

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

- QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2023
OR
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission File No. 001-34220



3D SYSTEMS CORPORATION

(Exact name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of
Incorporation or Organization)

95-4431352

(I.R.S. Employer
Identification No.)

333 Three D Systems Circle
Rock Hill, South Carolina 29730
(Address of Principal Executive Offices and Zip Code)

(Registrant's Telephone Number, Including Area Code): (803) 326-3900

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	DDD	New York Stock Exchange

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.) Yes No

APPLICABLE ONLY TO CORPORATE ISSUERS:

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.
Shares of Common Stock, par value \$0.001 per share, outstanding as of November 6, 2023: 133,434,049

3D SYSTEMS CORPORATION
Form 10-Q
For the Nine Months Ended September 30, 2023

TABLE OF CONTENTS

[PART I - FINANCIAL INFORMATION](#)

<u>Item 1. Financial Statements</u>	<u>3</u>
<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>35</u>
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	<u>58</u>
<u>Item 4. Controls and Procedures</u>	<u>58</u>

[PART II - OTHER INFORMATION](#)

<u>Item 1. Legal Proceedings</u>	<u>60</u>
<u>Item 1A. Risk Factors</u>	<u>60</u>
<u>Item 2. Unregistered Sales of Equity Securities, Use of Proceeds, and Issuer Purchases of Equity Securities</u>	<u>60</u>
<u>Item 3. Defaults Upon Senior Securities</u>	<u>60</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>60</u>
<u>Item 5. Other Information</u>	<u>60</u>
<u>Item 6. Exhibits</u>	<u>61</u>

PART I — FINANCIAL INFORMATION

Item 1. Financial Statements.

3D SYSTEMS CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

<i>(in thousands, except par value)</i>	ASSETS	<u>September 30, 2023</u>	<u>December 31, 2022</u>
Current assets:			
Cash and cash equivalents		\$ 445,554	\$ 388,134
Short-term investments		—	180,603
Accounts receivable, net of reserves — \$3,315 and \$3,114		104,516	93,886
Inventories		153,005	137,832
Prepaid expenses and other current assets		36,638	33,790
Total current assets		<u>739,713</u>	<u>834,245</u>
Property and equipment, net		63,535	58,072
Intangible assets, net		71,536	90,230
Goodwill		391,325	385,312
Right-of-use assets		73,020	42,746
Deferred income tax asset		7,042	7,038
Other assets		46,583	28,970
Total assets		<u>\$ 1,392,754</u>	<u>\$ 1,446,613</u>
LIABILITIES, REDEEMABLE NON-CONTROLLING INTEREST AND EQUITY			
Current liabilities:			
Current lease liabilities		\$ 10,684	\$ 9,036
Accounts payable		46,108	53,826
Accrued and other liabilities		43,575	55,571
Customer deposits		6,793	6,911
Deferred revenue		30,768	26,464
Total current liabilities		<u>137,928</u>	<u>151,808</u>
Long-term debt, net of deferred financing costs		451,520	449,510
Long-term lease liabilities		71,295	41,779
Deferred income tax liability		10,178	7,631
Other liabilities		20,367	44,181
Total liabilities		<u>691,288</u>	<u>694,909</u>
Commitments and contingencies (Note 18)			
Redeemable non-controlling interest		1,928	1,760
Stockholders' equity:			
Common stock, \$0.001 par value, authorized 220,000 shares; shares issued 133,575 and 131,207 as of September 30, 2023 and December 31, 2022, respectively		133	131
Additional paid-in capital		1,570,150	1,547,597
Accumulated deficit		(813,982)	(743,962)
Accumulated other comprehensive loss		(56,763)	(53,822)
Total stockholders' equity		<u>699,538</u>	<u>749,944</u>
Total liabilities, redeemable non-controlling interest and stockholders' equity		<u>\$ 1,392,754</u>	<u>\$ 1,446,613</u>

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

<i>(in thousands, except per share amounts)</i>	Three Months Ended		Nine Months Ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Revenue:				
Products	\$ 80,415	\$ 96,337	\$ 253,968	\$ 300,662
Services	43,376	35,916	119,253	104,637
Total revenue	123,791	132,253	373,221	405,299
Cost of sales:				
Products	47,427	58,042	153,442	181,845
Services	21,014	21,541	67,315	63,851
Total cost of sales	68,441	79,583	220,757	245,696
Gross profit	55,350	52,670	152,464	159,603
Operating expenses:				
Selling, general and administrative	33,355	65,579	150,623	185,398
Research and development	21,982	20,796	66,953	63,180
Impairment of intangible assets	13,597	—	13,597	—
Total operating expenses	68,934	86,375	231,173	248,578
Loss from operations	(13,584)	(33,705)	(78,709)	(88,975)
Interest and other income (expense), net	2,602	(3,502)	9,691	(5,456)
(Loss) income before income taxes	(10,982)	(37,207)	(69,018)	(94,431)
(Provision) benefit for income taxes	(174)	(338)	(404)	(2,911)
(Loss) on equity method investment, net of income taxes	(605)	—	(747)	—
Net (loss) income before redeemable non-controlling interest	(11,761)	(37,545)	(70,169)	(97,342)
Less: net (loss) income attributable to redeemable non-controlling interest	(57)	(147)	(149)	(184)
Net (loss) income attributable to 3D Systems Corporation	\$ (11,704)	\$ (37,398)	\$ (70,020)	\$ (97,158)
Net (loss) income per common share:				
Basic	\$ (0.09)	\$ (0.30)	\$ (0.54)	\$ (0.77)
Diluted	\$ (0.09)	\$ (0.30)	\$ (0.54)	\$ (0.77)
Weighted average shares outstanding:				
Basic	130,263	127,991	129,780	127,478
Diluted	130,263	127,991	129,780	127,478

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Unaudited)

<i>(in thousands)</i>	Three Months Ended		Nine Months Ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Net (loss) before redeemable non-controlling interest	\$ (11,761)	\$ (37,545)	\$ (70,169)	\$ (97,342)
Other comprehensive (loss) income, net of taxes:				
Pension plan adjustments	(31)	156	(42)	422
Foreign currency translation	(7,352)	(22,135)	(3,227)	(41,867)
Unrealized gain (loss) on short-term investments	—	2,370	328	(1,653)
Total other comprehensive (loss) income, net of taxes:	(7,383)	(19,609)	(2,941)	(43,098)
Total comprehensive (loss), net of taxes	(19,144)	(57,154)	(73,110)	(140,440)
Less: comprehensive (loss) attributable to redeemable non-controlling interest	(57)	(147)	(149)	(184)
Comprehensive (loss) attributable to 3D Systems Corporation	\$ (19,087)	\$ (57,301)	\$ (72,961)	\$ (140,624)

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

<i>(in thousands)</i>	Nine Months Ended	
	September 30, 2023	September 30, 2022
Cash flows from operating activities:		
Net (loss) income before redeemable non-controlling interest	\$ (70,169)	\$ (97,342)
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:		
Depreciation, amortization and accretion of debt discount	27,054	28,264
Stock-based compensation	15,140	31,508
Loss on short-term investments	6	2,609
Non-cash operating lease expense	6,552	4,796
Provision for inventory obsolescence and revaluation	6,061	646
Provision for bad debts	197	329
Loss (gain) on the disposition of businesses, property, equipment and other assets	51	(365)
Provision for deferred income taxes and reserve adjustments	141	1,666
Loss on equity method investment	747	—
Asset impairment	14,856	2,359
Changes in operating accounts:		
Accounts receivable	(11,706)	(1,513)
Inventories	(23,106)	(30,342)
Prepaid expenses and other current assets	(2,790)	2,562
Accounts payable	(7,717)	(1,666)
Deferred revenue and customer deposits	1,351	(3,468)
Accrued and other liabilities	(16,066)	12,387
All other operating activities	(12,495)	(4,879)
Net cash (used in) provided by operating activities	(71,893)	(52,449)
Cash flows from investing activities:		
Purchases of property and equipment	(20,995)	(17,055)
Purchases of short-term investments	—	(384,406)
Sales and maturities of short-term investments	180,925	112,050
Acquisitions and other investments, net of cash acquired	(29,241)	(84,705)
Net cash provided by (used in) investing activities	130,689	(374,116)
Cash flows from financing activities:		
Purchase of non-controlling interests	—	(2,300)
Taxes paid related to net-share settlement of equity awards	(4,752)	(10,195)
Other financing activities	(463)	(486)
Net cash (used in) provided by financing activities	(5,215)	(12,981)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	1,561	(7,911)
Net increase (decrease) in cash, cash equivalents and restricted cash	55,142	(447,457)
Cash, cash equivalents and restricted cash at the beginning of the year ^(a)	391,975	789,970
Cash, cash equivalents and restricted cash at the end of the period ^(a)	\$ 447,117	\$ 342,513
Supplemental cash flow information		
Lease assets obtained in exchange for new lease liabilities	\$ 37,513	\$ 2,422
Cash interest payments	231	148
Cash income tax payments, net	4,815	3,575
Transfer of equipment from inventory to property and equipment, net ^(b)	1,316	1,063

(a) The amounts for cash and cash equivalents and restricted cash shown above include restricted cash of \$118 and \$114 as of September 30, 2023 and December 31, 2022, respectively, which are included in prepaid expenses and other current assets. In addition, included in cash and cash equivalents and restricted cash above as of September 30, 2023, and December 31, 2022 is \$1,445 and \$3,727, respectively, of restricted cash included in other non-current assets.

(b) Inventory is transferred to property and equipment at cost when we require additional machines for training or demonstration or for placement into on demand manufacturing services locations.

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Three Months Ended September 30, 2023 and 2022
(Unaudited)

<i>(in thousands, except par value)</i>	Common Stock				Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Par Value \$0.001	Additional Paid-In Capital	Accumulated Deficit		
June 30, 2023	133,504	\$ 133	\$ 1,562,529	\$ (802,278)	\$ (49,380)	\$ 711,004
Shares issued, vested & expired under equity incentive plans	100	—	—	—	—	—
Shares withheld related to net-share settlement of equity awards	(29)	—	(188)	—	—	(188)
Stock-based compensation expense	—	—	7,870	—	—	7,870
Net (loss) attributable to 3D Systems Corp.	—	—	—	(11,704)	—	(11,704)
Pension plan adjustment	—	—	—	—	(31)	(31)
Redeemable non-controlling interest redemption value in excess of carrying value	—	—	(61)	—	—	(61)
Foreign currency translation adjustment	—	—	—	—	(7,352)	(7,352)
September 30, 2023	133,575	\$ 133	\$ 1,570,150	\$ (813,982)	\$ (56,763)	\$ 699,538
June 30, 2022	130,304	\$ 130	\$ 1,525,734	\$ (681,011)	\$ (61,195)	\$ 783,658
Shares withheld related to net-share settlement of equity awards	115	—	(108)	—	—	(108)
Stock-based compensation expense	—	—	8,175	—	—	8,175
Net loss	—	—	—	(37,398)	—	(37,398)
Pension plan adjustments	—	—	—	—	156	156
Redeemable non-controlling interest redemption value in excess of carrying value	—	—	(462)	—	—	(462)
Unrealized loss on short-term investments	—	—	—	—	2,370	2,370
Foreign currency translation adjustment	—	—	—	—	(22,135)	(22,135)
September 30, 2022	130,419	\$ 130	\$ 1,533,339	\$ (718,409)	\$ (80,804)	\$ 734,256

3D SYSTEMS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Nine Months Ended September 30, 2023 and 2022
(Unaudited)

<i>(in thousands, except par value)</i>	Common Stock				Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Par Value \$0.001	Additional Paid-In Capital	Accumulated Deficit		
December 31, 2023	131,207	\$ 131	\$ 1,547,597	\$ (743,962)	\$ (53,822)	\$ 749,944
Shares issued, vested & expired under equity incentive plans	2,886	2	—	—	—	2
Shares withheld related to net-share settlement of equity awards	(518)	—	(4,752)	—	—	(4,752)
Stock-based compensation expense	—	—	27,626	—	—	27,626
Net (loss) attributable to 3D Systems Corp.	—	—	—	(70,020)	—	(70,020)
Pension plan adjustment	—	—	—	—	(42)	(42)
Unrealized gain on short-term investments	—	—	—	—	328	328
Redeemable non-controlling interest redemption value in excess of carrying value	—	—	(321)	—	—	(321)
Foreign currency translation adjustment	—	—	—	—	(3,227)	(3,227)
September 30, 2023	133,575	\$ 133	\$ 1,570,150	\$ (813,982)	\$ (56,763)	\$ 699,538
December 31, 2021	128,375	\$ 128	\$ 1,501,210	\$ (621,251)	\$ (37,706)	\$ 842,381
Shares withheld related to net-share settlement of equity awards	2,044	2	(10,155)	—	—	(10,153)
Stock-based compensation expense	—	—	42,746	—	—	42,746
Net loss	—	—	—	(97,158)	—	(97,158)
Pension plan adjustments	—	—	—	—	422	422
Redeemable non-controlling interest redemption value in excess of carrying value	—	—	(462)	—	—	(462)
Unrealized loss on short-term investments	—	—	—	—	(1,653)	(1,653)
Foreign currency translation adjustment	—	—	—	—	(41,867)	(41,867)
September 30, 2022	130,419	\$ 130	\$ 1,533,339	\$ (718,409)	\$ (80,804)	\$ 734,256

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(1) Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include the accounts of 3D Systems Corporation and all majority and wholly-owned subsidiaries and entities in which a controlling interest is maintained (“3D Systems” or the “Company” or “we” or “our” or “us”). All significant intercompany accounts and transactions have been eliminated in consolidation.

A non-controlling interest in a subsidiary reflects an ownership interest in a majority-owned subsidiary that is not attributable to the Company. For the periods presented, the Company’s financial statements include a redeemable non-controlling interest (“RNCI”), which has been reported in temporary equity in the consolidated balance sheets. The net income (loss) attributable to the RNCI is presented as an adjustment to the Company’s consolidated net income (loss) to arrive at net income (loss) attributable to 3D Systems Corporation in the consolidated statements of operations and consolidated statements of comprehensive income (loss). Furthermore, adjustments to record the RNCI at its redemption value are recorded to additional paid-in capital, and the excess redemption value is recognized as a reduction to the net income, or increase to the net loss, attributable to 3D Systems’ shareholders for purposes of reporting earnings or loss per share. See Note 11 for a summary of the activity related to the reported RNCI balance during the period.

The unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) and the rules and regulations of the Securities and Exchange Commission (“SEC”) applicable to interim reports. Accordingly, our unaudited condensed consolidated financial statements do not include all of the information and notes required by GAAP for complete financial statements and should be read in conjunction with the audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2022 (“2022 Form 10-K”). The year-end balance sheet data reported on our unaudited condensed consolidated balance sheet has been derived from the balance sheet included in our 2022 Form 10-K.

The Company believes that the disclosures included in this Form 10-Q are adequate to make the information presented not misleading. In the opinion of management, the unaudited condensed consolidated financial statements include all adjustments, consisting of adjustments of a normal recurring nature, necessary to present fairly the financial position, results of operations, and cash flows for the periods presented. The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements. Actual results may differ from those estimates and assumptions.

Our annual reporting period is the calendar year. Our results of operations for the three and nine months ended September 30, 2023 are not necessarily indicative of the results to be expected for the full year. All dollar amounts and other amounts presented in the accompanying footnotes are presented in thousands, except for per share information.

Summary of Significant Accounting Policies

The significant accounting policies included in our 2022 Form 10-K have been updated as follows.

Goodwill

Goodwill is the excess of the cost of an acquired entity over the amounts assigned to the assets acquired and liabilities assumed in a business combination. Goodwill is not amortized. Goodwill is tested for impairment annually during the fourth quarter of each year, and is tested for impairment between annual tests if an event occurs or circumstances change that would indicate the carrying amount may be impaired. Impairment testing for goodwill is done at a reporting unit level, with all goodwill assigned to a reporting unit.

The test for impairment of goodwill requires the Company to make several estimates related to projected future cash flows to determine the fair value of the goodwill reporting units. The Company calculates the excess of each reporting unit’s fair value over its carrying amount, including goodwill, utilizing a discounted cash flow analysis and other valuation techniques, as deemed appropriate. Internal operational budgets and long-range strategic plans are used as a basis for the cash flow analysis. The Company also utilizes assumptions for working capital, capital expenditures, and terminal growth rates. The discount rate applied to the cash flow analysis is based on the weighted average cost of capital (“WACC”) for each reporting unit. An impairment is recognized when the carrying amount of the reporting unit’s net assets exceeds the estimated fair value of the reporting unit.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

During the quarter ended September 30, 2023, the Company experienced a significant decline in its market capitalization as a result of a decrease in its stock price, and during the month ended September 30, 2023, the Company's market capitalization fell slightly below its consolidated stockholders' equity balance. We do not consider this to constitute a sustained decrease in the Company's stock price as of September 30, 2023. Furthermore, the Company performed a qualitative goodwill impairment assessment as of September 30, 2023 and concluded that it is not more likely than not that the fair value of either of its reporting units is less than the reporting unit's carrying value as of September 30, 2023. As a result, we concluded that no triggering event had occurred that would require the Company to perform a quantitative goodwill impairment test for either of its two reporting units as of September 30, 2023. However, the Company's market capitalization has declined further since September 30, 2023, and if such a decline results in the estimated fair value of either of our reporting units being lower than the respective reporting unit's carrying value, the Company would need to record a non-cash goodwill impairment charge, which could be material, in a future period – including as of our upcoming annual impairment testing date of November 1, 2023 (reflecting our annual goodwill impairment testing date commencing as of the current fiscal year).

Variable Interest Entities (VIEs)

Upon making an investment in an entity, we assess whether the entity is a VIE. The determination of whether an entity in which we hold a direct or indirect variable interest is a VIE is based on several factors, including whether the entity's total equity investment at risk upon inception is sufficient to finance the entity's activities without additional subordinated financial support. We make judgments regarding the sufficiency of the equity at risk based first on a qualitative analysis, and then a quantitative analysis, if necessary.

We analyze any investments in VIEs to determine if we are the primary beneficiary. We perform this assessment at the time that we become involved with a VIE and reevaluate our conclusion upon the occurrence of a reconsideration event. In evaluating whether we are the primary beneficiary, we evaluate our direct and indirect economic interests in the entity. Determining which reporting entity, if any, is the primary beneficiary of a VIE is primarily a qualitative approach focused on identifying which reporting entity has both (1) the power to direct the activities of a VIE that most significantly impact such entity's economic performance and (2) the obligation to absorb losses or the right to receive benefits from such entity that could potentially be significant to such entity. Performance of such analysis requires the exercise of judgment, and we consider a variety of factors in identifying the entity that holds the power to direct matters that most significantly impact a VIE's economic performance including, but not limited to, the ability to direct a VIE's operating decisions and activities. In addition, we consider the rights of other investors to participate in those decisions.

We concluded that our investments in Theradaptive and the Saudi Arabian Industrial Investments Company ("Dussur") are each a VIE. These investments are not consolidated because we concluded that the Company is not the primary beneficiary. As of September 30, 2023, our maximum exposure to losses associated with the VIEs is limited to the \$13,782 carrying value of our investments in the VIEs, which is included in other assets on our condensed consolidated balance sheet. We have no other investments in unconsolidated entities that have been determined to be VIEs.

Equity Securities without a Readily Determinable Value

We recognize investments in equity securities without a readily determinable fair value at cost minus impairment. We assess these investments for potential impairment if an event occurs or circumstances change that would indicate the carrying amount may be impaired. If applicable, impairment charges taken with respect to these investments are reported within interest and other income (expense), net in the consolidated statements of operations in the period in which an investment becomes impaired (see Note 7).

Equity Method of Accounting

The Company accounts for an investment in a joint venture using the equity method of accounting because it does not have a controlling interest and is not the primary beneficiary; however, the Company has the ability to exert significant influence. Under the equity method of accounting, the initial investment is recorded at cost, and the investment is subsequently adjusted for the Company's proportionate share of the net earnings or losses and other comprehensive income or loss of the investee. Intra-entity profits or losses associated with the Company's equity method investment are eliminated until realized by the investee in transactions with third parties. Income or loss from this investment is recorded as a separate line item in the consolidated statements of operations on a three-month lag. We evaluate material events occurring during the three-month lag period to determine whether the effects of such events should be disclosed in our financial statements. The Company will evaluate its investment in the joint venture for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment may not be recoverable.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Other Accounting Policy Updates

All other significant accounting policies described in the 2022 Form 10-K remain unchanged.

(2) Acquisitions

Wematter

On July 1, 2023, the Company completed the previously announced acquisition of Wematter AB (“Wematter”), a Swedish 3D printer manufacturer that will broaden 3D Systems’ Selective Laser Sintering (SLS) portfolio. Wematter’s reported results are expected to be included in our Industrial Solutions segment. The acquisition resulted in the Company acquiring 100% of the outstanding voting interest of Wematter. Consideration for this acquisition consisted of approximately \$10,224 in cash, subject to customary post-closing adjustments. The Company also may be required to pay an additional €2,000 in cash, contingent upon the achievement of certain post-closing performance conditions and the continued employment of certain key Wematter employees for two years after the closing date. If earned, the €2,000 is expected to be recognized as compensation expense over the two-year service period that the key employees must remain employed at 3D Systems. As of September 30, 2023, management believes that the achievement of the post-closing performance conditions is probable and, accordingly, the Company has commenced the recognition of the related compensation expense. In addition, the Company incurred \$847 of acquisition-related expenses that are reported in selling, general and administrative expenses in the condensed consolidated statements of operations.

