3D SYSTEMS CORP
Form 10-Q
August 03, 2016

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 June 30, 2016

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 | 95 4431352 |
| (State or Other Jurisdiction of Incorporation or Organization) | (I.R.S. Employer Identification No.) |
| 333 THREE D SYSTEMS CIRCLE ROCK HILL, SOUTH CAROLINA | 29730 |
| (Address of Principal Executive Offices) | (Zip Code) |

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

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes No

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

| | | |
|---|---|---|
| Large accelerated filer | | Accelerated filer |
| Non-accelerated filer | (Do not check if smaller reporting company) | Smaller reporting company |

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, outstanding as of July 27, 2016: 112,207,399

3D SYSTEMS CORPORATION

Quarterly Report on Form 10-Q for the

Quarter and Six Months Ended June 30, 2016

TABLE OF CONTENTS


| | |
|---|---|
| PART I — FINANCIAL INFORMATION | |
| Item 1. Financial Statements. | 3 |
| Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations. | 19 |
| Item 3. Quantitative and Qualitative Disclosures About Market Risk. | 31 |
| Item 4. Controls and Procedures. | 31 |
| PART II — OTHER INFORMATION | |
| Item 1. Legal Proceedings. | 31 |
| Item 1A. Risk Factors. | 31 |
| Item 6. Exhibits. | 31 |
| Exhibit 31.1 | |
| Exhibit 31.2 | |
| Exhibit 32.1 | |
| Exhibit 32.2 | |

PART I — FINANCIAL INFORMATION

Item 1. Financial Statements.

3D SYSTEMS CORPORATION

CONDENSED CONSOLIDATED BALANCE SHEETS

(Unaudited)

| (in thousands, except par value) | June 30, 2016 | December 31, 2015 |
|---|---|---|
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | $ 176,248 | $ 155,643 |
| Accounts receivable, net of reserves — $16,151 (2016) and $14,139 (2015) | 125,095 | 157,406 |
| Inventories, net of reserves — $22,281 (2016) and $28,225 (2015) | 123,157 | 105,877 |
| Prepaid expenses and other current assets | 15,997 | 13,541 |
| Total current assets | 440,497 | 432,467 |
| Property and equipment, net | 87,258 | 85,995 |
| Intangible assets, net | 141,081 | 157,466 |
| Goodwill | 187,569 | 187,875 |
| Long term deferred income tax asset | 2,789 | 3,216 |
| Other assets, net | 25,117 | 26,256 |
| Total assets | $ 884,311 | $ 893,275 |
| LIABILITIES AND EQUITY | | |
| Current liabilities: | | |
| Current portion of capitalized lease obligations | $ 564 | $ 529 |
| Accounts payable | 42,356 | 46,869 |
| Accrued and other liabilities | 50,756 | 54,699 |
| Customer deposits | 6,005 | 8,229 |
| Deferred revenue | 43,706 | 35,145 |
| Total current liabilities | 143,387 | 145,471 |
| Long term portion of capitalized lease obligations | 7,917 | 8,187 |
| Long term deferred income tax liability | 15,526 | 17,944 |
| Other liabilities | 58,077 | 58,155 |
| Total liabilities | 224,907 | 229,757 |
| Redeemable noncontrolling interests | 8,872 | 8,872 |
| Commitments and contingencies (Note 13) | | |
| Stockholders' equity: | | |
| Common stock, $0.001 par value, authorized 220,000 shares; issued 113,559 (2016) and 113,115 (2015) | 113 | 113 |

| | | |
|---|---|---|
| Additional paid-in capital | 1,298,631 | 1,279,738 |
| Treasury stock, at cost — 1,384 shares (2016) and 892 shares (2015) | (2,333) | (1,026) |
| Accumulated deficit | (605,804) | (583,368) |
| Accumulated other comprehensive loss | (38,273) | (39,548) |
| Total 3D Systems Corporation stockholders' equity | 652,334 | 655,909 |
| Noncontrolling interests | (1,802) | (1,263) |
| Total stockholders’ equity | 650,532 | 654,646 |
| Total liabilities, redeemable noncontrolling interests and stockholders’ equity | $ 884,311 | $ 893,275 |