In a separate transaction, the Company had extended a loan to Wematter during the three months ended June 30, 2023. The carrying value of the Wematter loan was \$942 as of the acquisition date, and was previously reported in prepaid and other current assets on the Company’s condensed consolidated balance sheet as of June 30, 2023. Upon the close of the acquisition, we determined that the loan was effectively settled in the business combination as a preexisting contractual relationship. No gain or loss was recognized in connection with the effective settlement, as the carrying value of the loan was not materially different from the pricing for a current market transaction for similar items. The effective settlement of this loan receivable results in an increase to the consideration transferred in connection with this transaction (i.e., above the cash consideration paid) and a corresponding increase to goodwill.

We accounted for the acquisition of Wematter using the acquisition method, as prescribed by ASC 805, “Business Combinations” (“ASC 805”). In accordance with valuation methodologies described in ASC 820, “Fair Value Measurement” (“ASC 820”), the acquired assets and assumed liabilities were recorded at their estimated fair values as of the date of the Wematter acquisition.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Shown below is the preliminary purchase price allocation, which summarizes the fair values of the assets acquired and liabilities assumed at the date of acquisition:

<i>(in thousands)</i>	
Current assets, including cash acquired of \$148	\$ 835
Intangible assets:	
Trade names	\$ 1,487
Product technology	2,231
Customer relationships	347
Total intangible assets	4,065
Goodwill	6,878
Other assets	475
Liabilities:	
Accounts payable and accrued liabilities	\$ 794
Long term liabilities	293
Total liabilities	1,087
Net assets acquired	<u>\$ 11,166</u>

The goodwill recognized is attributable to synergies that are expected to enhance and expand the Company's overall product portfolio and opportunities in new and existing markets, future products that have yet to be determined and Wematter's assembled workforce. This goodwill is not expected to be deductible for tax purposes.

The following table presents the finite-lived intangible assets acquired and their respective estimated useful lives:

	<u>Useful Life</u>
Trade names	5
Product technology	15
Customer relationships	10

As of September 30, 2023, the purchase price allocation for Wematter is preliminary. The Company continues to review the final closing balance sheet of Wematter and may further adjust the acquisition-date fair values of acquired assets and assumed liabilities based on this review. The Company also continues to review Wematter's pre-acquisition tax returns to determine the final tax positions, including net operating losses and any required valuation allowance. The final purchase price allocations will be completed when the Company has finished its valuation activities and the review of Wematter's closing balance sheet and the pre-acquisition tax returns. These final allocations could differ materially from the current preliminary allocations. The final allocations may include (1) changes in the preliminary allocations to acquired intangible assets and goodwill and (2) changes in the preliminary allocations to other assets and liabilities, including but not limited to tax assets and liabilities, inclusive of deferred taxes. The estimated useful lives of acquired intangible assets are also preliminary.

The post-acquisition revenues of Wematter included in our condensed consolidated statements of operations for both the three and nine months ended September 30, 2023 are immaterial and, accordingly, Wematter's results are dilutive to our earnings.

Unaudited Pro Forma Financial Information

The following unaudited pro forma financial information summarizes the combined results of the Company and Wematter as if the acquisition had occurred on January 1, 2022. The pro forma results have been prepared for comparative purposes only, and do not necessarily represent what the results of operations would have been had the acquisition been completed on January 1, 2022. In addition, these pro forma results are not intended to be a projection of future operating results and do not reflect synergies that might be achieved.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The unaudited pro forma financial information includes adjustments for the pro forma impact of our preliminary purchase price allocation, including the amortization for newly acquired intangible assets, the impact of transaction costs, and the alignment of accounting policies. Transaction costs have been included in the pro forma results for the periods ended September 30, 2022, consistent with the pro forma assumption that the acquisition occurred on January 1, 2022. Pro forma revenue information has not been presented, as pre-acquisition revenue reported by Wematter was not material and, accordingly, the impact on our reported consolidated revenue also would not have been material. Pro forma net loss is not presented in the table below for the three months ended September 30, 2023 because Wematter's results are reflected in 3D Systems consolidated numbers for the full period.

<i>(in thousands)</i>	Three Months Ended September 30,	Nine Months Ended September 30,	
	2022	2023	2022
Net (loss) income attributable to 3D Systems Corporation	\$ (38,407)	\$ (71,076)	\$ (100,185)

dp polar

On October 4, 2022, we completed the acquisition of 100% of dp polar GmbH (“dp polar”), a German-based designer and manufacturer of a manufacturing system designed for true high-speed mass production of customized components, for \$25,866 (including customary post-closing adjustments), which includes \$19,604 paid in cash at closing, \$7,091 paid at closing via the issuance of the Company’s common stock, and a provisional \$829 estimated post-closing purchase price adjustment due to the Company from the sellers. See Note 12 for the discussion of an earnout arrangement with a key individual from dp polar.

The Company acquired dp polar for access to dp polar's patented continuous printing process. Central to dp polar’s patented continuous printing process is a large-scale, segmented, rotating print platform that eliminates the start/stop operations of virtually all additive manufacturing platforms. With dp polar’s technology and patented polar coordinate control, the print heads remain stationary above the rotating platform, providing a continuous print process.

We accounted for the acquisition of dp polar using the acquisition method, as prescribed by ASC 805. In accordance with valuation methodologies described in ASC 820, the acquired assets and assumed liabilities were recorded at their estimated fair values as of the date of the dp polar acquisition.

Shown below is the final purchase price allocation, which summarizes the fair values of the assets acquired and liabilities assumed at the date of acquisition:

<i>(in thousands)</i>			
Current assets, including cash acquired of \$243		\$	301
Intangible assets:			
In-process research and development	\$	4,989	
Trade name		3,930	
Total intangible assets			8,919
Goodwill			17,090
Other assets			765
Liabilities:			
Accounts payable and accrued liabilities	\$	364	
Deferred tax liability		845	
Total liabilities			1,209
Net assets acquired		\$	25,866

The goodwill recognized in connection with this acquisition is attributable to synergies that are expected to enhance and expand the Company’s overall product portfolio and opportunities in new and existing markets, future products that have yet to be determined and dp polar’s assembled workforce. This goodwill will not be deductible for tax purposes.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Kumovis

On April 1, 2022, we completed the acquisition of 93.75% of Kumovis GmbH (“Kumovis”) for an all-cash purchase price of \$37,875 (including customary post-closing adjustments), plus an estimated RNCI of \$1,559. \$3,628 of the cash payment was deferred for up to fifteen months from the closing date, and was paid in July 2023. Kumovis, which is part of the Healthcare Solutions segment and reporting unit, utilizes polyether ether keton or “PEEK” materials, which has properties that lend it to many medical applications that fit into our personalized healthcare solutions operations, including many implant applications.

In conjunction with the Kumovis acquisition, the Company and the non-controlling shareholders entered into a put/call option agreement, whereby, at a later date, the Company has the option to purchase from the non-controlling shareholders, and the non-controlling shareholders have the option to sell to the Company, the remaining 6.25% ownership interest in Kumovis for an exercise price calculated based on the achievement of pre-determined revenue and gross profit targets. Fifty percent of the Kumovis common shares related to the put/call can be exercised upon the achievement of an initial revenue and gross profit target, while the remaining 50% can be exercised upon the achievement of a second revenue and gross profit target. If one or both sets of targets have not been met within 5.75 years from the acquisition date, there is a floor strike price that must be exercised. Up to 50% of the exercise price can be paid in Company common stock at the election of 3D Systems. This arrangement results in the recognition of RNCI, for which an estimated fair value of \$1,559 was recorded as of the acquisition date.

We accounted for the acquisition of Kumovis using the acquisition method, as prescribed by ASC 805, and we have completed the allocation of the final purchase price. In accordance with valuation methodologies described in ASC 820, the acquired assets and assumed liabilities were recorded at their estimated fair values as of the date of the Kumovis acquisition. The table below reflects the fair value of both the consideration transferred and the RNCI attributable to this acquisition:

(in thousands)

Cash paid at acquisition	\$	34,098
Deferred cash consideration		3,628
Estimated fair value of RNCI		1,559
Post-closing net working capital adjustment		149
Total fair value of consideration transferred	\$	39,434

Shown below is the final purchase price allocation, summarizing the fair values of the assets acquired and liabilities assumed at the date of acquisition:

(in thousands)

Current assets, including cash acquired of \$125	\$	1,407
Intangible assets:		
Product technology	\$	20,770
Trade name		5,802
Total intangible assets		26,572
Goodwill		17,618
Other assets		705
Liabilities:		
Accounts payable and accrued liabilities	\$	332
Deferred revenue		70
Deferred tax liability		6,466
Total liabilities		6,868
Net assets acquired	\$	39,434

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The goodwill recognized in connection with this acquisition is attributable to synergies that are expected to enhance and expand the Company's overall product portfolio and opportunities in new and existing markets, future products that have yet to be determined and Kumovis's assembled workforce. This goodwill will not be deductible for tax purposes.

Titan

On April 1, 2022, we completed the acquisition of 100% of Titan Additive LLC ("Titan") for an all-cash purchase price of \$39,040. Titan, which is part of the Industrial Solutions segment and reporting unit, is a pellet-based extrusion platform that addresses customer applications requiring large build volumes, superior performance, and improved productivity at significantly lower cost. We believe the acquisition of Titan will open up new markets in the Industrial Solutions segment.

We accounted for the acquisition of Titan using the acquisition method, as prescribed by ASC 805, and we have completed the allocation of the purchase price. Shown below is the final purchase price allocation, summarizing the fair values of the assets acquired and liabilities assumed, as determined at the date of acquisition in accordance with valuation methodologies described in ASC 820:

<i>(in thousands)</i>	
Current assets	\$ 661
Intangible assets:	
Product technology	\$ 15,940
Trade name	5,580
Total intangible assets	21,520
Goodwill	17,430
Other assets	68
Liabilities:	
Accounts payable and accrued liabilities	\$ 229
Deferred revenue	410
Total liabilities	639
Net assets acquired	<u>\$ 39,040</u>

The goodwill recognized in connection with this acquisition is attributable to synergies that are expected to enhance and expand the Company's overall product portfolio and opportunities in new and existing markets, future products that have yet to be determined and Titan's assembled workforce. This goodwill is deductible for tax purposes.

Acquisitions of Non-controlling Interests

As of December 31, 2018, the Company owned approximately 70% of the capital and voting rights of Easyway, a service bureau and distributor of 3D printing and scanning products in China. The remaining 30% of the capital and voting rights of Easyway were acquired on January 21, 2019 for \$13,500, which has been paid in installments. The Company made the final installment payment of \$2,300 related to the acquisition of the remaining 30% interest in Easyway during the three months ended March 31, 2022.

(3) Revenue

Revenue is recognized when control of the promised products or services is transferred to customers.

Performance Obligations

At September 30, 2023, we had \$62,579 of outstanding performance obligations, comprised of deferred revenue, customer order backlog and customer deposits. We expect to recognize approximately 90.0% of the \$39,418 of deferred revenue and customer deposits as revenue within the next twelve months, an additional 4.0% by the end of 2024 and the remaining balance thereafter.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Collaboration and Licensing Agreements

We enter into collaboration and licensing agreements with third parties. The nature of the activities to be performed and the consideration exchanged under these agreements varies on a contract-by-contract basis. We evaluate these agreements to determine whether they meet the definition of a customer relationship for which revenue should be recorded. These contracts may contain multiple performance obligations and may contain fees for licensing, research and development services, contingent milestone payments upon the achievement of contractual developmental criteria and/or royalty fees based on the licensees' product revenue. We determine the revenue to be recognized for these agreements based on an evaluation of the distinct performance obligations, the identification and evaluation of material rights, the estimation of variable consideration and the determination of the pattern of transfer of control for each distinct performance obligation. During the three and nine-month periods ended September 30, 2023, the Company recognized \$7,896 and \$16,099, respectively, of revenue related to collaboration arrangements with customers. During the three and nine-month periods ended September 30, 2022, the Company recognized \$3,301 and \$9,075, respectively, of revenue related to collaboration arrangements with customers.

Our revenue recognized under collaboration and licensing agreements for the three and nine months ended September 30, 2023 includes the effect of the Company increasing its estimate of the variable consideration included in the transaction price related to one of its licensing agreements. The increase in estimated recognizable variable consideration was due to (1) the execution of a modification to the related customer contract and (2) the Company's determination that incremental revenue attributable to milestone payments that are contingent upon the achievement of contractual developmental criteria would be earned under the modified contract. As a result, during the quarter ended September 30, 2023, the Company recognized incremental services revenue of \$4,452, which reduced our reported basic and diluted loss per share by \$0.03 and \$0.03, respectively, for each of the three and nine months ended September 30, 2023.

Contract Balances

During the nine months ended September 30, 2023, we recognized revenue of \$23,498 related to our contract liabilities at December 31, 2022. During the nine months ended September 30, 2022, we recognized revenue of \$28,850 related to our contract liabilities at December 31, 2021.

Contract assets were \$7,379 and \$677 as of September 30, 2023 and December 31, 2022, respectively. The increase in the contract assets balance as of September 30, 2023 primarily relates to the increase in the estimated variable consideration included in the transaction price related to one of the Company's collaboration and licensing agreements (refer to the discussion above of Collaboration and Licensing Agreements), which has resulted in the recognition of incremental revenue for which the Company did not have the right to invoice as of the balance sheet date.

Revenue Concentrations

For the three and nine months ended September 30, 2023, one customer accounted for approximately 10.7% and 14.4% of our consolidated revenue, respectively. For the three and nine months ended September 30, 2022, one customer accounted for approximately 20.8% and 24.1% of our consolidated revenue, respectively. We expect to maintain our relationship with this customer.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Revenue by geographic region for the three and nine months ended September 30, 2023 and 2022 was as follows:

<i>(in thousands)</i>	Three Months Ended	
	September 30, 2023	September 30, 2022
Americas	\$ 69,714	\$ 80,455
EMEA	43,141	36,913
APAC	10,936	14,885
Total	<u>\$ 123,791</u>	<u>\$ 132,253</u>
United States (included in Americas above)	<u>\$ 68,840</u>	<u>\$ 78,910</u>

<i>(in thousands)</i>	Nine Months Ended	
	September 30, 2023	September 30, 2022
Americas	\$ 214,956	\$ 234,511
EMEA	127,150	122,788
APAC	31,115	48,000
Total	<u>\$ 373,221</u>	<u>\$ 405,299</u>
United States (included in Americas above)	<u>\$ 211,717</u>	<u>\$ 231,557</u>

(4) Inventories

Components of inventories at September 30, 2023 and December 31, 2022 are summarized as follows:

<i>(in thousands)</i>	September 30, 2023	December 31, 2022
Raw materials	\$ 61,314	\$ 59,907
Work in process	3,922	4,972
Finished goods and parts	87,769	72,953
Total inventories	<u>\$ 153,005</u>	<u>\$ 137,832</u>

The inventory reserve was \$16,711 and \$15,550 as of September 30, 2023 and December 31, 2022, respectively.

In the second quarter of 2023, we notified one of our contract manufacturers of our intent to terminate the manufacturing services arrangement and in-source the assembly and production process. The exit agreement was finalized in June 2023 and included a \$450 exit fee expensed in the second quarter of 2023. There is an associated commitment to purchase \$2,735 of inventory from the assembly manufacturer as of September 30, 2023.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(5) Intangible Assets

Intangible Assets with Finite Lives

At September 30, 2023 and December 31, 2022, the Company's intangible assets with finite lives were as follows:

<i>(in thousands)</i>	September 30, 2023			December 31, 2022		
	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Intangible assets with finite lives:						
Customer relationships	\$ 51,160	\$ (49,417)	\$ 1,743	\$ 51,137	\$ (48,695)	\$ 2,442
Acquired technology	45,894	(11,925)	33,969	55,480	(10,707)	44,773
Trade names	30,496	(13,705)	16,791	35,930	(12,455)	23,475
Patent costs	18,714	(10,823)	7,891	18,673	(10,909)	7,764
Acquired patents	16,426	(14,716)	1,710	17,499	(15,661)	1,838
Other	13,170	(9,120)	4,050	13,255	(8,765)	4,490
Total intangible assets	\$ 175,860	\$ (109,706)	\$ 66,154	\$ 191,974	\$ (107,192)	\$ 84,782

Impairment of Intangible Assets with Finite Lives

During the quarter ended September 30, 2023, the Company concluded that it is more likely than not that it will sell or otherwise dispose of Oqton MOS, a business which the Company acquired in 2021. Oqton MOS represents a discrete asset group within the Industrial Solutions segment, as its identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities within the Industrial Solutions segment. Based upon the Company's expectation that it will sell or otherwise dispose of Oqton MOS, the long-term cash flow forecast for this asset group was revised. The revised long-term cash flow forecast indicated that the carrying amounts of Oqton MOS's long-lived assets, consisting primarily of product technology and trade name intangible assets initially recorded when Oqton MOS was acquired, may not be recoverable. Accordingly, the carrying value of Oqton MOS's long-lived assets was tested for impairment based upon an estimate of the associated discounted future cash flows. This fair value measurement approach required the use of Level 3 fair value measurement inputs, as defined in Note 19. As the present value of the estimated future cash flows expected to result from the use and eventual disposition of the asset group is less than the carrying value of the asset group, during the quarter ended September 30, 2023, the Company recognized \$13,597 of impairment charges related to the acquired technology and trade names included in the Oqton MOS asset group.

Amortization of Intangible Assets with Finite Lives

Amortization expense related to our intangible assets with finite lives was \$3,179 and \$9,676 for the three and nine months ended September 30, 2023, respectively, compared to \$4,293 and \$10,273 for the three and nine months ended September 30, 2022, respectively. Amortization expense for intangible assets is estimated to be \$2,085 for the remainder of 2023, \$8,318 in 2024, \$8,029 in 2025, \$7,083 in 2026 and \$6,733 in 2027.

Indefinite-Life Intangible Assets (Excluding Goodwill)

Total intangible assets reported on our September 30, 2023 and December 31, 2022 consolidated balance sheets include in-process research and development ("IPR&D"), which the Company recognized as an acquired indefinite-life intangible asset in connection with its acquisition of dp polar on October 4, 2022 (see Note 2). The carrying value of this indefinite-life intangible asset was \$5,382 and \$5,448 as of September 30, 2023 and December 31, 2022, respectively.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(6) Goodwill

The following table reflects the changes in the carrying amount of goodwill by reporting unit for the nine months ended September 30, 2023:

<i>(in thousands)</i>	Nine Months Ended September 30, 2023								
	Healthcare			Industrial			Consolidated		
	Gross Goodwill	Impairments	Net Goodwill	Gross Goodwill	Impairments	Net Goodwill	Gross Goodwill	Impairments	Net Goodwill
Balance at beginning of year	\$ 143,431	\$ (32,055)	\$ 111,376	\$ 316,265	\$ (42,329)	\$ 273,936	\$ 459,696	\$ (74,384)	\$ 385,312
Acquisitions and measurement period adjustments	1,005	—	1,005	7,735	—	7,735	8,740	—	8,740
Foreign currency translation adjustments	(1,175)	—	(1,175)	(1,552)	—	(1,552)	(2,727)	—	(2,727)
Balance at end of period	<u>\$ 143,261</u>	<u>\$ (32,055)</u>	<u>\$ 111,206</u>	<u>\$ 322,448</u>	<u>\$ (42,329)</u>	<u>\$ 280,119</u>	<u>\$ 465,709</u>	<u>\$ (74,384)</u>	<u>\$ 391,325</u>

The effect of foreign currency exchange rates in the table above reflects the impact on goodwill of amounts recorded in currencies other than the U.S. dollar in the financial statements of foreign subsidiaries and the resulting effect of foreign currency translation between the applicable functional currency and the U.S. dollar.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(7) Investments and Notes Receivable

The Company holds various investments in equity and debt instruments that are included in other assets on our condensed consolidated balance sheets. The following table summarizes our investment balances as of September 30, 2023 and December 31, 2022:

<i>(in thousands)</i>	September 30, 2023	December 31, 2022
Equity investments under the equity method of accounting	\$ 5,782	\$ —
Equity investments without readily determinable fair values	20,962	12,953
Other ⁽¹⁾	200	200
Total equity investments	<u>\$ 26,944</u>	<u>\$ 13,153</u>
Long-term note receivable ⁽²⁾	\$ 530	\$ 515
Total notes receivable	<u>\$ 530</u>	<u>\$ 515</u>

(1) Reflects warrant investment carried at fair value. The fair value of these warrants is measured using Level 3 fair value measurement inputs. Refer to Note 19 for a description of these inputs.

(2) Includes interest amounts that have been accrued on, recorded to and reported as part of the notes receivable balance.

Equity Investments under the Equity Method of Accounting

Dussur

In March 2022, we and Dussur signed an agreement to form a joint venture intended to expand the use of additive manufacturing within the Kingdom of Saudi Arabia and surrounding geographies, including the Middle East and North Africa. The joint venture is to enable the development of Saudi Arabia's domestic additive manufacturing production capabilities, consistent with the Kingdom's 'Vision 2030,' which is focused on diversification of the economy and long-term sustainability. 3D Systems had committed to an initial investment in the joint venture of approximately \$6,500, of which \$3,435 had been deposited into an escrow account as of December 31, 2022 and, accordingly, was reported as restricted cash within other assets on the December 31, 2022 balance sheet. In February 2023, the Company officially became a shareholder in the joint venture. During April 2023, the \$3,435 held in escrow, as well as the additional amount of approximately \$3,065 owed to the joint venture as of March 31, 2023, was deposited into a bank account of the joint venture for use in its operations. Additional future investments in the joint venture are contingent upon the achievement of certain milestones. As of September 30, 2023, the Company owns 49% of the joint venture's common stock. The impact of this investment on the Company's future financial condition and cash flows is expected to be limited to the cash outflow(s) related to any future contingent investments, if required.

The Company accounts for the joint venture under the equity method of accounting, which requires the Company to recognize its proportionate share of the joint venture's reported net income or loss. Due to the timing of when the joint venture's reported financial information is expected to be available, the Company records amounts required to be recognized pursuant to the equity method of accounting on a one quarter lag. For the three and nine months ended September 30, 2023, Company has recorded and separately reported a loss on equity method investment in the condensed consolidated statements of operations.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Equity Investments without Readily Determinable Fair Values

Theradaptive

In June 2023, we made an \$8.0 million investment in Theradaptive, Inc. ("Theradaptive"), via the purchase of Series A Preferred Stock, pursuant to which we hold an approximate 9.15%, or 8.25% fully-diluted, ownership interest in Theradaptive. Theradaptive is currently developing a protein that encourages bone growth. This biotechnology could be applied to 3D printed metal splints for patients who otherwise may require amputation of a limb because the lost bone is too vast to replace with a splint. The Company expects to account for its investment in Theradaptive on a cost basis, subject to assessment for impairment, as (1) the fair value of Theradaptive's equity is not readily determinable and (2) the investment is not subject to the equity method of accounting due to the Company's lack of significant influence. The investment in Theradaptive is not expected to materially impact our future financial position, results of operations, or cash flows. No impairment charges were recognized with respect to this investment during the three or nine month periods ended September 30, 2023.

Enhatch

In March 2022, we made a \$10,000 investment in convertible preferred shares for an approximate 26.6% ownership interest in Enhatch Inc. ("Enhatch"), the developer of the Intelligent Surgery Ecosystem. We simultaneously entered into a supply agreement with Enhatch. We also obtained warrants to purchase additional shares of Enhatch, as well as the right to purchase in the future ("call option") the remaining shares of Enhatch that 3D Systems does not own if certain revenue targets are achieved. As of the original investment date, the fair values of the convertible preferred shares, inclusive of the embedded call option, and warrants were bifurcated and were \$9,670 and \$330, respectively. The investment, including the embedded call option and the warrants, is recorded in other assets on the consolidated balance sheets.

Enhatch's Intelligent Surgery Ecosystem provides technologies which streamline and scale the design and delivery of patient-specific medical devices by automating the process. Incorporating these capabilities into 3D Systems' workflow for patient-specific solutions, which includes advanced software, expert treatment planning services, custom implants and instrumentation design, and industry-leading production processes, will help more efficiently meet the growing demand for personalized medical devices.

As of September 30, 2023 and December 31, 2022, the reported carrying value of the Company's convertible preferred stock investment in Enhatch, inclusive of the call option, is \$6,900, which reflects the cumulative impact of \$2,770 of historical impairment charges that have been recognized since the date of the original investment. These impairment charges were recorded during the three months ended September 30, 2022. No impairment charges were recognized with respect to this investment during the three or nine month periods ended September 30, 2023.

(8) Leases

We have various lease agreements for our facilities, equipment and vehicles with remaining lease terms ranging from one to fifteen years. During the nine months ended September 30, 2023, two buildings previously under construction were completed and became available for use by the Company as leased premises. As a result, these leases were deemed to have commenced during the period. Additionally, during the nine months ended September 30, 2023, we extended material existing leases related to two buildings with office and production spaces. Rented spaces under these new and extended leases totaled 396,100 square feet. As of September 30, 2023, the aggregate remaining minimum base lease payments related to the new building leases and extended leases described above total \$47,634 and consist of \$1,006, \$4,516, \$5,093, \$5,234, \$5,380, and \$26,405 due, respectively, during the years ended December 31, 2023, 2024, 2025, 2026, 2027 and thereafter.

Classifications of the lease amounts reported on our balance sheets as of September 30, 2023 and December 31, 2022 are summarized below:

<i>(in thousands)</i>	September 30, 2023			December 31, 2022		
	Right-of-use assets	Current lease liabilities	Long-term lease liabilities	Right-of-use assets	Current lease liabilities	Long-term lease liabilities
Operating leases	\$ 60,973	\$ 9,616	\$ 59,428	\$ 39,502	\$ 8,343	\$ 38,499
Finance leases	12,047	1,068	11,867	3,244	693	3,280
Total	\$ 73,020	\$ 10,684	\$ 71,295	\$ 42,746	\$ 9,036	\$ 41,779

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(9) Accrued and Other Liabilities

Short-Term Accrued Liabilities

Accrued liabilities at September 30, 2023 and December 31, 2022 are summarized as follows:

<i>(in thousands)</i>	September 30, 2023	December 31, 2022
Compensation and benefits	\$ 15,492	\$ 19,814
Accrued taxes	9,633	10,694
Legal contingencies	4,850	9,948
Product warranty liability	2,409	3,677
Other accrued liabilities	11,191	11,438
Total	<u>\$ 43,575</u>	<u>\$ 55,571</u>

Changes in the product warranty obligation for the nine months ended September 30, 2023 and 2022 are summarized below:

<i>(in thousands)</i>	Beginning Balance	Settlements Made	Accruals for Warranties Issued	Ending Balance
September 30, 2023	\$ 3,677	\$ (2,983)	\$ 1,715	\$ 2,409
September 30, 2022	\$ 3,585	\$ (5,266)	\$ 5,257	\$ 3,576

Other Long-Term Liabilities

Other liabilities at September 30, 2023 and December 31, 2022 are summarized as follows:

<i>(in thousands)</i>	September 30, 2023	December 31, 2022
Long-term employee indemnity	\$ 4,634	\$ 4,817
Long-term tax liability	5,568	5,711
Defined benefit pension obligation	4,963	5,050
Long-term deferred revenue	1,858	4,974
Earnout liability	—	17,244
Legal contingencies	2,916	6,096
Other long-term liabilities	428	289
Total	<u>\$ 20,367</u>	<u>\$ 44,181</u>

The reduction in the earnout liability balance is the result of the reversal of all previously recognized expense attributable to a potential post-acquisition milestone-based payment related to the Company's 2021 acquisition of Volumetric Biotechnologies, Inc. ("Volumetric"). During the three months ended September 30, 2023, the Company reversed the accrued compensation expense related to the potential earnout payment as the related milestone is no longer deemed probable of being achieved. Refer to Note 12 for additional details regarding the earnout arrangement and the financial impact of this milestone-based payment no longer being deemed probable of being paid.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(10) Borrowings

On November 16, 2021, the Company issued \$460,000 in aggregate principal amount of 0% Convertible Senior Notes due November 15, 2026 (the “Notes”), pursuant to an Indenture dated November 16, 2021 (the “Indenture”) between the Company and The Bank of New York Mellon, N.A., as trustee. The net proceeds from the offering of the Notes were \$446,534 after deducting the initial purchasers’ discounts and commissions and offering expenses payable by the Company in the amount of \$13,466, of which \$8,480 is unamortized at September 30, 2023. The annual effective interest rate of the Notes is 0.594% when including purchasers’ discounts and commissions and offering expenses incurred by the Company. The Notes are senior, unsecured obligations of the Company, will not bear regular interest, and the principal amount of the Notes will not accrete. The Notes will mature on November 15, 2026, unless earlier redeemed, repurchased or converted in accordance with their terms.

The Notes will be convertible at the option of the holders at any time prior to the close of business on the business day immediately preceding August 15, 2026, only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on March 31, 2022 (and only during such quarter), if the last reported sale price of the Company’s common stock, par value \$0.001 per share, is equal to or greater than 130% of the conversion price for each of at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the “measurement period”) in which the trading price (as defined in the Indenture) per \$1 principal amount of Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price per share of the common stock and the conversion rate on each such trading day; (3) if the Company calls such Notes for redemption at any time prior to the close of business on the second scheduled trading day immediately preceding the redemption date; and (4) upon the occurrence of specified corporate events, including a Fundamental Change (as defined in the Indenture), or distributions of the common stock. On or after August 15, 2026, until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert all or any portion of their Notes at any time, at the option of the holder, regardless of the foregoing circumstances. Upon conversion, the Company will pay cash up to the aggregate principal amount of the Notes to be converted and pay or deliver, as the case may be, cash, shares of common stock, or a combination of cash and shares of common stock, at the Company’s election, in respect of the remainder, if any, of the Company’s conversion obligation in excess of the aggregate principal amount of the Notes being converted. The Notes have an initial conversion rate of 27.8364 shares of common stock per \$1 principal amount of Notes (which is subject to adjustment in certain circumstances). This is equivalent to an initial conversion price of approximately \$35.92 per share. The conversion rate is subject to customary adjustments under certain circumstances in accordance with the terms of the Indenture. Holders of the Notes have the right to require the Company to repurchase for cash all or a portion of their Notes at 100% of their principal amount, plus any accrued and unpaid special interest, upon the occurrence of a Fundamental Change. The Company is also required to increase the conversion rate for holders who convert their Notes in connection with a Fundamental Change or convert their Notes that are called for redemption, as the case may be, prior to the maturity date. The Company may not redeem the Notes prior to November 20, 2024. The Notes are redeemable, in whole or in part, for cash at the Company’s option at any time, and from time to time, on or after November 20, 2024 and before the 41st scheduled trading day immediately preceding the maturity date, but only if the last reported sale price per share of the common stock has been at least 130% of the conversion price then in effect for a specified period of time. As of September 30, 2023, none of the conditions that would trigger the right to convert the Notes had been met.

The Notes are the Company’s senior unsecured obligations and will rank senior in right of payment to any of the Company’s existing and future indebtedness that is expressly subordinated in right of payment to the Notes; rank equal in right of payment to any of the Company’s future unsecured indebtedness that is not so subordinated; be effectively subordinated in right of payment to any of the Company’s existing and future secured indebtedness to the extent of the value of the collateral securing such indebtedness; and structurally subordinated to all existing and future indebtedness and other liabilities (including trade payables) of current or future subsidiaries of the Company. The Indenture also contains covenants, events of default and other provisions which are customary for offerings of convertible notes. We are in compliance with all covenants as of September 30, 2023. At September 30, 2023, the fair value of the Notes is \$331,297. This is based on the quoted market price where the volume of activity is limited and not active and, thus, this is deemed a Level 2 fair value measurement.

The Company incurred \$671 and \$2,010 of debt issuance cost accretion for the three and nine months ended September 30, 2023, respectively, as compared to \$670 and \$2,006 for the three and nine months ended September 30, 2022, respectively. Debt issuance cost accretion of \$673, \$2,698, \$2,714, and \$2,395 is expected to be incurred in the remaining three months of 2023 and in 2024, 2025 and 2026, respectively.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(11) Redeemable Non-Controlling Interest

Upon consummation of the Company's acquisition of Kumovis, existing shareholders of Kumovis retained a 6.25% ownership interest in Kumovis that the Company reports as RNCI due to put and call terms that could result in the Company redeeming this remaining ownership interest at a future date (see Note 2). The following table shows changes in the reported RNCI balance during the nine months ended September 30, 2023:

<i>(in thousands)</i>	Nine Months Ended September 30, 2023
Balance at December 31, 2022	\$ 1,760
Net loss	(149)
Redemption value in excess of carrying value	321
Translation adjustments	(4)
Balance at September 30, 2023	<u>\$ 1,928</u>

The following table shows changes in the reported RNCI balance during the nine months ended September 30, 2022:

<i>(in thousands)</i>	Nine Months Ended September 30, 2022
Balance at December 31, 2021	\$ —
Fair value at the date of acquisition	1,559
Net Loss	(184)
Redemption value in excess of carrying value	462
Translation Adjustments	(183)
Balance at September 30, 2022	<u>\$ 1,654</u>

(12) Stock-Based Compensation

Stock Incentive Plans

2015 Incentive Plan

The Company is authorized to grant shares of restricted stock, restricted stock units ("RSUs"), stock appreciation rights, cash incentive awards and options to purchase shares of Common Stock to employees and non-employees inclusive of directors pursuant to its 2015 Incentive Plan (the "2015 Plan"). The 2015 Plan also designates measures that may be used for performance-based awards and market-based awards. The vesting period for awards granted under the 2015 Plan is generally determined by the Board of Directors at the date of the grant. Generally, the awards vest one third each year, over 3 years.

Systemic Bio Phantom Unit Plan

During the three months ended September 30, 2023, we began granting phantom unit awards ("Phantom Units") under a new compensation plan designed for employees and non-employees performing services for Systemic Bio, a wholly-owned subsidiary of 3D Systems Corporation. All awards granted under the plan are subsidiary-level awards.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The Phantom Units granted under the plan include both a time-based vesting condition (generally 4 years, subject to acceleration in connection with specified liquidity events) and a market condition that is met if (1) the value of Systemic Bio exceeds a specified multiple of the capital invested in this subsidiary (the "hurdle") and (2) the business achieves a specified minimum internal rate of return. The market condition will be assessed upon (A) a trigger event (e.g., change-in-control, IPO, or plan expiration of December 31, 2030) and/or (B) an interim liquidity event (defined as January 1, 2028) that occurs prior to a trigger event. All awards granted under the plan will be liability-classified due to our intention to settle these awards with cash; although, we have discretion to partially or fully settle these awards in equity upon vesting. Liability classification of the awards requires them to be remeasured at their fair value at the end of each reporting period. Due to the presence of the market-condition and the fact that Systemic Bio does not have a readily available share price, the awards are valued using a Monte Carlo simulation with the assistance of a third party valuation firm.

Other Compensation Arrangements that Include Share Settlement

Regenerative Medicine Earnout Payments and Performance-Based Stock Units

On December 1, 2021, the Company acquired Volumetric. Pursuant to the terms of the related acquisition agreement, the Company may be required to pay milestone-based payments of up to \$355,000 in the aggregate, all of which are incremental to the acquisition purchase price, upon (1) the achievement of seven discrete non-financial milestones that require attainment prior to either December 31, 2030 or December 31, 2035 and (2) the continued employment of certain key individuals from Volumetric. Each potential milestone-based payment is considered compensation expense, which the Company will recognize ratably from the point in time when a milestone is deemed probable of achievement through the estimated date of achievement. Each milestone payment will be settled approximately half in cash and half in shares of the Company's Common Stock and, accordingly, the portion of the Company's accrued liability (see Note 9) that is ultimately expected to be settled with the Company's common stock is reflected in the disclosure of stock-based compensation included herein.

In addition, the Company has granted performance-based stock units ("PSUs"), with vesting terms that are based upon four individually-measured, non-financial milestones, to other employees who work on advancements in regenerative medicine related to lungs and tissue organs. The PSUs associated with each individual milestone are recognized as compensation expense over the period commencing on the date that the respective milestone is deemed probable of being met through the anticipated date of achievement.

Prior to the quarter ended September 30, 2023, the Company recognized compensation expense related to (1) one Volumetric milestone-based payment, for which the potential amount due to the sellers would be \$65,000, and (2) one PSU milestone ("the RegMed Awards"), for which the aggregate grant date fair value of the outstanding and unvested awards was \$4,773 as of June 30, 2023, as the related milestone was deemed probable of achievement. During the quarter ended June 30, 2023, as a result of the Company's decision to reduce budgeted funding related to the research and development efforts required to achieve the milestone, the estimated timing for achievement of both the Volumetric milestone and the PSU milestone shifted from the end of fiscal year 2025 to the end of fiscal year 2026. During the quarter ended September 30, 2023, the Company decided to further reduce its budgeted funding for the research and development related to the Volumetric Earnout and RegMed Award milestone, which resulted in the Company concluding that it is no longer probable that the milestone will be achieved by the end of the term of the Volumetric Earnout arrangement or prior to the expiration of the RegMed Awards. In concluding that the Volumetric and RegMed Award milestone would no longer be achieved, the Company reversed all of the previously accrued compensation expense, one half of which was expected to be settled with common shares, which had an income statement impact of \$21,527 and \$18,392 for the three and nine-months ended September 30, 2023, respectively. The reversals of the previously expensed Volumetric Earnout and RegMed Award reduced our reported net loss per basic and diluted share of common stock by \$0.17 and \$0.14 for the three and nine months ended September 30, 2023, respectively.

dp polar Earnout

On October 4, 2022, the Company acquired dp polar. Pursuant to the terms of the related acquisition agreement, the Company may be required to pay an additional \$2,229, incremental to the acquisition purchase price, which will be settled via the issuance of 250 shares of the Company's Common Stock. The issuance and vesting of these shares is contingent on the continued service of a certain key individual from dp polar through October 4, 2024. Upon assessment, management concluded that this potential obligation for the payment of an additional 250 shares of Common Stock will be accounted for as compensation expense recognized over the required service period of the individual to whom the amount will potentially be paid and, accordingly, the related expense is reflected in the disclosure of stock-based compensation included herein. During the nine months ended September 30, 2023, we modified the service period of this arrangement to end on December 31, 2024. The impact of this modification on stock-based compensation expense is immaterial.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Stock-Based Compensation Activity and Expense

2015 Incentive Plan

During the three and nine months ended September 30, 2023, the Company granted 111 and 3,990 shares of restricted stock, respectively, which had a weighted-average grant date fair value of \$8.11 and \$10.95 per share, respectively. The restricted stock awards generally vest ratably over three years, except for those awards that the Company granted to settle a portion of its accrued annual bonus liability at December 31, 2022, which were fully vested immediately upon issuance.

The restricted stock granted during the nine months ended September 30, 2023 included 681 shares of market-based awards, whereby the number of shares that ultimately vest will be based upon the three-year performance of the Company's share price as compared to an index. These awards were valued using a Monte Carlo simulation, and the grant date fair value was \$18.91 per share.

The following table shows the stock-based compensation expense recognized during the three and nine months ended September 30, 2023 and 2022:

<i>(in thousands)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Stock-based compensation expense	\$ (3,142)	\$ 11,447	\$ 15,140	\$ 31,508
Tax benefit	\$ —	\$ —	\$ —	\$ —

Included in stock-based compensation expense recognized for the three and nine months ended September 30, 2023 are \$(1,055) and \$0, respectively, and \$1,282 and \$3,123 for the three and nine months ended September 30, 2022, respectively, of accrued expense pertaining to annual bonus incentive compensation for which settlement is ultimately expected to occur using shares of the Company's Common Stock. Also included in stock-based compensation expense are \$(10,140) and \$(8,640) for the three and nine months ended September 30, 2023, respectively, and \$1,989 and \$5,969 for the three and nine months ended September 30, 2022, respectively, which relate to the portion of the Volumetric Earnout expense reversed or recognized during each period that is expected to be settled using the Company's Common Stock. Further, stock-based compensation expense for the three and nine months ended September 30, 2023 includes \$175 and \$727, respectively, of expense related to the dp polar earnout arrangement. Finally, stock-based compensation expense includes \$(1,246) and \$(1,113) for the three and nine months ended September 30, 2023, respectively, and \$254 and \$746 for the three and nine months ended September 30, 2022, respectively, of expense related to the RegMed awards.

As of September 30, 2023, there was \$52,508 of unrecognized stock-based compensation expense related to all unvested share-based payment awards that the Company expects to recognize over a weighted-average period of 2.0 years.

Systemic Bio Phantom Unit Plan

During the three months ended September 30, 2023, we granted 589 units under the Systemic Bio Phantom Unit Plan, all of which remained outstanding as of September 30, 2023. Compensation expense attributable to these awards is being recognized over 40.5 months or 48 months, based upon the recipient. As the awards include graded, time-based vesting and a market condition, compensation expense is being recognized under the graded vesting (accelerated attribution) method. Compensation expense and the associated liability recognized during the three months ended September 30, 2023 were \$183.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(13) Interest and Other Income (Expense), Net

Interest and other income (expense), net consisted of the following amounts for the three and nine months ended September 30, 2023 and 2022:

<i>(in thousands)</i>	Three Months Ended		Nine Months Ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Interest and other income (expense), net				
Foreign exchange (loss), net	\$ (2,202)	\$ (764)	\$ (3,847)	\$ (4,193)
Interest income, net	4,909	2,029	13,118	4,019
Other (expense) income, net	(105)	(4,767)	420	(5,282)
Total interest and other income (expense), net	\$ 2,602	\$ (3,502)	\$ 9,691	\$ (5,456)

Interest and other income (expense), net includes (1) interest income of \$5,841 and \$15,730 for the three and nine months ended September 30, 2023, respectively, and \$2,753 and \$6,103 for the three and nine months ended September 30, 2022, respectively, and (2) interest expense of \$932 and \$2,612 for the three and nine months ended September 30, 2023 respectively, and \$724 and \$2,084 for the three and nine months ended September 30, 2022, respectively.

(14) Income Taxes

We maintain the exception under ASC 740-270-30-36(b), "Accounting for Income Taxes," for jurisdictions that do not have reliable estimates of ordinary income. Based on volatility in the industry, we have continued to use a year-to-date methodology in determining the effective tax rate for the three and nine months ended September 30, 2023.

For the three and nine months ended September 30, 2023, the Company's effective tax rate was (1.6)% and (0.6)%, respectively. For the three and nine months ended September 30, 2022, the Company's effective tax rate was (0.9)% and (3.1)%, respectively. The differences between the U.S. statutory tax rate and the effective tax rates for the three and nine months ended September 30, 2023 and September 30, 2022 are primarily driven by a full valuation allowance in various jurisdictions.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(15) Net Earnings (Loss) Per Share

Basic net income (loss) per share is calculated by dividing net income (loss) attributable to 3D Systems' Common Stock shareholders by the weighted average number of Common Stock shares outstanding during the applicable period. Diluted net income (loss) per share incorporates the additional shares issuable upon the assumed exercise of stock options, the vesting of restricted stock and RSUs, and the assumed conversion of debt, except in such cases when (1) the inclusion of such shares or potential shares would be anti-dilutive or (2) when the vesting of restricted stock or RSUs is contingent upon one or more performance conditions that have not been met as of the balance sheet date.