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)

(Unaudited)

| (in thousands, except per share amounts) | Quarter Ended June 30, 2016 | 2015 | Six Months Ended June 30, 2016 | 2015 |
|---|---|---|---|---|
| Revenue: | | | | |
| Products | $ 94,899 | $ 104,577 | $ 185,863 | $ 204,399 |
| Services | 63,212 | 65,927 | 124,803 | 126,827 |
| Total revenue | 158,111 | 170,504 | 310,666 | 331,226 |
| Cost of sales: | | | | |
| Products | 46,200 | 57,484 | 90,361 | 107,960 |
| Services | 31,500 | 31,393 | 62,381 | 62,655 |
| Total cost of sales | 77,700 | 88,877 | 152,742 | 170,615 |
| Gross profit | 80,411 | 81,627 | 157,924 | 160,611 |
| Operating expenses: | | | | |
| Selling, general and administrative | 63,228 | 79,738 | 137,195 | 154,030 |
| Research and development | 20,900 | 25,731 | 41,205 | 47,947 |
| Total operating expenses | 84,128 | 105,469 | 178,400 | 201,977 |
| Loss from operations | (3,717) | (23,842) | (20,476) | (41,366) |
| Interest and other (income) expense, net | (208) | 89 | (334) | 2,656 |
| Loss before income taxes | (3,509) | (23,931) | (20,142) | (44,022) |
| Provision (benefit) for income taxes | 1,700 | (10,096) | 2,879 | (17,039) |
| Net loss | (5,209) | (13,835) | (23,021) | (26,983) |
| Less: net loss attributable to noncontrolling interests | (561) | (139) | (585) | (106) |
| Net loss attributable to 3D Systems Corporation | $ (4,648) | $ (13,696) | $ (22,436) | $ (26,877) |
| Net loss per share available to 3D Systems Corporation common stockholders — basic and diluted | $ (0.04) | $ (0.12) | $ (0.20) | $ (0.24) |
| Other comprehensive income (loss): | | | | |
| Pension adjustments | $ 67 | $ (3) | $ 36 | $ 262 |
| Foreign currency gain (loss) | (6,654) | 13,011 | 1,285 | (7,946) |
| Total other comprehensive income (loss) | (6,587) | 13,008 | 1,321 | (7,684) |
| Less foreign currency translation gain (loss) attributable to noncontrolling interests | (43) | (1,581) | 46 | (1,706) |
| Other comprehensive income (loss) attributable to 3D Systems Corporation | (6,544) | 14,589 | 1,275 | (5,978) |

| | | | | |
|---|---|---|---|---|
| Comprehensive loss | (11,796) | (827) | (21,700) | (34,667) |
| Less comprehensive loss attributable to noncontrolling interests | (604) | (1,720) | (539) | (1,812) |
| Comprehensive income (loss) attributable to 3D Systems Corporation | $ (11,192) | $ 893 | $ (21,161) | $ (32,855) |

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Unaudited)