<i>(in thousands, except per share amounts)</i>	Three Months Ended		Nine Months Ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Numerator for basic and diluted net (loss) income per share:				
Net (loss) income attributable to 3D Systems Corporation	\$ (11,704)	\$ (37,398)	\$ (70,020)	\$ (97,158)
Redeemable non-controlling interest redemption value in excess of carrying value	(61)	(462)	(321)	(462)
Net (loss) income attributable to common stock shareholders	\$ (11,765)	\$ (37,860)	\$ (70,341)	\$ (97,620)
Denominator for net (loss) income per share:				
Weighted average shares – basic and diluted ⁽¹⁾	130,263	127,991	129,780	127,478
Net income (loss) per share – basic and diluted	\$ (0.09)	\$ (0.30)	\$ (0.54)	\$ (0.77)

(1) Equity awards are deemed anti-dilutive for the three and nine month periods ended September 30, 2023 and 2022 because we reported a net loss for these periods.

The following table presents the potentially dilutive shares that have been excluded from the computation of diluted earnings (loss) per share attributable to Common Stock shareholders because their effect is considered anti-dilutive for the three and nine months ended September 30, 2023 and 2022:

<i>(in thousands)</i>	Three and Nine Months Ended	
	September 30, 2023	September 30, 2022
Restricted stock and restricted stock units	6,653	5,030
Stock options	420	420
Total	7,073	5,450

For the three and nine months ended September 30, 2023, the table above excludes an estimate of 110 shares that are contingently issuable under the dp polar earnout arrangement, as discussed in Note 12. As of September 30, 2023, there are no contingently issuable shares related to the Volumetric Earnout arrangement or the fiscal year 2023 annual bonus incentive compensation plan.

For the three and nine months ended September 30, 2022, the table above excludes the following: (1) an estimate of 506 shares contingently issuable to settle the September 30, 2022 liability accrued for the assumed achievement of one milestone in the Volumetric Earnout arrangement, as discussed in Note 12, and (2) an estimate of 233 shares for the payment of the portion of the fiscal year 2022 annual bonus incentive compensation that was accrued as of September 30, 2022 and expected to be settled in shares. These share estimates are based upon the aggregate liabilities reported at September 30, 2022 for the Volumetric Earnout arrangement and a ratable portion of the fiscal year 2022 annual bonus incentive compensation that was settled using shares of the Company's Common Stock in the quarter ended June 30, 2023, divided by the Company's year-to-date average share price of \$13.11 per share.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

On November 16, 2021, the Company issued \$460,000 in aggregate principal amount of 0% Convertible Senior Notes due November 15, 2026, as discussed in Note 10. The Notes' impact on weighted average diluted shares will be calculated using the if-converted method as prescribed in ASC 260. The Notes will increase the weighted average diluted share count when the Company's average share price over an interim or annual reporting period is greater than \$35.92 per share, the conversion price of the Notes. For the three and nine months ended September 30, 2023 and 2022, the Notes were anti-dilutive on a stand-alone basis because (1) the Company's average share price during these periods did not exceed the conversion price and (2) we reported a net loss for each of the respective periods.

(16) Accumulated Other Comprehensive Loss

For the three and nine months ended September 30, 2023 and 2022, the changes in the balances of accumulated other comprehensive loss by component are as follows:

<i>(in thousands)</i>	Three Months Ended September 30, 2023			
	Foreign currency translation adjustment	Defined benefit pension plan	Unrealized loss on short-term investments	Total
Balance at June 30, 2023	\$ (50,069)	\$ 689	\$ —	\$ (49,380)
Other comprehensive income (loss)	(7,352)	(20)	—	(7,372)
Amounts reclassified from accumulated other comprehensive income (loss)	—	(11)	—	(11)
Balance at September 30, 2023	<u>\$ (57,421)</u>	<u>\$ 658</u>	<u>\$ —</u>	<u>\$ (56,763)</u>

<i>(in thousands)</i>	Nine Months Ended September 30, 2023			
	Foreign currency translation adjustment	Defined benefit pension plan	Unrealized loss on short-term investments	Total
Balance at December 31, 2022	\$ (54,194)	\$ 700	\$ (328)	\$ (53,822)
Other comprehensive income (loss)	(3,227)	(8)	108	(3,127)
Amounts reclassified from accumulated other comprehensive income (loss) ^(a)	—	(34)	220	186
Balance at September 30, 2023	<u>\$ (57,421)</u>	<u>\$ 658</u>	<u>\$ —</u>	<u>\$ (56,763)</u>

<i>(in thousands)</i>	Three Months Ended September 30, 2022			
	Foreign currency translation adjustment	Defined benefit pension plan	Unrealized loss on short-term investments	Total
Balance at June 30, 2022	\$ (55,196)	\$ (1,976)	\$ (4,023)	\$ (61,195)
Other comprehensive income (loss)	(22,135)	164	(32)	(22,003)
Amounts reclassified from accumulated other comprehensive income (loss) ^(a)	—	(8)	2,402	2,394
Balance at September 30, 2022	<u>\$ (77,331)</u>	<u>\$ (1,820)</u>	<u>\$ (1,653)</u>	<u>\$ (80,804)</u>

<i>(in thousands)</i>	Nine Months Ended September 30, 2022			
	Foreign currency translation adjustment	Defined benefit pension plan	Unrealized loss on short-term investments	Total
Balance at December 31, 2021	\$ (35,464)	\$ (2,242)	\$ —	\$ (37,706)
Other comprehensive income (loss)	(41,867)	311	(4,055)	(45,611)
Amounts reclassified from accumulated other comprehensive income (loss) ^(a)	—	111	2,402	2,513
Balance at September 30, 2022	<u>\$ (77,331)</u>	<u>\$ (1,820)</u>	<u>\$ (1,653)</u>	<u>\$ (80,804)</u>

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(a) Amount reclassified into interest and other income (expense), net on the statement of operations. See Note 19 for details regarding fair value measurements and unrealized gains (losses) on short-term investments.

The amounts presented in the table above are net of income taxes.

(17) Segment Information

The Company's operations are comprised of two reportable segments: Healthcare Solutions and Industrial Solutions. Effective as of January 1, 2023, and for periods subsequent thereto, Adjusted EBITDA reflects the measure of profitability used by the Company's chief operating decision maker ("CODM") to evaluate the performance of the Company's reportable segments. In addition, as of January 1, 2023, the Company's methodology for allocating certain costs between its segments was revised to more closely reflect changes in the Company's business and estimates of the usage of shared resources by the Company's segments. Prior year amounts have been reclassified to conform with current year presentation in connection with the changes referenced above. The following tables set forth our operating results by segment for the three and nine months ended September 30, 2023 and 2022:

<i>(in thousands)</i>	Revenue		Adjusted EBITDA	
	Three Months Ended September 30,		Three Months Ended September 30,	
	2023	2022	2023	2022
Healthcare Solutions	\$ 52,429	\$ 64,203	\$ 13,869	\$ 13,787
Industrial Solutions	71,362	68,050	7,662	7,180
Total Reportable segments	123,791	132,253	21,531	20,967
Corporate and Other ⁽¹⁾	—	—	(16,805)	(21,288)
Total Company	\$ 123,791	\$ 132,253	\$ 4,726	\$ (321)

<i>(in thousands)</i>	Revenue		Adjusted EBITDA	
	Nine Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Healthcare Solutions	\$ 162,028	\$ 200,294	\$ 30,328	\$ 45,705
Industrial Solutions	211,193	205,005	16,828	16,473
Total Reportable segments	373,221	405,299	47,156	62,178
Corporate and Other ⁽¹⁾	—	—	(59,422)	(63,155)
Total Company	\$ 373,221	\$ 405,299	\$ (12,266)	\$ (977)

(1) Corporate and Other is not an operating segment, but reflects expenses not directly attributable to and, accordingly, not allocated to our reportable segments. These expenses relate to corporate functions such as human resources, finance, and legal and include expenses such as salaries, benefits, and other related costs. Similar to the Company's operating segments, Corporate results are reported to and reviewed by the Company's CODM on the basis of Adjusted EBITDA.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The following table provides a reconciliation of the Company's reported net loss to the total of our reportable segment Adjusted EBITDA and Corporate and Other Adjusted EBITDA for the three and nine months ended September 30, 2023 and 2022:

<i>(in thousands)</i>	Three Months Ended		Nine Months Ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Net loss attributable to 3D Systems Corporation	\$ (11,704)	\$ (37,398)	\$ (70,020)	\$ (97,158)
Interest (income) expense, net	(4,909)	(2,029)	(13,118)	(4,019)
Provision (benefit) for income taxes	174	338	404	2,911
Depreciation expense	5,084	5,142	15,690	15,992
Amortization expense	3,179	4,293	9,676	10,273
Stock-based compensation expense	(3,142)	11,447	15,140	31,508
Acquisition and divestiture-related expense	(4,055)	2,728	134	9,382
Legal expenses	2,145	9,707	4,880	20,467
Restructuring expense	1,504	67	6,712	376
Redeemable non-controlling interest	(57)	(147)	(149)	(184)
Loss on equity method investment	605	—	747	—
Asset impairment charges	13,595	2,909	14,211	2,885
Other non-operating (income) expense	2,307	2,622	3,427	6,590
Adjusted EBITDA	\$ 4,726	\$ (321)	\$ (12,266)	\$ (977)

(18) Commitments and Contingencies

Indemnification

In the normal course of business, we periodically enter into agreements to indemnify customers or suppliers against claims of intellectual property infringement that may be made by third parties and arise from the use of our products. Historically, costs related to these indemnification provisions have not been significant, and we are unable to estimate the maximum potential impact of these indemnification provisions on our future results of operations.

To the extent permitted under Delaware law, we indemnify our directors and officers for certain events or occurrences, when the director or officer is, or was, serving at our request in such capacity, subject to limited exceptions. The maximum potential amount of future payments we could be required to make under these indemnification obligations is unlimited; however, we have directors and officers insurance coverage that may enable us to recover future amounts paid, subject to a deductible and the policy limits. There is no assurance that the policy limits will be sufficient to cover all damages, if any.

Other Commitments

Government Settlement

As previously disclosed, beginning in October 2017, the Company undertook an internal investigation relating to possible violations of U.S. export control laws, including the International Traffic in Arms Regulations administered by the Directorate of Defense Trade Controls of the Department of State ("DDTC") and the Export Administration Regulations administered by the Bureau of Industry and Security of the Department of Commerce ("BIS"). In February 2023, the Company settled these matters with the U.S. Department of Justice ("DOJ"), DDTC and BIS. As a part of these settlement agreements, the Company agreed to pay \$15,048 in civil monetary penalties to these agencies, with an additional \$10,000 in suspended penalty amounts to be allocated to remedial compliance measures required by DDTC. The penalty amounts were broken down as follows: DDTC, \$10,000 (in three installments over a three-year period); BIS, \$2,778; and DOJ, \$2,270. The first penalty installment payment to DDTC and the full penalty payments to BIS and to DOJ were made in the first quarter of 2023. The \$10,000 suspended penalty has not been recognized as a liability as of September 30, 2023 and will be recognized as incurred during the three-year term of the settlement agreement and any portion not expended at the end of the three-year term of the settlement agreement will be paid by the Company to DDTC.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Litigation

Shareholder Suits

The Company and certain of its current and former executive officers have been named as defendants in a consolidated putative stockholder class action lawsuit pending in the United States District Court for the Eastern District of New York (the “District Court”). The action is styled *In re 3D Systems Securities Litigation*, No. 1:21-cv-01920-NGG-TAM (E.D.N.Y.) (the “Securities Class Action”). On July 14, 2021, the Court appointed a Lead Plaintiff for the putative class and approved his choice of Lead Counsel. Lead Plaintiff filed his Consolidated Amended Complaint (the “Amended Complaint”) on September 13, 2021, alleging that defendants violated the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and SEC Rule 10b-5 promulgated thereunder by making false and misleading statements and omissions, and that the current and former executive officers named as defendants are control persons under Section 20(a) of the Exchange Act. The Amended Complaint was filed on behalf of stockholders who purchased shares of the Company’s Common Stock between May 6, 2020 and March 5, 2021, and seeks monetary damages on behalf of the purported class. Defendant moved to dismiss the Amended Complaint on February 15, 2022, and the motion was fully briefed in May 2022. On October 28, 2022, the parties notified the District Court that they reached an agreement in principle resolving this action, and on December 19, 2022, Lead Plaintiff filed a motion seeking entry of an order preliminarily approving the settlement and establishing notice procedures. The settlement is subject to both preliminary and final approval by the District Court. On June 5, 2023, following the District Court’s referral of Lead Plaintiff’s motion to a Magistrate Judge for a Report and Recommendation on the motion, the Magistrate Judge issued a Report and Recommendation recommending that the District Court grant Lead Plaintiff’s motion for preliminary approval of the settlement. The District Court adopted the Report and Recommendation and preliminarily approved the settlement on July 19, 2023. A final hearing on the settlement is scheduled for November 21, 2023. The settlement is subject to both preliminary and final approval by the District Court. On April 15, 2022, the Company was informed that the SEC is conducting a formal investigation of the Company related to, among other things, the allegations in the Securities Class Action, and the Company received subpoenas from the SEC for the production of documents and information related to its investigation as a follow on to a previous voluntary request for documents. The Company is cooperating with the SEC.

The Company has been named as a nominal defendant and certain of its current and former executive officers and directors have been named as defendants in derivative lawsuits pending in the United States District Court for the Eastern District of New York, the South Carolina Court of Common Pleas for the 16th Circuit, York County, and the Supreme Court of the State of New York, Kings County. The actions are styled *Nguyen v. Joshi, et al.*, No. 21-cv-03389-NGG-TAM (E.D.N.Y.) (the “Nguyen Action”), *Lesar v. Graves, et al.*, No. 2021CP4602308 (S.C., Ct. of Common Pleas for the 16th Judicial Cir., Cty. of York) (the “Lesar Action”), *Scanlon v. Graves, et al.*, No. 2021CP4602312 (S.C., Ct. of Common Pleas for the 16th Judicial Cir., Cty. of York) (the “Scanlon Action”), *Bohus v. Joshi, et al.*, No. 22-cv-2203-CBA-RML (E.D.N.Y.) (the “Bohus Action”), and *Fernicola v. Clinton, et al.*, No. 512613/2022 (N.Y., Kings County Supreme Court) (the “Fernicola Action”). The Complaints in the Nguyen and Bohus Actions, which were filed on June 15, 2021 and April 18, 2022, respectively, assert breach of fiduciary duty claims against all defendants and claims for contribution under the federal securities laws against certain of the defendants. The Complaints in the Lesar and Scanlon Actions, which were filed on July 26, 2021, assert breach of fiduciary duty and unjust enrichment claims against the defendants. The Complaint in the Fernicola Action was filed on May 2, 2022, and asserts claims for breach of fiduciary duty and waste of corporate assets against the director defendants. On August 27, 2021, the Nguyen Action was stayed until 30 days after the earlier of: (i) the close of discovery in the Securities Class Action, or (ii) the deadline for appealing a dismissal of the Securities Class Action with prejudice. On October 26, 2021, the Lesar Action and the Scanlon Action were consolidated into a single stockholder derivative action, styled as *In Re 3D Systems Corp. Shareholder Derivative Litigation*, No. 2021CP4602308 (S.C., Ct. of Common Pleas for the 16th Judicial Cir., Cty. Of York) (the “South Carolina Derivative Action”). On March 3, 2022, the South Carolina Derivative Action was stayed until 30 days after the earlier of: (i) the close of discovery in the Securities Class Action, or (ii) the deadline for appealing a dismissal of the Securities Class Action with prejudice. On June 16, 2022, the Bohus Action was consolidated with the Nguyen Action (the “E.D.N.Y. Derivative Action”). The E.D.N.Y. Derivative Action is stayed until 30 days after the earlier of: (i) the close of discovery in the Securities Class Action, or (ii) the deadline for appealing a dismissal of the Securities Class Action with prejudice. On August 15, 2022, the Fernicola Action was voluntarily dismissed without prejudice.

The Company believes the claims alleged in the putative securities class action and derivative lawsuits are without merit and the Company intends to defend itself and its current and former officers vigorously.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Letter of Credit

On June 2, 2023, we issued \$1,161 of guarantees in the form of a standby letter of credit as security for a long-term real estate lease. The letter of credit has an initial maturity date of June 2024 with automatic one-year extensions not beyond July 1, 2033. We have not recorded any liability for this guarantee as we believe the likelihood of having to perform under the letter of credit is remote. In connection with this transaction, we pledged an equal amount of cash to the issuing bank of this letter of credit. The cash pledged is recorded as restricted cash, included in other assets on our condensed consolidated balance sheets.

Other

We are involved in various other legal matters incidental to our business. Although we cannot predict the results of the litigation with certainty, we believe that the disposition of all of these various other legal matters will not have a material adverse effect, individually or in the aggregate, on our consolidated results of operations, consolidated cash flows or consolidated financial position.

In connection with the foregoing matters, we recognized a liability of \$16,044 during the year ended December 31, 2022, which includes the \$10,000 DDTC civil monetary penalty being recognized at a discount using the risk-free interest rate in effect at the time of recognition. During the nine months ended September 30, 2023, we have paid \$8,548 of this liability in accordance with the settlement agreements discussed above. Refer to Note 9 for details regarding our remaining short-term and long-term liabilities recorded for legal contingencies.

(19) Fair Value Measurements

Fair value is the exchange price to sell an asset or transfer a liability (an exit price) in an orderly transaction between market participants at the measurement date. Fair value measurements use market data or assumptions market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs may be readily observable, corroborated by market data, or generally unobservable. Valuation techniques maximize the use of observable inputs and minimize use of unobservable inputs. The accounting guidance for fair value measurements and disclosures establishes a three-level fair value hierarchy:

- Level 1 - Inputs are based on quoted prices in active markets for identical assets and liabilities.
- Level 2 - Inputs are based on observable inputs other than quoted prices in active markets for identical or similar assets and liabilities.
- Level 3 - One or more inputs are unobservable and significant.

Financial and nonfinancial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

Cash equivalents are valued utilizing the market approach to measure fair value for financial assets and liabilities. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. The carrying amounts of our cash and cash equivalents, restricted cash, accounts receivable, accounts payable, and accrued liabilities approximate fair value as of September 30, 2023 and December 31, 2022 because of the relatively short duration of these instruments.

We did not have any transfers of assets or liabilities between Level 1, Level 2 and Level 3 of the fair value measurement hierarchy during the three and nine months ended September 30, 2023.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Assets measured at fair value on a recurring basis as of December 31, 2022 are summarized below. During the three months ended September 30, 2023, we sold all of our remaining Level 2 short-term investments included in the table below.

<i>(in thousands)</i>	Fair Value Measurement as of December 31, 2022					
	Fair Value Measurement				Balance Sheet Classification	
	Fair Value Level	Cost Basis	Unrealized Gains (Losses)	Fair Value	Cash and Cash Equivalents	Short-term Investments
Money market funds	Level 1	\$ 232,018	\$ —	\$ 232,018	\$ 232,018	\$ —
Certificates of deposit	Level 2	990	6	996	—	996
Commercial paper	Level 2	1,281	6	1,287	—	1,287
Short-term bond mutual funds	Level 2	100,242	(99)	100,143	—	100,143
Corporate bonds ^(a)	Level 2	78,418	(241)	78,177	—	78,177
Total		<u>\$ 412,949</u>	<u>\$ (328)</u>	<u>\$ 412,621</u>	<u>\$ 232,018</u>	<u>\$ 180,603</u>

(a) Includes \$745 and \$743 of cost basis and fair market value, respectively, with a weighted average maturity of 1.3 years.

(20) Restructuring

During the three months ended June 30, 2023, the Company announced a restructuring initiative intended to improve internal operating efficiencies, as well as long-term valuation creation. Actions taken by the Company primarily consisted of a reduction in headcount of approximately 6% of the Company's workforce, with the majority of the workforce reduction occurring in corporate and business support functions predominately located in the US and Europe. Since initiating the plan, the Company has accrued severance and termination costs totaling \$3,724, which have been reported within selling, general, and administrative expense on the Company's condensed consolidated statement of operations and reflect the total costs expected to be incurred in connection with this activity. As the reduction in workforce was concentrated within corporate and business support functions, the reported results of the Company's Healthcare Solutions and Industrial Solutions segments were not impacted by this restructuring initiative. The settlement of all costs accrued in connection with this restructuring initiative is expected to occur prior to the end of the year ending December 31, 2023. The following table provides additional details regarding the restructuring costs incurred during the period, the portion of such costs that were settled with cash as of September 30, 2023, and the remaining accrued liability reported in our condensed consolidated balance sheet as of September 30, 2023:

<i>(in thousands)</i>	Accrued liability as of December 31, 2022	Costs incurred during 2023	Amounts settled with cash	Accrued liability as of September 30, 2023
Severance, termination benefits and other employee costs	\$ —	\$ 3,724	\$ 2,693	\$ 1,031
Total	<u>\$ —</u>	<u>\$ 3,724</u>	<u>\$ 2,693</u>	<u>\$ 1,031</u>

In addition to the recognition of severance and termination costs, the Company recognized an impairment charge of \$628 related to certain fixed assets that were retired.

3D SYSTEMS CORPORATION
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

(21) Subsequent Events

On October 25, 2023, the Company announced the next evolution of its restructuring initiative designed to improve operating efficiencies throughout the organization and drive long-term value creation. This additional phase of the restructuring initiative will target to deliver expected annualized savings of between \$45 million and \$55 million by the end of 2024, with the majority of the cost takeout to occur by the end of the first quarter of 2024. This initiative is primarily targeted at continuing to rationalize headcount and geographic locations in all functions across the Company. As this latest phase of the Company's multi-faceted restructuring initiative contemplates the execution of new strategic actions that may be taken with respect to certain of the Company's previously acquired businesses and/or other asset groups, certain asset groups could become subject to impairment tests triggered by (1) an adverse change in the extent or manner in which the long-lived asset (or asset group) is being used, (2) a current expectation that it is more likely than not that the long-lived asset (or asset group) will be sold or otherwise disposed of significantly before the end of its previously estimated useful life, or (3) other factors triggered by the Company's restructuring initiative. If required, a quantitative impairment test related to any of our asset groups could result in the recognition of a material impairment charge.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read together with our unaudited condensed consolidated financial statements and notes thereto included in Item 1 of this Quarterly Report on Form 10-Q (the “Financial Statements”). Certain statements contained in this discussion may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements involve a number of risks, uncertainties and other factors that may affect our future performance, as discussed in greater detail under the heading “Forward Looking Statements” below and in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2022 (“2022 Form 10-K”).

Business Overview

3D Systems Corporation (“3D Systems” or the “Company” or “we,” “our” or “us”) markets our products and services through subsidiaries in North America and South America (collectively referred to as “Americas”), Europe and the Middle East (collectively referred to as “EMEA”) and the Asia Pacific and Oceania regions (collectively referred to as “APAC”). We provide comprehensive 3D printing and digital manufacturing solutions, including 3D printers for plastics and metals, materials, software, and digital design tools. Our solutions support advanced applications in two key industry verticals: Healthcare Solutions and Industrial Solutions. We have over 35 years of experience and expertise, which have proven vital to our development of an ecosystem and end-to-end digital workflow solutions that enable customers to optimize product designs, transform workflows, bring innovative products to market and drive new business models.

The Company has two reportable segments, Healthcare Solutions and Industrial Solutions. Healthcare Solutions includes dental, medical devices, personalized health services and regenerative medicine. Industrial Solutions includes aerospace, defense, transportation and general manufacturing. We architect solutions specific to customers’ needs through a combination of materials, hardware platforms, software, professional services and advanced manufacturing – creating a path to integrating additive manufacturing into traditional production environments. As a result, manufacturers achieve design freedom, increase agility, scale production and improve their overall total cost of operation. Our technologies and process knowledge enable over a million production parts to be made through additive manufacturing each day.

Recent Developments

Fiscal Year 2023 Restructuring Activity

On May 8, 2023, the Company announced its plans to reduce its headcount by approximately 6%, with the majority of reductions being made in corporate and business support functions predominantly located in the US and Europe. The reduction in headcount, which resulted in the recognition of \$3.0 million of severance-related costs, was part of the Company’s multi-faceted restructuring initiative that has also included the Company’s plans to in-source the manufacturing of certain metal printer platforms, as previously announced during the quarter ended March 31, 2023. The headcount reduction announced during our second fiscal quarter of 2023, reflected both our plan to improve operating efficiencies and investments that we had made to improve business processes, rationalize operations, and integrate the acquisitions completed over the past two years. Our plan to in-source certain metal printer platforms is expected to improve cycle time from development to production by co-locating the engineering and manufacturing related to such platforms. The combination of reducing the Company’s headcount and the in-sourcing of certain metal printer platforms as part of this phase of the Company’s restructuring initiative is expected to result in (1) total reduced operating expenses of between \$4.0 million and \$6.0 million for the fiscal year ending December 31, 2023 and (2) reduced operating expenses of between \$9.0 million and \$11.0 million for future annual periods, beginning with the fiscal year ending December 31, 2024.

On October 25, 2023, the Company announced the latest phase of its multi-faceted restructuring initiative, which is expected to continue to improve operating efficiencies throughout the organization and drive long-term value creation. This additional phase of the restructuring initiative will target the delivery of incremental annualized savings of between \$45.0 million and \$55.0 million by the end of the fiscal year ended December 31, 2024, with the majority of the cost takeout to occur by the end of the first quarter of 2024. The initiative is primarily targeted at continuing to rationalize headcount, as well as rationalizing geographic locations, across all functions of the Company. The initiative also considers strategic actions expected to be taken with respect to certain of the Company’s previously acquired businesses. (Refer to the discussion below at “Acquisitions/Investments” for additional detail.)

Stratasys Update

Since June 2023, the Company has delivered to the board of directors of Stratasys Ltd. (“Stratasys”) multiple proposals to acquire all of Stratasys’ issued and outstanding ordinary shares of common stock. On September 6, 2023, the Company delivered its most recent proposal to Stratasys and on September 13, 2023 delivered in escrow a binding merger agreement (the “Merger Agreement”) and an accompanying escrow letter (the “Escrow Letter”), for the acquisition of 100% of Stratasys’ issued and outstanding shares of common stock for a per share consideration equivalent of (1) \$7.00 in cash and (2) 1.6387 newly issued shares of the combined company. The Company’s binding offer expired on October 5, 2023 with no further engagement from Stratasys. Refer to the Company’s Form 8-K furnished on September 13, 2023 for additional details regarding the Company’s most recent proposal for the acquisition of Stratasys.

Acquisitions/Investments

The Company has made the following significant acquisitions and investments, commencing with the fourth quarter of 2021 and continuing through September 30, 2023.

Wematter AB

On July 1, 2023, the Company completed the acquisition of Wematter AB (“Wematter”), a Swedish 3D printer manufacturer. The acquisition broadens 3D Systems’ Selective Laser Sintering (SLS) portfolio. Consideration for this acquisition consisted of approximately \$10,224 in cash, subject to customary post-closing adjustments. The Company also may be required to pay an additional €2,000 in cash, contingent upon the achievement of certain post-closing performance conditions and the continued employment of certain Wematter key employees for two years after the closing date. If earned, the €2,000 is expected to be recognized as compensation expense over the two-year service period that the key employees must remain employed at 3D Systems. As of September 30, 2023, management believes that the achievement of the post-closing performance conditions is probable and has commenced the recognition of the compensation expense accordingly.

Theradaptive, Inc.

In June of 2023, we made an \$8.0 million investment in Theradaptive, Inc. (“Theradaptive”), via the purchase of Series A Preferred Stock, pursuant to which we hold an approximate 9.15%, or 8.25% fully-diluted, ownership interest in Theradaptive. Theradaptive is currently developing a protein that encourages bone growth. This biotechnology could be applied to 3D printed metal splints for patients who otherwise may require amputation of a limb because the lost bone is too vast to replace with a splint. The Company has accounted for its investment in Theradaptive on a cost basis, subject to assessment for impairment, as the fair value of Theradaptive’s equity is not readily determinable and the investment is not subject to the equity method of accounting due to the Company’s lack of significant influence. The investment in Theradaptive is not expected to materially impact our future financial position, results of operations, or cash flows.

dp polar GmbH

On October 4, 2022, we completed the acquisition of dp polar GmbH (“dp polar”), a German-based designer and manufacturer of a manufacturing system designed for true high-speed mass production of customized components, for \$25.9 million, which includes \$19.6 million paid in cash at closing, \$7.1 million paid at closing via the issuance of the Company’s common stock, and a provisional estimated post-closing purchase price adjustment of \$0.8 million due to the Company from the sellers. An additional payment of \$2.2 million, consisting of the issuance of 249,865 shares of the Company’s common stock, could be required if a key individual from dp polar’s management team provides service to the Company through December 31, 2024. dp polar has not yet begun to generate revenues and, accordingly, the acquisition’s impact on the Company’s results of operations and cash flows has been dilutive.

Kumovis GmbH

On April 1, 2022, we completed the acquisition of 93.75% of Kumovis GmbH (“Kumovis”) for an all-cash purchase price of \$37.9 million. \$3.6 million of the purchase price was deferred for up to fifteen months from the closing date, and was paid in July 2023. Kumovis, which is part of the Healthcare Solutions segment, utilizes polyether ether keton or “PEEK” materials, which have properties that lend it to many medical applications, including many implant applications, that fit into our personalized healthcare solutions operations. The acquisition’s near-term impact on the Company’s results of operations and cash flows has been dilutive.

Titan Additive LLC

On April 1, 2022, we completed the acquisition of 100% of Titan Additive LLC ("Titan") for an all-cash purchase price of \$39.0 million. Titan, which is part of the Industrial Solutions segment, is a pellet-based extrusion platform that addresses customer applications requiring large build volumes, superior performance, and improved productivity at significantly lower cost. We believe the acquisition of Titan will open up new markets in the Industrial Solutions segment. The acquisition's near-term impact on the Company's results of operations and cash flows has been dilutive.

Saudi Arabian Industrial Investments Company

In March 2022, the Saudi Arabian Industrial Investments Company ("Dussur") and 3D Systems signed an agreement to form a joint venture intended to expand the use of additive manufacturing within the Kingdom of Saudi Arabia and surrounding geographies, including the Middle East and North Africa. The joint venture is to enable the development of Saudi Arabia's domestic additive manufacturing production capabilities, consistent with the Kingdom's 'Vision 2030,' which is focused on diversification of the economy and long-term sustainability. Upon entering the agreement with Dussur, 3D Systems committed to an initial investment in the joint venture of approximately \$6.5 million, of which \$3.4 million had been deposited into an escrow account as of December 31, 2022 and, accordingly, was reported as restricted cash within other assets on the December 31, 2022 balance sheet. In February 2023, the Company became a shareholder in the joint venture and owns 49% of the joint venture's common stock. During April 2023, the \$3.4 million held in escrow, as well as the additional amount of approximately \$3.1 million owed to the joint venture, was deposited into a bank account of the joint venture for use in its operations. Additional future investments are contingent upon the achievement of certain milestones by the joint venture. The impact of this investment on the Company's future financial position and cash flows is expected to be limited to cash outflow(s) related to future contingent investments, if required. The Company accounts for the joint venture under the equity method of accounting, which requires the Company to recognize its proportionate share of the joint venture's reported net income or loss. Due to the timing of when the joint venture's reported financial information is expected to be available, the Company records amounts required to be recognized pursuant to the equity method of accounting on a one quarter lag.

Enhatch Inc.

In March 2022, we made a \$10.0 million investment for an approximate 26.6% ownership interest in Enhatch Inc. ("Enhatch"), the developer of the Intelligent Surgery Ecosystem. We simultaneously entered into a collaboration and supply agreement with Enhatch. We also obtained warrants to purchase additional shares of Enhatch and the right to purchase, in the future, the remaining shares of Enhatch that 3D Systems does not own, if certain revenue targets are achieved. Enhatch's Intelligent Surgery Ecosystem provides technologies which streamline and scale the design and delivery of patient-specific medical devices by automating the process. Incorporating these capabilities into 3D Systems' workflow for patient-specific solutions, which includes advanced software, expert treatment planning services, custom implants, instrumentation design, and industry-leading production processes, will help more efficiently meet the growing demand for personalized medical devices.

Volumetric Biotechnologies, Inc.

On December 1, 2021, we acquired Volumetric Biotechnologies, Inc. ("Volumetric") for \$40.2 million. Additional payments of up to \$355.0 million are possible upon (1) the attainment of seven non-financial milestones, each of which is measured individually and requires achievement prior to either December 31, 2030 or December 31, 2035, and (2) the continued employment of certain key individuals from Volumetric. Volumetric's mission is to develop the ability to manufacture human organs using bioprinting methods and the underlying technologies required to create these highly complex biological structures. With this acquisition, we expanded our capabilities and capacity in 3D printing related to bio-printing and regenerative medicine. Combining 3D Systems' regenerative medicine group with Volumetric's highly complementary skill sets of biological expertise and cellular engineering is expected to accelerate our core regenerative medicine strategies, which include the bio-printing of human organs, additional non-organ applications and bio-printing technologies for research labs. The acquisition's near-term impact on the Company's results of operations and cash flows has been dilutive. Volumetric's operating results are reported in the Healthcare Solutions segment.

Oqton, Inc.

On November 1, 2021, we acquired Oqton, Inc. ("Oqton") for \$187.8 million. Oqton is a software company that creates an intelligent, cloud-based MOS ("manufacturing operations system") platform tailored for flexible production environments that increasingly utilize a range of advanced manufacturing and automation technologies, including additive manufacturing solutions, in their production workflows. The cloud-based solution leverages the Industrial Internet of Things, artificial intelligence, and machine learning technologies to deliver a solution for customers to automate their digital manufacturing workflows, scale their operations and enhance their competitive position.

Since being acquired, Oqton's impact on the consolidated Company's financial position, results of operations and cash flows, as well as the reported results of the Industrial Solutions segment, has been dilutive. As such, the Company has been evaluating strategic alternatives for Oqton's cloud-based MOS platform and, during the quarter ended September 30, 2023, the Company concluded that it is more likely than not that it will either sell or dispose of Oqton, which represents a discrete asset group within the Industrial Solutions segment and reporting unit. Based on this conclusion, the long-term cash flow forecast for Oqton was revised. The revised long-term cash flow forecast indicated that the carrying amount of the Oqton long-lived assets, consisting of recognized product technology and trade name intangible assets, may not be recoverable. Accordingly, the carrying value of these assets was tested for impairment. As a result of the sum of the present value of the estimated future cash flows expected to result from the use and eventual disposition of the asset group being less than the carrying value of the asset group, during the quarter ended September 30, 2023, the Company recognized \$13.6 million of impairment charges related to the long-lived assets included in the asset group.

Investing in Regenerative Medicine

We continue to expand our focus and investments in the application of additive manufacturing for regenerative medicine. Currently, our efforts in the area of regenerative medicine consist mainly of pre-commercial research and development ("R&D") and involve three strategies.

The first strategy is the use of additive manufacturing for human organ transplantation. Each year, end-stage organ failure kills millions of people. However, the supply of donated organs is insufficient to meet the needs of patients seeking transplantation. We have made significant progress in our organ printing development program, which we are conducting with a key strategic partner. This program was first established in 2017 and combines our legacy 3D printing expertise and our new capabilities in human tissue engineering from our acquisition of Volumetric in 2021 with the regenerative medicine and biotechnology expertise of our partner. To date, our program has focused on developing the capability to print scaffolds for human lungs, kidneys and livers, with a long-term goal of allowing patients with end-stage disease to receive transplants which will enable them to enjoy long and active lives.

Our second strategy involves utilizing our bio-printing technology to manufacture non-organ human tissue scaffolds for use in transplantation and surgical reconstruction applications. We believe that continued progress in this area could result in significantly improved health outcomes for patients, as well as open up attractive new growth markets and therapeutic applications for 3D printed, vascularized soft-tissue scaffolds.

Our third regenerative medicine strategy seeks to utilize our bio-printing capabilities to design and manufacture 3D-printed vascularized "organs-on-chips" for use in drug development by pharmaceutical industry customers through our wholly-owned biotech company, Systemic Bio. Currently, drug development is an expensive and time-consuming process, and many drug therapies that appear promising during pre-clinical trials fail during human clinical trials. We believe that "organs-on-chips" can accelerate the drug development process and reduce the cost of pre-clinical drug testing, as well as reduce the pharmaceutical industry's reliance on animal testing. Systemic Bio combines 3D Systems' legacy expertise in high-resolution 3D printing with advanced capabilities in bioprinting and biomaterials to design and market 3D-printed, vascularized "organs-on-chips" for sale to pharmaceutical industry customers. In the first quarter of 2023, we signed our first contract with a top pharmaceutical company.

Background

We earn revenue from the sale of products and services through our Healthcare Solutions and Industrial Solutions segments. The product categories include 3D printers and corresponding materials, digitizers, software licenses, 3D scanners and haptic devices. The majority of materials used in our 3D printers are proprietary. The services categories include maintenance contracts and services on 3D printers, software maintenance, software as a service subscriptions and healthcare solutions services.

Given the relatively high price of certain 3D printers and a corresponding lengthy selling cycle, as well as relatively low unit volume of the higher-priced printers in any particular period, a shift in the timing and concentration of orders and shipments from one period to another can materially affect reported revenue in any given period.

In addition to changes in sales volumes, there are two other primary drivers of changes in revenue from one period to another: (1) the combined effect of changes in product mix and average selling prices and (2) the impact of fluctuations in foreign currencies. As used in this Management's Discussion and Analysis of Financial Condition and Results of Operations, the price and mix effects relate to changes in revenue that are not able to be specifically related to changes in unit volume or foreign exchange.

How We Assess the Performance of Our Business

We manage operations through the two business segments described above. In addition to our consolidated GAAP financial measures, we review Adjusted EBITDA.

We believe Adjusted EBITDA is a helpful supplemental measure to assist us and investors in evaluating our operating results, as Adjusted EBITDA excludes certain items for which the fluctuation from period to period does not necessarily correspond to changes in the operations of our business. Adjusted EBITDA represents net income (loss), plus income tax (provision) benefit, interest and other income (expense), net, stock-based compensation expense, amortization of intangible assets, depreciation expense, and certain other non-GAAP adjustments. We believe that the adjustments applied in presenting Adjusted EBITDA are appropriate to provide additional information to investors about (1) our operating and financial performance without the effect of certain material non-cash items and (2) non-recurring items that we do not expect to continue at the same level in the future.

Management and our Board of Directors regularly use Adjusted EBITDA in evaluating our operating and financial performance and in establishing discretionary annual compensation. This measure is provided in addition to, and should not be considered to be a substitute for, or superior to, comparable measures determined in accordance with GAAP. In addition, we believe that Adjusted EBITDA is frequently used by investors and other interested parties in the evaluation of other issuers, many of which also present Adjusted EBITDA when reporting their results in an effort to augment investors' understanding of their operating and financial results; however, similarly titled measures provided by other issuers may not be calculated in the same manner and/or using the same adjustments.

Adjusted EBITDA should not be considered as an alternative to net income (loss) or any other performance measure derived in accordance with GAAP. Adjusted EBITDA has limitations as an analytical tool, and you should not consider such measure either in isolation or as a substitute for analyzing our results as reported under GAAP.

For further information regarding Adjusted EBITDA, see "Reconciliation of non-GAAP Measures" below.

Consolidated Financial Results for the Three and Nine Months Ended September 30, 2023 and 2022

<i>(in thousands)</i>	Three Months Ended		Nine Months Ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Revenue:				
Products	\$ 80,415	\$ 96,337	\$ 253,968	\$ 300,662
Services	43,376	35,916	119,253	104,637
Total revenue	123,791	132,253	373,221	405,299
Cost of sales:				
Products	47,427	58,042	153,442	181,845
Services	21,014	21,541	67,315	63,851
Total cost of sales	68,441	79,583	220,757	245,696
Gross profit	55,350	52,670	152,464	159,603
Operating expenses:				
Selling, general and administrative	33,355	65,579	150,623	185,398
Research and development	21,982	20,796	66,953	63,180
Impairment of intangible assets	13,597	—	13,597	—
Total operating expenses	68,934	86,375	231,173	248,578
Loss from operations	(13,584)	(33,705)	(78,709)	(88,975)
Interest and other income (expense), net	2,602	(3,502)	9,691	(5,456)
(Loss) income before income taxes	(10,982)	(37,207)	(69,018)	(94,431)
(Provision) benefit for income taxes	(174)	(338)	(404)	(2,911)
(Loss) on equity method investment, net of income taxes	(605)	—	(747)	—
Net (loss) income before redeemable non-controlling interest	(11,761)	(37,545)	(70,169)	(97,342)
Less: net (loss) income attributable to redeemable non-controlling interest	(57)	(147)	(149)	(184)
Net (loss) income attributable to 3D Systems Corporation	\$ (11,704)	\$ (37,398)	\$ (70,020)	\$ (97,158)
Other Financial Data:				
Adjusted EBITDA	\$ 4,726	\$ (321)	\$ (12,266)	\$ (977)

Operating Results for the Three Months Ended September 30, 2023 Compared to the Three Months Ended September 30, 2022

Consolidated revenue

The following table sets forth changes in our products and services revenue for the three months ended September 30, 2023 and 2022.

<i>(Dollars in thousands)</i>	Products		Services		Total	
Revenue — Three months ended September 30, 2022	\$ 96,337	72.8 %	\$ 35,916	27.2 %	\$ 132,253	100.0 %
Change in revenue:						
Volume	(19,290)	(20.0)%	6,653	18.5 %	(12,637)	(9.6)%
Price/mix	1,351	1.4 %	—	— %	1,351	1.0 %
Foreign currency translation	2,017	2.1 %	807	2.2 %	2,824	2.1 %
Net change	(15,922)	(16.5)%	7,460	20.7 %	(8,462)	(6.4)%
Revenue — Three months ended September 30, 2023	\$ 80,415	65.0 %	\$ 43,376	35.0 %	\$ 123,791	100.0 %

Products revenue

For the three months ended September 30, 2023, products revenue decreased by \$15.9 million, or 16.5%, as compared to the three months ended September 30, 2022. Lower sales volume resulted in a \$19.3 million, or 20.0%, decrease in reported product revenue relative to the prior year period, of which \$19.0 million of such decrease is attributable to our Healthcare Solutions segment. The lower sales volume within our Healthcare Solutions segment was primarily due to lower sales to the dental market, as the demand for related elective dental procedures that our products support has been impacted by current economic conditions. Product sales volume in our Healthcare Solutions segment also decreased due to lower printer sales into the medical devices market. As shown in the table, a favorable impact of price/mix, primarily related to our Healthcare Solutions segment, and a favorable impact of foreign currency translation, related to both the Healthcare Solutions and Industrial Solutions segments, partially offset the significant decrease in revenue attributable to our Healthcare Solutions segment's lower sales volume.