| | Six Months Ended June 30, | |
|---|---|---|
| | 2016 | 2015 |
| Cash flows from operating activities: | | |
| Net loss | $ (23,021) | $ (26,983) |
| Adjustments to reconcile net loss to net cash provided by (used in) operating activities: | | |
| Benefit of deferred income taxes | (2,201) | (14,773) |
| Depreciation and amortization | 30,435 | 41,895 |
| Impairment of investments and leasehold improvements | 2,760 | — |
| Provision for bad debts | 2,677 | 5,135 |
| Stock-based compensation | 18,893 | 20,050 |
| (Gain) loss on the disposition of property and equipment | (51) | 711 |
| Changes in operating accounts, net of acquisition activity: | | |
| Accounts receivable | 30,375 | 25,899 |
| Inventories | (16,153) | (34,117) |
| Prepaid expenses and other current assets | (2,463) | (13,332) |
| Accounts payable | (4,526) | (3,827) |
| Accrued and other current liabilities | (4,328) | (11,393) |
| All other operating activities | (1,357) | 4,382 |
| Net cash provided by (used in) operating activities | 31,040 | (6,353) |
| Cash flows from investing activities: | | |
| Purchases of property and equipment | (7,597) | (12,196) |
| Additions to license and patent costs | (790) | (560) |
| Cash paid for acquisitions, net of cash assumed | — | (91,799) |
| Other investing activities | (1,000) | (1,750) |
| Net cash used in investing activities | (9,387) | (106,305) |
| Cash flows from financing activities: | | |
| Tax benefits from share-based payment arrangements | — | 547 |
| Proceeds (repurchase) — restricted stock | (1,307) | 942 |
| Repayment of capital lease obligations | (524) | (526) |
| Net cash provided by (used in) financing activities | (1,831) | 963 |
| Effect of exchange rate changes on cash | 783 | (1,950) |
| Net increase (decrease) in cash and cash equivalents | 20,605 | (113,645) |
| Cash and cash equivalents at the beginning of the period | 155,643 | 284,862 |

| | | |
|---|---|---|
| Cash and cash equivalents at the end of the period | $ 176,248 | $ 171,217 |
| | | |
| Cash interest payments | $ 211 | $ 283 |
| Cash income tax payments | 5,933 | 8,552 |
| Transfer of equipment from inventory to property and equipment, net (a) | 7,529 | 4,403 |
| Transfer of equipment to inventory from property and equipment, net (b) | 2,075 | 3,923 |

(a) Inventory is transferred from inventory to “property and equipment, net” at cost when the Company requires additional machines for training or demonstration or for placement into on demand parts manufacturing services locations.

(b) In general, an asset is transferred from property and equipment, net, into inventory at its net book value when the Company has identified a potential sale for a used machine.

See accompanying notes to condensed consolidated financial statements.

3D SYSTEMS CORPORATION

CONDENSED CONSOLIDATED STATEMENT OF EQUITY

(Unaudited)

| | Common Stock | | | Treasury Stock | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| (In thousands, except par value) | Shares | Par Value $0.001 | Additional Paid In Capital | Shares | Amount | Accumulated Deficit | Accumulated Other Comprehensive Loss | Total 3D Systems Corporation Stockholders' Equity | Equity Attributable to Noncontrolling Interests | Tot Stoc Equ |
| Balance at December 31, 2015 | 113,115 | $ 113 | $ 1,279,738 | 892 | $ (1,026) | $ (583,368) | $ (39,548) | $ 655,909 | $ (1,263) | $ 6 |
| Issuance (repurchase) of restricted stock, net | 444 | — | — | 492 | (1,307) | — | — | (1,307) | — | ( |
| Stock-based compensation expense | — | — | 18,893 | — | — | — | — | 18,893 | — | 1 |
| Net loss | — | — | — | — | — | (22,436) | — | (22,436) | (585) | ( |
| Pension adjustment | — | — | — | — | — | — | 36 | 36 | — | |
| Foreign currency translation adjustment | — | — | — | — | — | — | 1,239 | 1,239 | 46 | 1 |
| Balance at June 30, 2016 | 113,559 | $ 113 | $ 1,298,631 | 1,384 | $ (2,333) | $ (605,804) | $ (38,273) | $ 652,334 | $ (1,802) | $ 6 |

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 its subsidiaries (collectively, the "Company"). All significant intercompany transactions and balances have been eliminated in consolidation. The unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America ("GAAP") and the rules and regulations of the Securities and Exchange Commission ("SEC") applicable to interim reports. Accordingly, they do not include all the information and notes required by GAAP for complete financial statements and should be read in conjunction with the audited financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2015 ("Form 10-K").

In the opinion of management, the unaudited condensed consolidated financial statements contain 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 results of operations for the quarter and six months ended June 30, 2016 are not necessarily indicative of the results to be expected for the full year.

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.

Certain prior period amounts presented in the condensed consolidated financial statements and accompanying footnotes have been reclassified to conform to current year presentation.