Services revenue

For the three months ended September 30, 2023, services revenue increased by \$7.5 million, or 20.7%, as compared to the three months ended September 30, 2022. Higher sales volume resulted in a \$6.6 million, or 18.5%, increase in reported services revenue relative to the prior year period, of which \$4.4 million and \$2.2 million of the increase relates to our Healthcare Solutions segment and our Industrial Solutions segment, respectively. Services revenue recognized by our Healthcare Solutions segment increased primarily due to incremental variable consideration (revenue) being deemed probable of being earned under a regenerative medicine collaboration and licensing agreement that was amended during the three months ended September 30, 2023. In connection with the amendment to this collaboration and licensing agreement, the Company concluded that three additional milestone-based payments included in the contract, totaling \$6.5 million in the aggregate, became probable of being earned, for which an aggregate of \$4.5 million of revenue was recognized during the three months ended September 30, 2023. Revenue related to the collaboration and licensing agreement is recognized over time and, accordingly, the remaining \$2.0 million of revenue attributable to the three additional milestone payments is expected to be recognized over the remaining duration of the contract.

The \$2.2 million increase in the services revenue attributable to our Industrial Solutions segment relates to increases in revenue generated from hardware services, parts manufacturing services, and software maintenance.

Total revenue

For the three months ended September 30, 2023, total revenue decreased by \$8.5 million, or 6.4%, as compared to the three months ended September 30, 2022, as the decrease in our products revenue exceeded the increase in our services revenue, as described above.

Consolidated gross profit

(Dollars in thousands)	Three Months Ended				Change in Gross Profit		Change in Gross Profit Margin	
	September 30, 2023		September 30, 2022		\$	%	Percentage Points	%
	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin				
Products	\$ 32,988	41.0 %	\$ 38,295	39.8 %	\$ (5,307)	(13.9)%	1.2	3.0 %
Services	22,362	51.6 %	14,375	40.0 %	7,987	55.6 %	11.6	29.0 %
Total	\$ 55,350	44.7 %	\$ 52,670	39.8 %	\$ 2,680	5.1 %	4.9	12.3 %

Products gross profit and gross profit margin

For the three months ended September 30, 2023, gross profit from products sales decreased by \$5.3 million, or 13.9%, as compared to the three months ended September 30, 2022. Gross profit decreased \$9.0 million due to lower sales volumes and the resulting decrease in product revenue, which decrease was partially offset by a favorable impact of sales price/mix. Gross profit margin increased due to the favorable impact of sales price/mix.

Services gross profit and gross profit margin

For the three months ended September 30, 2023, gross profit from services sales increased \$8.0 million, or 55.6%, as compared to the three months ended September 30, 2022. The increase in gross profit from services sales was driven by the \$6.6 million, or 18.5%, increase in services revenue attributable to higher sales volume, favorable impacts of cost reductions due to reduced headcount, and a favorable impact of foreign currency exchange. The increase in services revenue includes the \$4.5 million of incremental variable consideration revenue recognized by our Healthcare Solutions segment upon concluding that additional milestone-based payments included in a collaboration and licensing revenue agreement are probable of being earned. As there were no direct costs (e.g., costs of goods sold) associated with this incremental collaboration and licensing revenue, the entire \$4.5 million contributed to an increase in our reported gross profit, as well as to a 5.5% increase and 2.1% increase in our services gross profit margin and consolidated gross profit margin, respectively. In addition, a \$2.2 million increase in services revenue attributable to our Industrial Solutions segment contributed to a \$1.5 million increase in our reported gross profit.

Consolidated selling, general and administrative expense

Selling, general and administrative ("SG&A") expense for the three months ended September 30, 2023 decreased \$32.2 million, or 49.1%, to \$33.4 million, as compared to \$65.6 million for the three months ended September 30, 2022. The primary drivers of the \$32.2 million decrease in SG&A expense reported for the three months ended September 30, 2023, as compared to the three months ended September 30, 2022, are as follows:

Primary drivers (in thousands)	Increase / (Decrease)
Volumetric earnout	\$ (24,260)
Legal and contingency costs	(4,819)
Compensation and benefits (inclusive of stock-based compensation)	(4,391)
Consulting and outside services	1,289
Severance	674
Other	(717)
Total change	\$ (32,224)

Volumetric earnout expense decreased \$24.3 million as the Company reversed \$20.3 million of previously recognized earnout expense during the three months ended September 30, 2023, as compared to recognizing \$4.0 million of earnout expense during the three months ended September 30, 2022. Prior to the current quarter ended September 30, 2023, the Company was accruing for a potential earnout payment of \$65 million (compensation expense) based upon the expected achievement of a non-financial milestone outlined in the Volumetric acquisition agreement. Expense related to the potential earnout payment was being recognized on a straight-line basis through the anticipated date of achievement of the related milestone. However, as of the current quarter ended September 30, 2023, the Company has concluded that this non-financial milestone is no longer probable of being achieved due to a reduction in the budgeted funding for the related research and development efforts, resulting in the reversal of all previously recognized compensation expense. Refer to Note 12 and our discussion of "Critical Accounting Estimates" for additional details.

The decrease in legal and contingency costs for the three months ended September 30, 2023 is primarily due to the Company's accrual of approximately \$9.7 million in estimated costs related to the government compliance matters discussed in Note 18 during the quarter ended September 30, 2022. Those government compliance matters were ultimately settled during the quarter ended March 31, 2023. No events that would require the recognition of a similar material legal contingency accrual occurred during the three months ended September 30, 2023. An increase in other legal fees incurred during the three months ended September 30, 2023 partially offset the impact of not recording similar legal and contingency costs during the quarter ended September 30, 2023.

The decrease in compensation and benefit costs for the three months ended September 30, 2023 is primarily attributable to \$5.2 million of lower bonus and stock-based compensation expense recognized during the quarter ended September 30, 2023, partially offset by an increase in ordinary salaries and wages and benefit costs, as compared to the three months ended September 30, 2022. Lower bonus expense is primarily attributable to the reversal of previously accrued performance-based bonus expense during the quarter ended September 30, 2023. Lower stock-based compensation expense is primarily attributable to the reversal of \$1.2 million of expense attributable to performance-based restricted stock units during the quarter ended September 30, 2023, for which the performance condition required to be achieved is identical to the Volumetric non-financial milestone that is no longer deemed probable of being met due to the reduction in the budgeted funding for the related research and development efforts. Refer to Note 12 and our discussion of "Critical Accounting Estimates" for additional details.

The increase in consulting and outside services for the three months ended September 30, 2023 reflects an increase in the use of third-party service providers to support various functions within the Company, including certain internal transformation efforts.

The increase in severance costs for the three months ended September 30, 2023 reflects costs incurred in connection with the Company's continued reduction in headcount in its corporate and business support functions, as part of its restructuring plan announced during the quarter ended June 30, 2023. The reduction in headcount reflects the Company's commitment to rationalizing its operations and improving its operating efficiency.

Consolidated research and development expense

Research and development ("R&D") expense for the three months ended September 30, 2023 increased \$1.2 million, or 5.7%, to \$22.0 million, as compared to \$20.8 million for the three months ended September 30, 2022. R&D expense increased \$2.1 million related to our regenerative medicine research activities primarily attributable to our wholly-owned subsidiary, Systemic Bio, and \$0.6 million due to the Company's acquisitions of dp polar in October of 2022 and Wematter in July of 2023. While the Company's R&D expense reported for the three months ended September 30, 2023 includes amounts incurred as part of dp polar's and Wematter's operating activities, neither of these entities had been acquired as of September 30, 2022 and, accordingly, their operating results were not part of the Company's reported results for the three months then ended. Offsetting the increase in R&D costs attributable to regenerative medicine research activities and recent acquisitions is a reduction in corporate R&D costs.

Impairment of intangible assets

During the quarter ended September 30, 2023, the Company concluded that it is more likely than not that it will sell or otherwise dispose of Oqton MOS, a business which the Company acquired in 2021. Based upon the Company's expectation to sell or otherwise dispose of Oqton MOS, the Company assessed the carrying value of Oqton MOS's long-lived assets, a discrete asset group consisting primarily of product technology and trade name intangible assets initially recorded when Oqton MOS was acquired, for both recoverability and impairment. The Company's assessment resulted in the recognition of impairment charges totaling \$13.6 million related to the acquired technology and trade names included in the Oqton MOS asset group during the three months ended September 30, 2023.

Consolidated operating loss

Our operating loss was \$13.6 million for the three months ended September 30, 2023, as compared to \$33.7 million for the three months ended September 30, 2022. The decrease in our reported operating loss for the quarter ended September 30, 2023 was due to the \$2.7 million increase in our gross profit and \$32.2 million decrease in SG&A costs reported for the quarter ended September 30, 2023, as compared to the quarter ended September 30, 2022, which more than offset (1) the \$1.2 million period-over-period increase in R&D costs and (2) \$13.6 million impairment charge recorded during the quarter ended September 30, 2023. Refer to the discussion above for additional details regarding the variances in the amounts reported for each of the aforementioned financial statement line items for the three months ended September 30, 2023, as compared to the three months ended September 30, 2022, as well as the factors contributing to those variances.

Operating Results for the Nine Months Ended September 30, 2023 Compared to the Nine Months Ended September 30, 2022

Consolidated revenue

The following table sets forth changes in our products and services revenue for the nine months ended September 30, 2023 and 2022.

<i>(Dollars in thousands)</i>	Products		Services		Total	
Revenue — nine months ended September 30, 2022	\$ 300,662	74.2 %	\$ 104,637	25.8 %	\$ 405,299	100.0 %
Change in revenue:						
Volume	(52,257)	(17.4)%	14,522	13.9 %	(37,735)	(9.3)%
Price/mix	5,519	1.8 %	—	— %	5,519	1.4 %
Foreign currency translation	44	— %	94	0.1 %	138	— %
Net change	(46,694)	(15.6)%	14,616	14.0 %	(32,078)	(7.9)%
Revenue — nine months ended September 30, 2023	\$ 253,968	68.0 %	\$ 119,253	32.0 %	\$ 373,221	100.0 %

Products revenue

For the nine months ended September 30, 2023, products revenue decreased by \$46.7 million, or 15.6%, as compared to the nine months ended September 30, 2022. Lower sales volume resulted in a \$52.3 million, or 17.4%, decrease in reported product revenue relative to the prior year period, of which \$51.8 million of such decrease is attributable to our Healthcare Solutions segment. The lower product sales volume within our Healthcare Solutions segment was primarily due to lower sales to the dental market, as the demand for elective dental procedures that our products support has been impacted by current economic conditions. Product sales volume in our Healthcare Solutions segment also decreased due to lower printer sales into the medical devices market. As shown in the table, favorable impacts of price/mix, also primarily related to our Healthcare Solutions segment, partially offset the significant decrease in revenue attributable to lower sales volume within the Healthcare Solutions segment.

Services revenue

For the nine months ended September 30, 2023, services revenue increased by \$14.6 million, or 14.0%, as compared to the nine months ended September 30, 2022. Higher sales volume resulted in a \$14.5 million, or 13.9%, increase in reported services revenue relative to the prior year period, of which \$8.6 million and \$5.9 million of such increase is attributable to our Healthcare Solutions segment and our Industrial Solutions segment, respectively. The largest contributor to the increase in the services revenue realized by our Healthcare Solutions segment was incremental variable consideration (revenue) being deemed probable of being earned under a regenerative medicine collaboration and licensing agreement that was amended during the three months ended September 30, 2023. In connection with the amendment to this collaboration and licensing agreement, the Company concluded that three additional milestone-based payments included in the contract, totaling \$6.5 million in the aggregate, became probable of being earned, for which an aggregate of \$4.5 million of revenue was recognized during the three months ended September 30, 2023. Revenue related to the collaboration and licensing agreement is recognized over time and, accordingly, the remaining \$2.0 million of revenue attributable to the three additional milestone payments is expected to be recognized over the remaining duration of the contract. In addition, the increase in services sales volume within our Healthcare Solutions segment relates to personalized healthcare solutions and advanced manufacturing services.

The increase in the services sales volume realized by our Industrial Solutions segment primarily relates to hardware services and parts manufacturing.

Total revenue

For the nine months ended September 30, 2023, total revenue decreased by \$32.1 million, or 7.9%, compared to the nine months ended September 30, 2022, as the decrease in our products revenue exceeded the increase in our services revenue, as described above.

Consolidated gross profit

<i>(Dollars in thousands)</i>	Nine Months Ended				Change in Gross Profit		Change in Gross Profit Margin	
	September 30, 2023		September 30, 2022		\$	%	Percentage Points	%
	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin				
Products	\$ 100,526	39.6 %	\$ 118,817	39.5 %	\$ (18,291)	(15.4)%	0.1	0.3 %
Services	51,938	43.6 %	40,786	39.0 %	11,152	27.3 %	4.6	11.8 %
Total	\$ 152,464	40.9 %	\$ 159,603	39.4 %	\$ (7,139)	(4.5)%	1.5	3.8 %

Products gross profit and gross profit margin

For the nine months ended September 30, 2023, gross profit from products sales decreased by \$18.3 million, or 15.4%, as compared to the nine months ended September 30, 2022. The decrease in gross profit from products sales is primarily due to the corresponding 15.6% decrease in products sales revenue.

Services gross profit and gross profit margin

For the nine months ended September 30, 2023, gross profit from services sales increased by \$11.2 million, or 27.3%, as compared to the nine months ended September 30, 2022. The increase in gross profit from services sales was primarily driven by the \$14.5 million, or 13.9%, increase in services revenue attributable to higher sales volume. The increase in services revenue includes the \$4.5 million of incremental variable consideration revenue recognized by our Healthcare Solutions segment during the three months ended September 30, 2023, upon concluding that additional milestone-based payments included in a collaboration and licensing revenue agreement are probable of being earned. As there were no direct costs (e.g., costs of goods sold) associated with this incremental collaboration and licensing revenue, the entire \$4.5 million contributed to an increase in our reported gross profit, as well as to a 2.2% increase and 0.7% increase in our services gross profit margin and consolidated gross profit margin, respectively, for the nine months ended September 30, 2023. In addition, a general increase in services revenue attributable to both our Industrial Solutions and Healthcare Solutions segments contributed to an increase in our reported services gross profit due to the fixed nature of the costs (e.g., salaries) incurred to provide certain of our services.

Consolidated selling, general and administrative expense

SG&A expense for the nine months ended September 30, 2023 decreased \$34.8 million, or 18.8%, to \$150.6 million, as compared to \$185.4 million for the nine months ended September 30, 2022. The primary drivers of the \$34.8 million decrease in SG&A expense reported for the nine months ended September 30, 2023, as compared to the nine months ended September 30, 2022 — inclusive of the impacts of the acquisitions described above — are as follows:

Primary drivers (in thousands)	Increase / (Decrease)
Volumetric earnout	\$ (29,218)
Legal and contingency costs	(13,218)
Consulting and outside services	4,079
Severance	3,484
Other	98
Total change	\$ (34,775)

Volumetric earnout expense decreased \$29.2 million as the Company reversed \$17.3 million of previously recognized earnout expense during the nine months ended September 30, 2023, as compared to recognizing \$11.9 million of earnout expense during the nine months ended September 30, 2022. The reversal of \$17.3 million of expense for the nine months ended September 30, 2023 reflects the reversal of \$20.3 million of expense during the current quarter, net of \$3.0 million of earnout expense recognized through June 30, 2023. Prior to the current quarter ended September 30, 2023, the Company was accruing for a potential earnout payment of \$65 million (compensation expense) based upon the expected achievement of a non-financial milestone outlined in the Volumetric acquisition agreement. Expense related to the potential earnout payment was being recognized on a straight-line basis through the anticipated date of achievement of the related milestone. However, as of the current quarter ended September 30, 2023, the Company has concluded that this non-financial milestone is no longer probable of being achieved due to a reduction in the budgeted funding for the related R&D efforts, resulting in the reversal of all previously recognized compensation expense. Refer to Note 12 and our discussion of "Critical Accounting Estimates" for additional details.

The decrease in legal and contingency costs for the nine months ended September 30, 2023 is primarily due to the Company's accrual of approximately \$18.1 million in estimated costs related to the government compliance matters discussed in Note 18 during the nine months ended September 30, 2022. Based upon subsequent settlement discussions, this accrual amount was adjusted in the fourth quarter of fiscal year 2022, and the government compliance matters were ultimately settled during the quarter ended March 31, 2023 without a need for further adjustment to the accrual during such period. No events that would require the recognition of a similar material legal contingency accrual occurred during the nine months ended September 30, 2023. An increase in other legal fees incurred during the nine months ended September 30, 2023 partially offset the impact of not recording similar legal contingency costs during the nine-month period.

The increase in consulting and outside services costs for the nine months ended September 30, 2023 reflects an increase in the use of third-party service providers to support various functions within the Company, including certain internal transformation efforts, as well as an increase in audit and accounting fees.

The increase in severance costs for the nine months ended September 30, 2023 reflects costs incurred in connection with the Company's reduction in headcount in its corporate and business support functions, as part of its restructuring plan announced during the quarter ended June 30, 2023, as well as severance costs incurred during the quarter ended March 31, 2023 prior to the announcement of the formal restructuring plan. The reduction in headcount pursuant to the restructuring plan reflects the Company's commitment to rationalizing its operations and improving its operating efficiency.

Consolidated research and development expense

R&D expense for the nine months ended September 30, 2023 increased \$3.8 million, or 6.0%, to \$67.0 million as compared to \$63.2 million for the nine months ended September 30, 2022. R&D expense increased \$2.5 million due to the timing of the Company's acquisitions of Titan, Kumovis, and dp polar during fiscal year 2022, as well as the acquisition of Wematter in July of 2023. As Titan and Kumovis were not acquired by the Company until April 1, 2022, their operating activities are only reflected in the Company's reported results for six months of the nine-month period ended September 30, 2022. As dp polar and Wematter were acquired by the Company after September 30, 2022, their operations were not part of the Company's reported results for any portion of the nine months then ended.

In addition to the impact of recent acquisitions, R&D expense increased \$4.2 million related to our regenerative medicine research activities primarily attributable to our wholly-owned subsidiary, Systemic Bio. Offsetting the increase in R&D costs attributable to regenerative medicine research activities and recent acquisitions is a reduction in corporate R&D costs.

Impairment of intangible assets

During the quarter ended September 30, 2023, the Company concluded that it is more likely than not that it will sell or otherwise dispose of Oqton MOS, a business which the Company acquired in 2021. Based upon the Company's expectation to sell or otherwise dispose of Oqton MOS, the Company assessed the carrying value of Oqton MOS's long-lived assets, a discrete asset group consisting primarily of product technology and trade name intangible assets initially recorded when Oqton MOS was acquired, for both recoverability and impairment. The Company's assessment resulted in the recognition of impairment charges totaling \$13.6 million related to the acquired technology and trade names included in the Oqton MOS asset group during the nine months ended September 30, 2023.

Consolidated operating loss

Our operating loss for the nine months ended September 30, 2023 was \$78.7 million, as compared to \$89.0 million for the nine months ended September 30, 2022. The decrease in our reported operating loss for the nine months ended September 30, 2023 was primarily due to our \$34.8 million decrease in SG&A expense for the nine months ended September 30, 2023, as compared to the nine months ended September 30, 2022, which more than offset the impact of (1) our lower reported revenue and the corresponding decrease in our gross profit for the nine months ended September 30, 2023, (2) the \$3.8 million period-over-period increase in our R&D expense, and (3) the \$13.6 million impairment charge recognized during the period. Refer to the discussion above for additional details regarding the variances in the amounts reported for each of the financial statement line items that comprise our reported operating loss for the nine months ended September 30, 2023 and September 30, 2022.

Non-Operating Income (Loss) for the Three and Nine Months Ended September 30, 2023 compared to the Three and Nine Months Ended September 30, 2022

Interest and other income (expense), net

The following table sets forth the components of interest and other income (expense), net for the three and nine months ended September 30, 2023 and 2022.

<i>(in thousands)</i>	Three Months Ended		Nine Months Ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Interest and other income (expense), net				
Foreign exchange (loss), net	\$ (2,202)	\$ (764)	\$ (3,847)	\$ (4,193)
Interest income, net	4,909	2,029	13,118	4,019
Other (expense) income, net	(105)	(4,767)	420	(5,282)
Total interest and other income (expense), net	<u>\$ 2,602</u>	<u>\$ (3,502)</u>	<u>\$ 9,691</u>	<u>\$ (5,456)</u>

For the three and nine months ended September 30, 2023, interest income, net increased as compared to the three and nine months ended September 30, 2022 due to higher interest income earned on cash and cash equivalents resulting from increased interest rates during the three and nine months ended September 30, 2023.

For the three and nine months ended September 30, 2023, other expense decreased primarily due to the \$2.8 million impairment loss recorded with respect to the Company's investment in Enhatch during the three months ended September 30, 2022. There were no similar impairments recognized with respect to the Company's investments during the three and nine months ended September 30, 2023.

Net (loss) income

The following table sets forth our net (loss) income for the three and nine months ended September 30, 2023, and 2022.

<i>(in thousands, except per share amounts)</i>	Three Months Ended		Nine Months Ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
(Loss) income before income taxes	\$ (10,982)	\$ (37,207)	\$ (69,018)	\$ (94,431)
(Provision) benefit for income taxes	(174)	(338)	(404)	(2,911)
(Loss) on equity method investment, net of income taxes	(605)	—	(747)	—
Net (loss) income before redeemable non-controlling interest	(11,761)	(37,545)	(70,169)	(97,342)
Less: net (loss) income attributable to redeemable non-controlling interest	(57)	(147)	(149)	(184)
Net (loss) income attributable to 3D Systems Corporation	<u>\$ (11,704)</u>	<u>\$ (37,398)</u>	<u>\$ (70,020)</u>	<u>\$ (97,158)</u>
Net (loss) income per common share:				
Basic	<u>\$ (0.09)</u>	<u>\$ (0.30)</u>	<u>\$ (0.54)</u>	<u>\$ (0.77)</u>
Diluted	<u>\$ (0.09)</u>	<u>\$ (0.30)</u>	<u>\$ (0.54)</u>	<u>\$ (0.77)</u>

Our tax provision for the three and nine months ended September 30, 2023 was \$0.2 million and \$0.4 million, respectively, as compared to \$0.3 million and \$2.9 million for the three and nine months ended September 30, 2022, respectively. The Company's effective tax rates for the three and nine months ended September 30, 2023 and 2022 were significantly below the U.S. and foreign jurisdictions' statutory tax rates due to (1) the Company's reported losses and (2) the maintenance of a valuation allowance against deferred tax assets generated by such losses based upon the Company's conclusion that it is more likely than not that its deferred tax assets will not be realized in various tax jurisdictions.

The decrease in the net loss attributable to 3D Systems for the three months ended September 30, 2023, as compared to the net loss attributable to 3D Systems for the three months ended September 30, 2022, was primarily driven by the period-over period decrease in the Company's consolidated operating loss (as described above) and the increase in interest and other income (expense), net for the quarter ended September 30, 2023, partially offset by the loss on equity method investment. As of September 30, 2022, the Company did not have an investment accounted for under the equity method of accounting.

The decrease in the net loss attributable to 3D Systems for the nine months ended September 30, 2023, as compared to the net loss attributable to 3D Systems for the nine months ended September 30, 2022, was primarily due to the period-over-period decrease in the Company's consolidated operating loss (as described above), the increase in interest and other income (expense), net for the nine months ended September 30, 2023, and the lower tax provision for the nine months ended September 30, 2023, partially offset by the loss on equity method investment. As of September 30, 2022, the Company did not have an investment accounted for under the equity method of accounting.

Non-GAAP Earnings

Adjusted EBITDA

Our Adjusted EBITDA increased from negative \$0.3 million for the three months ended September 30, 2022 to positive \$4.7 million for the three months ended September 30, 2023. This increase of \$5.0 million in our reported adjusted EBITDA was driven by a \$20.1 million decrease in our reported operating loss for the three months ended September 30, 2023, adjusted for the period-over-period changes in certain operating costs that are included in the determination of our GAAP operating loss, but are excluded from our calculation of Adjusted EBITDA. As shown in the reconciliation of our reported Net Loss to Adjusted EBITDA (below), GAAP costs for which period-over-period variances materially impacted our reported operating loss for the three months ended September 30, 2023, as compared to the three months ended September 30, 2022, but are excluded from the calculation of Adjusted EBITDA for each of those respective periods, include amortization expense, stock-based compensation expense, acquisition and divestiture-related expense, litigation costs, restructuring expense, and impairment losses.

Our Adjusted EBITDA decreased from negative \$1.0 million for the nine months ended September 30, 2022 to negative \$12.3 million for the nine months ended September 30, 2023, despite a \$10.3 million decrease in our reported operating loss for the nine months ended September 30, 2023. The decrease in our reported operating loss for the nine months ended September 30, 2023 did not result in a corresponding improvement to our Adjusted EBITDA as certain operating expenses that are included in the determination of our GAAP operating loss, and for which there were material period-over-period variances in the amounts reported, are excluded from our calculation of Adjusted EBITDA. As shown in the reconciliation of our reported Net Loss to Adjusted EBITDA (below), GAAP costs for which period-over-period variances materially impacted our reported operating loss for the nine months ended September 30, 2023, as compared to the nine months ended September 30, 2022, but are excluded from the calculation of Adjusted EBITDA for each of those respective periods, include amortization expense, stock-based compensation expense, acquisition and divestiture-related expense, litigation costs, restructuring expense, and impairment losses.

Reconciliation of Non-GAAP Measures

The table that follows provides a reconciliation of the Company's reported Net Loss to Adjusted EBITDA. Refer to the discussion of "How We Assess the Performance of Our Business" for additional information regarding Adjusted EBITDA, and why management believes this measure provides useful information regarding the Company's results of operations.

<i>(in thousands)</i>	Three Months Ended		Nine Months Ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Net loss attributable to 3D Systems Corporation	\$ (11,704)	\$ (37,398)	\$ (70,020)	\$ (97,158)
Interest (income) expense, net	(4,909)	(2,029)	(13,118)	(4,019)
Provision (benefit) for income taxes	174	338	404	2,911
Depreciation expense	5,084	5,142	15,690	15,992
Amortization expense	3,179	4,293	9,676	10,273
Stock-based compensation expense	(3,142)	11,447	15,140	31,508
Acquisition and divestiture-related expense	(4,055)	2,728	134	9,382
Legal expenses	2,145	9,707	4,880	20,467
Restructuring expense	1,504	67	6,712	376
Redeemable non-controlling interest	(57)	(147)	(149)	(184)
Loss on equity method investment	605	—	747	—
Asset impairment charges	13,595	2,909	14,211	2,885
Other non-operating (income) expense	2,307	2,622	3,427	6,590
Adjusted EBITDA	\$ 4,726	\$ (321)	\$ (12,266)	\$ (977)

Segment Financial Results for the Three and Nine Months Ended September 30, 2023 and 2022

Effective January 1, 2023, and for periods subsequent thereto, Adjusted EBITDA reflects the measure of profitability used by the Company's chief operating decision maker ("CODM") to evaluate the performance of the Company's reportable segments. In addition, as of January 1, 2023, the Company's methodology for allocating certain costs between its segments was revised to more closely reflect changes in the Company's business and estimates of usage of shared resources by the Company's segments. Prior year amounts have been reclassified to conform with current year presentation.

Segment Results for the Three Months Ended September 30, 2023 Compared to the Three Months Ended September 30, 2022

The following table presents the revenue and Adjusted EBITDA amounts reported by each of our segments, as well as non-allocated corporate costs, for the three months ended September 30, 2023 and 2022:

<i>(in thousands)</i>	Revenue			Adjusted EBITDA		
	Three Months Ended			Three Months Ended		
	September 30, 2023	September 30, 2022	Change	September 30, 2023	September 30, 2022	Change
Healthcare Solutions	\$ 52,429	\$ 64,203	\$ (11,774)	\$ 13,869	\$ 13,787	\$ 82
Industrial Solutions	71,362	68,050	3,312	7,662	7,180	482
Corporate and Other	—	—	—	(16,805)	(21,288)	4,483
Total Company	<u>\$ 123,791</u>	<u>\$ 132,253</u>	<u>\$ (8,462)</u>	<u>\$ 4,726</u>	<u>\$ (321)</u>	<u>\$ 5,047</u>

Healthcare Solutions

Revenue

For the three months ended September 30, 2023, Healthcare Solutions revenue decreased \$11.8 million, or 18.3%, as compared to the three months ended September 30, 2022. This decrease in segment revenue was primarily due to (1) a \$13.3 million, or 39.1%, decrease in sales to the dental market, as the demand for related elective dental procedures that our products support has been impacted by current economic conditions, and (2) a \$3.0 million, or 12%, decrease in sales to the medical devices market. The decrease in sales into the dental and medical devices markets was partially offset by the \$4.5 million increase in variable consideration revenue recognized with respect to a regenerative medicine collaboration and licensing revenue agreement for which the Company concluded that additional milestone-based payments became probable of being earned upon amendment of the agreement during the quarter ended September 30, 2023.

Adjusted EBITDA

For the three months ended September 30, 2023, Adjusted EBITDA for our Healthcare Solutions segment was flat as compared to the three months ended September 30, 2022, despite lower reported revenue, as the decrease in segment EBITDA due to lower sales to the dental market was effectively offset by the \$4.5 million increase in variable consideration revenue recognized with respect to a regenerative medicine collaboration and licensing revenue agreement for which the Company concluded that additional milestone-based payments became probable of being earned upon amendment of the agreement during the quarter ended September 30, 2023. The entire \$4.5 million increase in recognized variable consideration revenue contributed to an increase in segment gross profit and Adjusted EBITDA.

Industrial Solutions

Revenue

For the three months ended September 30, 2023, Industrial Solutions revenue increased \$3.3 million, or 4.9%, as compared to the three months ended September 30, 2022. The increase in segment revenue is primarily attributable to a \$2.2 million increase in services revenue related to hardware services, parts manufacturing services, and software maintenance, as well as the favorable impact of foreign exchange rates.

Adjusted EBITDA

For the three months ended September 30, 2023, Adjusted EBITDA for our Industrial Solutions segment increased \$0.5 million, or 6.7%, as compared to the three months ended September 30, 2022, which was primarily driven by a favorable impact of price/mix, partially offset by an unfavorable impact of the Company's recent acquisitions of dp polar and Wematter.

Corporate and Other

Adjusted EBITDA

For the three months ended September 30, 2023, Corporate and Other Adjusted EBITDA was negative \$16.8 million, as compared to negative \$21.3 million for the three months ended September 30, 2022. The improvement of \$4.5 million was primarily driven by a \$3.6 million decrease in unallocated corporate operating expense and a \$0.6 million favorable impact of foreign exchange rates. The decrease in unallocated corporate operate expense for the three months ended September 30, 2023 primarily relates to lower legal costs, a larger reversal of annual bonus expense, and lower workforce expense within corporate functions.

Segment Results for the Nine Months Ended September 30, 2023 Compared to the Nine Months Ended September 30, 2022

The following table presents the revenue and Adjusted EBITDA amounts reported by each of our segments, as well as non-allocated corporate costs, for the nine months ended September 30, 2023 and 2022:

<i>(in thousands)</i>	Revenue			Adjusted EBITDA		
	Nine Months Ended			Nine Months Ended		
	September 30, 2023	September 30, 2022	Change	September 30, 2023	September 30, 2022	Change
Healthcare Solutions	\$ 162,028	\$ 200,294	\$ (38,266)	\$ 30,328	\$ 45,705	\$ (15,377)
Industrial Solutions	211,193	205,005	6,188	16,828	16,473	355
Corporate and Other	—	—	—	(59,422)	(63,155)	3,733
Total Company	\$ 373,221	\$ 405,299	\$ (32,078)	\$ (12,266)	\$ (977)	\$ (11,289)

Healthcare Solutions

Revenue

For the nine months ended September 30, 2023, Healthcare Solutions revenue decreased \$38.3 million, or 19.1%, as compared to the nine months ended September 30, 2022. The decrease in segment revenue was primarily due to a \$43.0 million, or 35.9%, decrease in sales to the dental market, as the demand for related elective dental procedures that our products support has been impacted by current economic conditions. The decrease in sales into the dental market was offset by the \$4.5 million increase in variable consideration revenue recognized with respect to a regenerative medicine collaboration and licensing revenue agreement for which the Company concluded that additional milestone-based payments became probable of being earned upon amendment of the agreement during the quarter ended September 30, 2023.

Adjusted EBITDA

For the nine months ended September 30, 2023, Adjusted EBITDA for our Healthcare Solutions segment decreased \$15.4 million, or 33.6%, as compared to the nine months ended September 30, 2022, which was primarily driven by the decrease in segment revenue related to lower sales to the dental market, partially offset by a favorable impact of pricing/mix.

Industrial Solutions

Revenue

For the nine months ended September 30, 2023, Industrial Solutions revenue increased \$6.2 million, or 3.0%, as compared to the nine months ended September 30, 2022. The increase in segment revenue is primarily attributable to a \$5.9 million increase in services revenue related to hardware services and parts manufacturing services.

Adjusted EBITDA

For the nine months ended September 30, 2023, Adjusted EBITDA for our Industrial Solutions segment increased \$0.4 million, or 2.2%, as compared to the nine months ended September 30, 2022. The increase in segment Adjusted EBITDA is primarily reflective of the increase in services sales and favorable impacts of pricing/mix and foreign exchange rates, partially offset by a net negative impact of the Company's recent acquisitions of Titan, dp polar, and Wematter.

Corporate and Other

Adjusted EBITDA

For the nine months ended September 30, 2023, Corporate and Other Adjusted EBITDA was negative \$59.4 million, as compared to negative \$63.2 million for the nine months ended September 30, 2022. This improvement in Adjusted EBITDA was primarily driven by a \$2.8 million decrease in unallocated corporate operating expense and a \$0.9 million favorable impact of foreign exchange rates. The decrease in unallocated corporate operate expense for the nine months ended September 30, 2023 primarily relates to lower legal costs.

Liquidity and Capital Resources

The following table sets forth the Company's operating working capital at September 30, 2023 and December 31, 2022.

<i>(Dollars in thousands)</i>	September 30, 2023	December 31, 2022	Change	
			\$	%
Cash and cash equivalents	\$ 445,554	\$ 388,134	\$ 57,420	14.8 %
Short-term investments	—	180,603	(180,603)	(100.0)%
Accounts receivable, net	104,516	93,886	10,630	11.3 %
Inventories	153,005	137,832	15,173	11.0 %
	<u>703,075</u>	<u>800,455</u>	<u>(97,380)</u>	<u>(12.2)%</u>
Less:				
Current lease liabilities	10,684	9,036	1,648	18.2 %
Accounts payable	46,108	53,826	(7,718)	(14.3)%
Accrued and other liabilities	43,575	55,571	(11,996)	(21.6)%
	<u>100,367</u>	<u>118,433</u>	<u>(18,066)</u>	<u>(15.3)%</u>
Operating working capital	<u>\$ 602,708</u>	<u>\$ 682,022</u>	<u>\$ (79,314)</u>	<u>(11.6)%</u>

We assess our liquidity in terms of our ability to generate cash to fund our operating, investing and financing activities. In doing so, we review and analyze our current cash on hand, the number of days our sales are outstanding, inventory turns, capital expenditure commitments and accounts payable turns. Our cash requirements, excluding acquisitions, primarily consist of funding working capital and capital expenditures.

At September 30, 2023, cash and cash equivalents and short-term investments totaled \$445.6 million and have decreased \$123.2 million since December 31, 2022. This decrease resulted primarily from cash used in operations of \$71.9 million, capital expenditures of \$21.0 million, cash used for acquisitions and other investments of \$29.2 million, and taxes paid related to net-share settlement of equity awards of \$4.8 million.

Cash held outside the U.S. at September 30, 2023 was \$59.2 million, or 13.3%, of total cash and cash equivalents, compared to \$58.4 million, or 15.0%, of total cash and cash equivalents at December 31, 2022. As our previously unremitted earnings have been subjected to U.S. federal income tax, we expect any repatriation of these earnings to the U.S. would not incur significant federal and state taxes. However, any repatriation of these earnings are subject to foreign withholding taxes that are estimated to result in the Company incurring tax costs in excess of the cost to obtain cash through other means.

Cash equivalents are comprised of funds held in money market instruments and are reported at their current carrying value, which approximates fair value due to the short-term nature of these instruments. We strive to minimize our credit risk by investing primarily in investment grade, liquid instruments and limiting exposure to any one issuer depending upon credit quality. See “Cash Flow” discussion below.

The changes that make up the other components of working capital not discussed above resulted from the ordinary course of business. Differences between the amounts of working capital item changes in the cash flow statement and the balance sheet changes for the corresponding items are primarily the result of foreign currency translation adjustments.

Cash Flow

The Company currently funds its operations — including working capital requirements, capital expenditures, investments and acquisitions — using cash on hand cash; cash equivalents and short-term investments; cash flow from operations, which can vary widely from quarter to quarter; and financing activities, as necessary. We expect that cash flow from operations, cash and cash equivalents, and other sources of liquidity, such as issuing equity or debt securities, subject to market conditions, will be available and sufficient to meet all foreseeable cash requirements. The following is a summary of the changes in the Company’s cash flows, followed by a brief discussion of these changes:

<i>(in thousands)</i>	Nine Months Ended		Dollar Change
	September 30, 2023	September 30, 2022	
Cash flow used in operating activities	\$ (71,893)	\$ (52,449)	\$ (19,444)
Cash flow provided by (used in) investing activities	130,689	(374,116)	504,805
Cash flow used in financing activities	(5,215)	(12,981)	7,766

Cash flow from operations

For the nine months ended September 30, 2023, cash used in operating activities was \$71.9 million, and cash used in operating activities for the nine months ended September 30, 2022 was \$52.4 million. The \$19.4 million increase in cash flow used in operating activities during the nine months ended September 30, 2023, as compared to the same period of the prior year, is primarily due to \$8.5 million of cash paid for legal settlements (see Note 18) and an increase in working capital during the nine months ended September 30, 2023.

Cash flow from investing activities

For the nine months ended September 30, 2023, cash provided by investing activities was \$130.7 million, which included \$180.9 million of proceeds from the sales and maturities of short-term investments, partially offset by capital expenditures of \$21.0 million and cash used for investments in strategically-aligned businesses totaling \$29.2 million.

For the nine months ended September 30, 2022, cash used in investing activities was \$374.1 million, which included \$384.4 million of purchases of short-term investments, cash used for acquisitions and other investments of \$84.7 million and capital expenditures of \$17.1 million, partially offset by \$112.1 million of proceeds from the sales and maturities of short-term investments.

Cash flow from financing activities

For the nine months ended September 30, 2023, cash used in financing activities was \$5.2 million, which primarily reflects \$4.8 million of withholding taxes paid related to the net-share settlement of employee equity awards.

For the nine months ended September 30, 2022, cash used in financing activities was \$13.0 million, which primarily reflects \$10.2 million of withholding taxes paid related to the net-share settlement of employee equity awards and the final \$2.3 million installment payment related to the acquisition of the non-controlling interest in Easyway.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements and do not utilize any “structured debt,” “special purpose” or similar unconsolidated entities for liquidity or financing purposes.

Material Cash Requirements

The Company's material cash requirements consist of the following contractual and other obligations:

Indebtedness

At September 30, 2023, we had \$460 million of outstanding 0% convertible notes that mature in November 2026. Management may consider pursuing additional long-term financing if it is appropriate in light of cash requirements for operations or other strategic opportunities, which could result in higher financing costs.

Purchase Commitments

We have purchase commitments under legally enforceable agreements for goods and services with defined terms as to quantity, price and timing of delivery. In addition to ordinary purchase commitments, as of September 30, 2023, the Company had approximately \$2.7 million of purchase commitments for inventory as a result of the termination of a manufacturing services agreement (refer to Note 4).

Leases

The Company had operating and financing lease obligations (inclusive of interest) of \$111.3 million at September 30, 2023, primarily related to real estate and equipment leases, of which approximately \$4.0 million in payments are expected over the remainder of 2023.

Dussur

In March 2022, Dussur and 3D Systems signed an agreement to form a joint venture intended to expand the use of additive manufacturing within the Kingdom of Saudi Arabia and surrounding geographies, including the Middle East and North Africa. The joint venture is to enable the development of Saudi Arabia's domestic additive manufacturing production capabilities, consistent with the Kingdom's ‘Vision 2030,’ which is focused on diversification of the economy and long-term sustainability. In February 2023, the Company became a shareholder in the joint venture and now owns 49% of its common stock. 3D Systems was committed to an initial investment of approximately \$6.5 million of cash into the joint venture, all of which has been funded as of September 30, 2023. Additional future investments in the joint venture are contingent upon the achievement of certain milestones by the joint venture. The future impact that participation in the joint venture will have on the Company's financial position and cash flows is not expected to be material other than any potential cash outflow(s) that may be required to fund contingent investments.

Sources of Funding to Satisfy Material Cash Requirements

The Company believes that it has the financial resources needed to meet its cash requirements during the next twelve months. Cash requirements for periods beyond the next twelve months will depend on, among other things, the Company's profitability and its ability to manage working capital requirements.

Other Contractual Commitments

Convertible Notes

As of September 30, 2023, we were in compliance with all covenants of the outstanding 0% convertible notes due November 2026.

Indemnification

In the normal course of business, we periodically enter into agreements to indemnify customers or suppliers against claims of intellectual property infringement that may be made by third parties and arise from the use of our products. Historically, costs related to these indemnification provisions have not been significant. We are unable to estimate the maximum potential impact of these indemnification provisions on our future results of operations.

To the extent permitted under Delaware law, we indemnify our directors and officers for certain events or occurrences, when the director or officer is, or was, serving at our request in such capacity, subject to limited exceptions. The maximum potential amount of future payments we could be required to make under these indemnification obligations is unlimited; however, we have directors' and officers' insurance coverage that may enable us to recover future amounts paid, subject to a deductible and to the policy limits. There is no assurance that the policy limits will be sufficient to cover all damages, if any.

Critical Accounting Estimates

Our condensed consolidated financial statements are prepared in accordance with GAAP. The preparation of these condensed consolidated financial statements requires us to make certain estimates and assumptions that affect the reported amounts of our assets, liabilities, revenues, costs and expenses, as well as related disclosures. On an ongoing basis, we evaluate and reassess our estimates and assumptions. Our actual results may differ from these estimates under different assumptions or conditions.

Regenerative Medicine Earnout Payments and Performance-Based Stock Units

In connection with the acquisition of Volumetric on December 1, 2021, the Company could be required to pay up to \$355.0 million in earnout payments to Volumetric's former owners ("Sellers") based upon the achievement of up to seven non-financial milestones. Each of the non-financial milestones, which individually triggers a specific earnout payment if achieved prior to an agreed upon date of either December 31, 2030 or December 31, 2035, is based upon specific advances in regenerative medicine related to lungs or tissue organs. For each milestone, payment is only due to the extent that the Sellers continue to be employed by the Company at the time that a milestone is achieved. As the earnout payments require the continued employment of certain of the Sellers, the Company recognizes each individual earnout payment as compensation expense over the period commencing on the date that the related milestone is deemed probable of achievement through the anticipated date of achievement.

In addition, the Company has granted performance-based stock units ("PSUs") with vesting terms that are based upon four individually-measured, non-financial milestones to other employees who work on advancements in regenerative medicine related to lungs and tissue organs — the RegMed Awards. The RegMed Awards associated with each individual milestone are recognized as compensation expense over the period commencing on the date that the respective milestone is deemed probable of being met through the anticipated date of achievement.