All amounts presented in the accompanying footnotes are presented in thousands, except for per share information.

Recent Accounting Pronouncements

No new accounting pronouncements, issued or effective during the second quarter of 2016, have had or are expected to have a significant impact on the Company's consolidated financial statements.

(2) Inventories

Components of inventories, net, as of June 30, 2016 and December 31, 2015 were as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Raw materials | $ 44,069 | $ 43,960 |
| Work in process | 7,384 | 4,067 |
| Finished goods and parts | 71,704 | 57,850 |
| Inventories, net | $ 123,157 | $ 105,877 |

(3) Property and Equipment

Property and equipment, net, as of June 30, 2016 and December 31, 2015 were as follows:

| (in thousands) | 2016 | 2015 | Useful Life (in years) |
|---|---|---|---|
| Land | $ 903 | $ 903 | N/A |
| Building | 11,032 | 11,007 | 25-30 |
| Machinery and equipment | 108,633 | 105,383 | 2-7 |
| Capitalized software | 8,895 | 7,391 | 3-5 |
| Office furniture and equipment | 5,094 | 4,714 | 1-5 |
| Leasehold improvements | 23,007 | 17,867 | Life of lease (a) |
| Rental equipment | 152 | 149 | 5 |
| Construction in progress | 10,364 | 9,578 | N/A |
| Total property and equipment | 168,080 | 156,992 | |
| Less: Accumulated depreciation and amortization | (80,822) | (70,997) | |
| Total property and equipment, net | $ 87,258 | $ 85,995 | |

(a) Leasehold improvements are amortized on a straight-line basis over the shorter of (i) their estimated useful lives and (ii) the estimated or contractual life of the related lease.

Depreciation and amortization expense on property and equipment was $6,210 and $12,210 for the quarter and six months ended June 30, 2016, respectively, compared to $4,691 and $9,400 for the quarter and six months ended June 30, 2015, respectively.

(4) Intangible Assets

Intangible assets, net, other than goodwill, as of June 30, 2016 and December 31, 2015 were as follows:

| | 2016 | | | 2015 | | | | |
|---|---|---|---|---|---|---|---|---|
| (in thousands) | Gross | Accumulated Amortization | Net | Gross | Accumulated Amortization | Net | Useful Life (in years) | Weighted Average Useful Life Remaining (in years) |
| Intangible assets with finite lives: | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Patent costs | $ 16,377 | $ (5,457) | $ 10,920 | $ 16,251 | $ (4,895) | $ 11,356 | 1-19 | 8 |
| Acquired technology | 53,161 | (22,075) | 31,086 | 52,809 | (16,405) | 36,404 | 2-15 | 4 |
| Internally developed software | 4,730 | (3,220) | 1,510 | 4,730 | (2,919) | 1,811 | 3 | 3 |
| Customer relationships | 102,585 | (42,315) | 60,270 | 101,933 | (36,158) | 65,775 | 2-15 | 7 |
| Non-compete agreements | 11,808 | (8,916) | 2,892 | 12,163 | (8,558) | 3,605 | 2-5 | 3 |
| Trade names | 28,352 | (14,386) | 13,966 | 28,108 | (12,498) | 15,610 | 1-9 | 6 |
| Other | 46,202 | (25,765) | 20,437 | 46,435 | (23,530) | 22,905 | 1-7 | 5 |
| Total intangible assets | $ 263,215 | $ (122,134) | $ 141,081 | $ 262,429 | $ (104,963) | $ 157,466 | 1-19 | 5 |

Amortization expense related to costs incurred to internally develop and extend patents in the United States and various other countries was $81 and $165 for the quarter and six months ended June 30, 2016, respectively, compared to $76 and $151 for the quarter and six months ended June 30, 2015, respectively.

Amortization expense related to all other intangible assets was $8,779 and $17,514 for the quarter and six months ended June 30, 2016, respectively, compared to $17,405 and $31,846 for the quarter and six months ended June 30, 2015, respectively.