As the milestones that trigger the Volumetric Earnout payments and the vesting of the RegMed Awards are (1) based upon scientific and technological advancements that are expected to require multiple years of R&D to achieve and (2) subject to significant known and unknown risks and uncertainties, management must apply significant assumptions and judgment at each balance sheet date to assess both the probability of achievement and expected timing of achievement. A change in management's assumptions or estimates regarding the probability and/or timing of achievement of a milestone in connection with management's quarterly reassessment can materially impact the amount of compensation expense recognized for the respective and future periods as follows:

- A change in assumptions that results in a milestone first being deemed probable of achievement will result in the recognition of incremental compensation expense in the Company's consolidated statement of operations;
- A change in assumption regarding the timing of achievement of a milestone will result in the acceleration or deceleration of the recognition of future compensation expense, as well as the potential recognition of an expense catch-up or reversal adjustment in the period of change; and/or
- A change in assumption that results in a milestone no longer being deemed probable of achievement will result in a full reversal of previously recognized expense.

Prior to the quarter ended September 30, 2023, the Company recognized compensation expense related to (1) one Volumetric milestone-based payment, for which the potential amount due to the sellers would be \$65,000, and (2) one PSU milestone (“the RegMed Awards”), for which the aggregate grant date fair value of the outstanding and unvested awards was \$4,773 as of June 30, 2023, as the related milestone was deemed probable of achievement. During the quarter ended June 30, 2023, as a result of the Company's decision to reduce budgeted funding related to the research and development efforts required to achieve the milestone, the estimated timing for achievement of both the Volumetric milestone and the PSU milestone shifted from the end of fiscal year 2025 to the end of fiscal year 2026. During the quarter ended September 30, 2023, the Company decided to further reduce its budgeted funding for the research and development related to the Volumetric Earnout and RegMed Award milestone, which resulted in the Company concluding that it is no longer probable that the milestone will be achieved by the end of the term of the Volumetric Earnout arrangement or prior to the expiration of the RegMed Awards. In concluding that the Volumetric and RegMed Award milestone would no longer be achieved, the Company reversed all of the previously accrued compensation expense, one half of which was expected to be settled with common shares, which had an income statement impact of \$21.5 million and \$18.4 million for the three and nine-months ended September 30, 2023, respectively.

As a result of the reversal of all previously recognized expense during the quarter ended September 30, 2023, the Company has not recognized any compensation expense related to (1) the \$355.0 million of Volumetric earnout payments and (2) the outstanding RegMed Awards with an aggregate grant date fair value of \$19.1 million. This is because none of the related non-financial milestones are deemed probable of achievement as of September 30, 2023. Changes to management's assumptions regarding the probability and/or timing of achievement of these milestones could significantly increase the amount of compensation expense recognized by the Company in the future.

With the exception of the change in estimate impacting the expense and liability recognized for the Volumetric earnout and the expense recognized for the RegMed Awards, there have been no other material changes to the Critical Accounting Estimates described in our 2022 Form 10-K that have had a material impact on our condensed consolidated financial statements and/or the related notes during the three and nine months ended September 30, 2023. However, recent events, including the Company's recently announced restructuring plan and the recent trading price of the Company's common stock, could result in changes to certain of the Company's past estimates, assumptions, and judgments underlying the "Critical Accounting Estimates" described in our 2022 Form 10-K. Any future changes in those estimates, assumptions and judgments could potentially have a material near-term impact on the Company's reported results. Refer to the discussion that follows for details regarding our historical Critical Accounting Estimates for which we have identified a higher potential for a change in the underlying assumptions, judgments and estimates and, accordingly, a higher potential for a material near-term impact on the Company's reported results.

Goodwill and Other Long-Lived Assets, Including Intangible Assets

Long-Lived Assets, Including Intangible Assets

We review long-lived assets (or asset groups), including intangible assets subject to amortization, for impairment whenever events or changes in circumstances indicate that the carrying value of an asset (or asset group) may not be recoverable. We assess the recoverability of the carrying value of assets (or asset groups) held for use based upon a review of undiscounted projected cash flows. Impairment losses, where identified, are measured as the excess of the carrying value of a long-lived asset (or asset group) over its estimated fair value, as determined using discounted projected cash flows.

As the Company's latest phase of its multi-faceted restructuring initiative that was announced on October 25, 2023 contemplates the execution of new strategic actions that may be taken with respect to certain of the Company's previously acquired businesses and/or other asset groups, certain asset groups could become subject to impairment tests triggered by (1) an adverse change in the extent or manner in which the long-lived asset (or asset group) is being used, (2) a current expectation that it is more likely than not that the long-lived asset (or asset group) will be sold or otherwise disposed of significantly before the end of its previously estimated useful life, or (3) other factors triggered by the Company's restructuring initiative. If required, a quantitative impairment test related to any of our asset groups could result in the recognition of a material impairment charge.

Goodwill

Goodwill represents the purchase price paid in excess of the fair value of net tangible and intangible assets acquired in a business combination. We review goodwill for impairment annually and, between annual impairment assessments, when circumstances indicate that the likelihood of an impairment is greater than 50%. Such circumstances may include a significant adverse change in the business climate for one of our reporting units or a decision to dispose of a reporting unit or a significant portion of a reporting unit. The test for goodwill impairment compares the fair value of each of our reporting units to its respective carrying value. This process requires a significant level of estimation and use of judgment by management – particularly to (1) estimate the fair value of each of our reporting units and (2) determine the carrying of each of our reporting units, since we do not maintain separate balance sheets for our reporting units.

We estimate the fair value of our reporting units based primarily on the discounted projected cash flows of their underlying operations, which requires us to make assumptions about estimated cash flows, including long-term revenue and expense forecasts, profit margins, discount rates and terminal growth rates. We develop these assumptions based on the market risks unique to each reporting unit. We separately use reasonable and consistent allocation methodologies and approaches to allocate asset and liability balances to our reporting units when an account balance is not directly attributable to a specific reporting unit.

We conducted our annual goodwill impairment tests for the years ended December 31, 2022 and 2021 as of November 30, 2022 and 2021, respectively, and concluded that there was no goodwill impairment. During the quarter ended September 30, 2023, the Company experienced a significant decline in its market capitalization as a result of a decrease in its stock price, and during the month ended September 30, 2023, the Company's market capitalization fell slightly below its consolidated stockholders' equity balance. We do not consider this to constitute a sustained decrease in the Company's stock price as of September 30, 2023. Furthermore, the Company performed a qualitative goodwill impairment assessment as of September 30, 2023 and concluded that it is not more likely than not that the fair value of either of its reporting units is less than the reporting unit's carrying value as of September 30, 2023. As a result, we concluded that no triggering event had occurred that would require the Company to perform a quantitative goodwill impairment test for either of its two reporting units as of September 30, 2023. However, the Company's market capitalization has declined further since September 30, 2023, and if such a decline results in the estimated fair value of either of our reporting units being lower than the respective reporting unit's carrying value, the Company would need to record a non-cash goodwill impairment charge, which could be material, in a future period – including as of our upcoming annual impairment testing date of November 1, 2023 (reflecting our annual goodwill impairment testing date commencing as of the current fiscal year).

Forward-Looking Statements

Certain statements made in this Form 10-Q that are not statements of historical or current facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. In many cases, you can identify forward-looking statements by terms such as “believes,” “belief,” “expects,” “may,” “will,” “estimates,” “intends,” “anticipates,” or “plans” or the negative of these terms or other comparable terminology.

Forward-looking statements are based upon management's beliefs, assumptions and current expectations concerning future events and trends, using information currently available, and are necessarily subject to uncertainties, many of which are outside our control. Although we believe that the expectations reflected in the forward-looking statements are reasonable, forward-looking statements are not, and should not be relied upon as, a guarantee of future performance or results, nor will they necessarily prove to be accurate indications of the times at or by which any such performance or results will be achieved. A number of important factors could cause actual results to differ materially from those expressed in or implied by the forward-looking statements. These factors include without limitation:

- impacts on our business resulting from macroeconomic events, including the Russia-Ukraine war and other geopolitical risks, recession, supply chain disruptions and foreign exchange volatility;
- our ability to deliver products that meet changing technology and customer needs;
- our ability to identify strategic acquisitions, to integrate such acquisitions into our business without disruption and to realize the anticipated benefits of such acquisitions;
- impacts of future write-offs or write-downs of goodwill and intangible assets;
- the concentration of revenue and credit risk exposure from our largest customer;
- our ability to acquire and enforce intellectual property rights and defend such rights against third party claims;
- our ability to protect our intellectual property rights and confidential information, including our digital content, from third-party infringers or unauthorized copying, use or disclosure;
- failure of our information technology infrastructure or inability to protect against cyber-attack;
- our ability to predict quarterly sales and manage product inventory due to uneven sales cycles;
- our ability to generate net cash flow from operations;
- our ability to service our debt and ability to raise funds necessary to settle conversions of the Notes in cash, repay the Notes at maturity, or repurchase the Notes in the case of a fundamental change;
- our ability to remediate material weaknesses in our internal controls over financial reporting and maintain effective internal controls;
- fluctuations in our gross profit margins, operating income or loss and/or net income or loss;
- our ability to efficiently conduct business outside the U.S.;

- our dependence on our supply chain for components and sub-assemblies used in our 3D printers and other products and for raw materials used in our print materials;
- our ability to manage the costs and effects of litigation, investigations or similar matters involving us or our subsidiaries;
- our ability to avoid and manage product quality problems that could result in decreased sales and operating margin, product returns, product liability, warranty or other claims;
- our ability to retain our key employees and to attract and retain new qualified employees, while controlling our labor costs;
- our ability to successfully develop and commercialize regenerative medicine products ourselves, or in conjunction with development partners;
- disruption in our management information systems for inventory management, distribution, and other key functions;
- compliance with U.S. and other anti-corruption laws, data privacy laws, trade controls, economic sanctions, and similar laws and regulations;
- our ability to maintain our status as a responsible contractor under federal rules and regulations;
- changes in, or interpretation of, tax rules and regulations; and
- the other factors discussed in the reports we file with or furnish to the SEC from time to time, including the risks and important factors set forth in additional detail in Item 1A. “Risk Factors” in the 2022 Form 10-K.

Readers are cautioned not to place undue reliance on our forward-looking statements. The forward-looking statements included herein are made only as of the date of this Form 10-Q, and we undertake no obligation to publicly update or revise any forward-looking statement made by us or on our behalf, whether as a result of new information, future developments, subsequent events or circumstances or otherwise, except as required by law. All subsequent written or oral forward-looking statements attributable to us or individuals acting on our behalf are expressly qualified in their entirety by the cautionary statements referenced above.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

For a discussion of market risks at December 31, 2022, refer to Item 7A. “Quantitative and Qualitative Disclosures about Market Risk” in our 2022 Form 10-K. During the three and nine months ended September 30, 2023, there were no material changes or developments that would materially alter the market risk assessment performed as of December 31, 2022.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of September 30, 2023, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) pursuant to Rules 13a-15 and 15d-15 under the Exchange Act. These controls and procedures are designed to provide reasonable assurance that the information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, in a manner to allow timely decisions regarding required disclosures. Based on this evaluation, management has concluded that our disclosure controls and procedures were not effective as of September 30, 2023 due to the following two material weaknesses in internal control over financial reporting:

- We did not design or maintain effective controls in response to the risks of material misstatement, including designing and maintaining formal accounting policies, procedures, and controls over significant accounts and disclosures to achieve complete, accurate and timely financial accounting, reporting and disclosures, with respect to: (1) revenue, receivables and deferred revenue, including the input of executed contract terms into the Company’s information systems that perform revenue recognition; and (2) the review of internally prepared reports and analyses utilized in the financial closing process.

Notwithstanding the existence of the material weaknesses described above, management believes that the condensed consolidated financial statements included in this Form 10-Q fairly present, in all material respects, our financial position, results of operations and cash flows, as of and for the periods presented, in conformity with GAAP.

Management's Plan for Remediation

The material weaknesses described above were initially identified at December 31, 2020 and continued to exist at December 31, 2022. However, as a result of the remediation plan we commenced in January 2021, the number of control deficiencies that aggregated into the material weaknesses at December 31, 2022 were significantly reduced as compared to December 31, 2020. The remediation plan we began in January 2021 is designed to improve our internal control over financial reporting and remediate the related control deficiencies that led to these material weaknesses. In response to these deficiencies, management, with the oversight of the Audit Committee of the Board of Directors, has identified and implemented steps to remediate the material weaknesses.

During the year ended December 31, 2022, the Company completed the implementation of the following remedial measures designed to address the material weaknesses and to continue to improve our internal control over financial reporting.

- Established a formal controls governance committee in the first quarter of 2022 to manage and enhance the oversight and execution of internal controls. The controls governance committee consists of members of senior leadership, which meets monthly or more frequently as needed.
- Retained an outside firm with expertise in the design and execution of internal controls over financial reporting to examine our control design, perform a root cause analysis as to why certain controls have not been and continue to not be properly executed, and to advise on changes in the design of our controls and procedures and implementation of our remediation activities.
- Enhanced the global control environment, including testing in 2022 of a significant number of additional business process and information technology controls.
- Implemented software to manage and administer account reconciliations.
- Revamped and expanded our internal disclosure processes to provide greater representation across functions and improve opportunities to identify matters requiring accounting disposition or disclosures.
- Implemented software enhancements, including a tax reporting solution for our tax provision process.
- Redesigned controls related to the accounting for the income tax process.
- Engaged a third party to review our quarterly and annual tax calculations.
- Hired additional experienced resources with backgrounds in income tax accounting.

Our remaining internal control remediation efforts are expected to include the following:

- Design and implementation of enhanced policies, procedures and controls relating to our revenue recognition and our closing and financial reporting process.
- Redesign of existing management review controls, including the input of executed contract terms into the Company's information systems that perform revenue recognition.
- Hire and retain additional staff with sufficient experience and knowledge in GAAP financial reporting matters and internal control over financial reporting.
- Train appropriate personnel in the effective design and execution of our enhanced policies, procedures and controls, including the importance of the ongoing, consistent effective execution of such procedures and controls.
- Initiation of a robust finance transformation initiative with dedicated resources tasked to create a more efficient close process and implement key technologies to enable a more mature and automated control environment.

We are committed to the remediation of all material weaknesses and expect to successfully implement enhanced control processes. However, as we continue to evaluate, and work to improve our internal control over financial reporting, management may determine that additional measures to address control deficiencies or modifications to the remediation plan are necessary. Therefore, we cannot assure you when we will remediate such weaknesses, nor can we be certain that additional actions will not be required or the costs of any such additional actions. Moreover, we cannot assure you that additional material weaknesses will not arise in the future.

Changes in Internal Control Over Financial Reporting

We are in the process of implementing certain changes to our internal controls to remediate the material weaknesses described above. Except as noted above, there were no changes in the Company's internal control over financial reporting during the three months ended September 30, 2023 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

The information relating to legal proceedings set forth under the header “Litigation” in Note 18 to the Financial Statements in Part I, Item 1 of this Form 10-Q is incorporated herein by reference.

Item 1A. Risk Factors

There are no material changes to the risk factors previously disclosed in response to Item 1A, “Risk Factors” in our 2022 Form 10-K.

Item 2. Unregistered Sales of Equity Securities, Use of Proceeds, and Issuer Purchases of Equity Securities

Issuance of Unregistered Securities and Issuer Purchases of Equity Securities

Issuances of Unregistered Securities

None.

Issuer purchases of equity securities

We did not repurchase any of our equity securities in the open market during the three months ended September 30, 2023; however, shares of common stock were surrendered to us for payment of tax withholding obligations in connection with the vesting of restricted stock awards and restricted stock units pursuant to our Amended and Restated 2015 Incentive Stock Plan.

	<u>Total number of shares (or units) purchased</u>	<u>Average price paid per share (or unit)</u>
July 1, 2023 - July 31, 2023	1,434	\$ 9.62
August 1, 2023 - August 30, 2023	27,972	6.22
September 1, 2023 - September 30, 2023	—	—
Total	<u>29,406</u> ^a	<u>\$ 6.39</u> ^b

a. Represents shares of common stock surrendered to us for payment of tax withholding obligations in connection with the vesting of restricted stock awards and restricted stock units.

b. The average price paid per share reflects the average market value of shares withheld for tax purposes.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

(c) During the fiscal quarter ended September 30, 2023, none of our directors or officers (as defined in Rule 16a-1(f) of the Securities Exchange Act of 1934, as amended) adopted or terminated a Rule 10b5-1 trading arrangement or a non-Rule 10b5-1 trading arrangement (in each case, as defined in Item 408(a) of Regulation S-K) for the purchase or sale of the Company’s securities.

Item 6. Exhibits

(a)(3) Exhibits

The following exhibits are included as part of this filing and incorporated herein by this reference:

- 3.1 Certificate of Incorporation of Registrant. (Incorporated by reference to Exhibit 3.1 to Registrant's Form 8-B filed on August 16, 1993, and the amendment thereto, filed on Form 8-B/A on February 4, 1994.)
- 3.2 Amendment to Certificate of Incorporation filed on May 23, 1995. (Incorporated by reference to Exhibit 3.2 to Registrant's Registration Statement on Form S-2/A, filed on May 25, 1995.)
- [3.3](#) Certificate of Amendment of Certificate of Incorporation filed with Secretary of State of Delaware on May 19, 2004. (Incorporated by reference to Exhibit 3.1 to Registrant's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2004, filed on August 5, 2004.)
- [3.4](#) Certificate of Amendment of Certificate of Incorporation filed with Secretary of State of Delaware on May 17, 2005. (Incorporated by reference to Exhibit 3.1 to Registrant's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2005, filed on August 1, 2005.)
- [3.5](#) Certificate of Amendment of Certificate of Incorporation filed with the Secretary of State of Delaware on October 7, 2011. (Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed on October 7, 2011.)
- [3.6](#) Certificate of Amendment of Certificate of Incorporation filed with the Secretary of State of Delaware on May 21, 2013. (Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed on May 22, 2013.)
- [3.7](#) Amended and Restated By-Laws. (Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed on March 15, 2018.)
- [4.1](#) Specimen Common Stock Certificate. (Incorporated by reference to Exhibit 4.1 to Registrant's Registration Statement on Form S-3 (Registration No. 333-182065), filed on June 12, 2012.)
- [4.2](#) Indenture, dated as of November 16, 2021, between 3D Systems Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee. (Incorporated by reference to the Exhibit 4.1 of the Registrant's Current Report on Form 8-K filed on November 17, 2021.)
- [4.3](#) Form of 0% Convertible Notes due 2026 (filed as Exhibit A to Exhibit 4.2). (Incorporated by reference to the Exhibit 4.2 of the Registrant's Current Report on Form 8-K filed on November 17, 2021.)
- [31.1](#)† Certification of Principal Executive Officer filed pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated November 9, 2023.
- [31.2](#)† Certification of Principal Financial Officer filed pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated November 9, 2023.
- [32.1](#)† Certification of Principal Executive Officer filed pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated November 9, 2023.
- [32.2](#)† Certification of Principal Financial Officer filed pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated November 9, 2023.
- 101.INS† Inline XBRL Instance Document - the instance document does not appear in the Interactive Data file because the its XBRL tags are embedded within the Inline XBRL document.In
- 101.SCH† Inline XBRL Taxonomy Extension Scheme Document
- 101.CAL† Inline XBRL Taxonomy Extension Calculation Linkbase Document
- 101.DEF† Inline XBRL Taxonomy Extension Definition Linkbase Document
- 101.LAB† Inline XBRL Taxonomy Extension Label Linkbase Document
- 101.PRE† XBRL Taxonomy Extension Presentation Linkbase Document
- 104 Cover Page Interactive Data File - this data file does not appear in the Interactive Data file because its XBRL tags are embedded within the Inline XBRL document.

† Exhibits filed herein. All exhibits not so designated are incorporated by reference to a prior filing, as indicated.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

3D Systems Corporation

By _____ /s/ Margaret E. Wicklund
Margaret E. Wicklund
Senior Vice President and Chief Accounting Officer
(principal accounting officer)

Date: November 9, 2023

Exhibit 31.2

**Certification of
Principal Financial Officer of
3D Systems Corporation**

I, Andrew Johnson, certify that:

1. I have reviewed this report on Form 10-Q of 3D Systems Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Andrew Johnson

Andrew Johnson

Title: Executive Vice President, Interim Chief Financial Officer, Chief
Corporate Development Officer, Chief Legal Counsel
(principal financial officer)

Date: November 9, 2023

Exhibit 32.1

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

This certification is provided pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and accompanies the Quarterly Report on Form 10-Q (the "Form 10-Q") for the quarter ended September 30, 2023 of 3D Systems Corporation (the "Issuer").

I, Dr. Jeffrey A. Graves, President, Chief Executive Officer and Director (principal executive officer) of the Issuer, certify that, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge:

- (i) the Form 10-Q fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and
- (ii) The information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Issuer.

Date: November 9, 2023

/s/ Dr. Jeffrey A. Graves

Name: Dr. Jeffrey A. Graves
(principal executive officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Form 10-Q or as a separate disclosure document.

Exhibit 32.2

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

This certification is provided pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and accompanies the Quarterly Report on Form 10-Q (the "Form 10-Q") for the quarter ended September 30, 2023 of 3D Systems Corporation (the "Issuer").

I, Andrew Johnson, Executive Vice President, Interim Chief Financial Officer, Chief Corporate Development Officer, and Chief Legal Officer of the Issuer, certify that, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge:

- (i) the Form 10-Q fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and
- (ii) The information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Issuer.

Date: November 9, 2023

/s/ Andrew Johnson

Name: Andrew Johnson
(principal financial officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Form 10-Q or as a separate disclosure document.