Annual amortization expense for intangible assets is expected to be $35,358, $32,134, $26,962, $21,626 and $16,932 for the years ending 2016, 2017, 2018, 2019, and 2020, respectively.

(5) Accrued and Other Liabilities

Accrued liabilities as of June 30, 2016 and December 31, 2015 were as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Compensation and benefits | $ 22,875 | $ 24,152 |
| Vendor accruals | 8,656 | 12,354 |
| Accrued professional fees | 531 | 491 |
| Accrued taxes | 10,494 | 11,317 |
| Royalties payable | 1,464 | 1,431 |
| Accrued interest | 41 | 42 |
| Accrued earnouts and deferred purchase payments related to acquisitions | 2,752 | 159 |
| Accrued other | 3,943 | 4,753 |
| Total | $ 50,756 | $ 54,699 |

Other liabilities as of June 30, 2016 and December 31, 2015 were as follows:

| (in thousands) | 2016 | 2015 |
|---|---|---|
| Arbitration award | $ 11,282 | $ 11,282 |
| Long term employee indemnity | 10,446 | 9,794 |
| Defined benefit pension obligation | 6,344 | 6,211 |
| Long term tax liability | 8,312 | 8,312 |
| Long term earnouts related to acquisitions | 6,716 | 9,673 |
| Long term deferred revenue | 7,856 | 7,956 |
| Other long term liabilities | 7,121 | 4,927 |
| Total | $ 58,077 | $ 58,155 |

(6) Hedging Activities and Financial Instruments

The Company conducts business in various countries using both the functional currencies of those countries and other currencies to effect cross border transactions. As a result, the Company is subject to the risk that fluctuations in

foreign exchange rates between the dates that those transactions are entered into and their respective settlement dates will result in a foreign exchange gain or loss. When practicable, the Company endeavors to match assets and liabilities in the same currency on its balance sheet and those of its subsidiaries in order to reduce these risks. When appropriate, the Company enters into foreign currency contracts to hedge exposures arising from those transactions. The Company has elected not to prepare and maintain the documentation to qualify for hedge accounting treatment under Accounting Standards Codification ("ASC") 815, "Derivatives and Hedging," and therefore, all gains and losses (realized or unrealized) are recognized in "Interest and other expense, net" in the condensed consolidated statements of operations and comprehensive income (loss). Depending on their fair value at the end of the reporting period, derivatives are recorded either in prepaid expenses and other current assets or in accrued liabilities on the condensed consolidated balance sheet.

There were no foreign currency contracts outstanding as of June 30, 2016 or December 31, 2015.

For the quarter and six months ended June 30, 2016, the condensed consolidated statements of operations includes a foreign currency transaction loss of $55 and a gain of $1,463, respectively, compared to a gain of $428 and a loss of $1,767 for the quarter and six months ended June 30, 2015, respectively.

For the quarter and six months ended June 30, 2016, the total impact of foreign currency translation on accumulated other comprehensive loss reflects a loss of $6,611 and a gain of $1,239, respectively, compared to a gain of $14,592 and a loss of $6,240 for the quarter and six months ended June 30, 2015, respectively.

(7) Borrowings

Credit Facility

On October 10, 2014, the Company and certain of its subsidiaries entered into a $150,000 five-year revolving, unsecured credit facility (the "Credit Agreement") with PNC Bank, National Association, as Administrative Agent, PNC Capital Markets LLC, as Sole Lead Arranger and Sole Bookrunner, HSBC Bank USA, N.A., as Syndication Agent, and the other lenders party thereto (collectively, the "Lenders"). The Credit Agreement comprises a revolving loan facility that provides for advances in the initial aggregate principal amount of up to $150,000 (the "Credit Facility"). Subject to certain terms and conditions contained in the Credit Agreement, the Company may, at its option, request an increase in the aggregate principal amount available under the Credit Facility by an additional $75,000. The Credit Agreement includes provisions for the issuance of letters of credit and swingline loans.

The Credit Agreement is guaranteed by certain of the Company's material domestic subsidiaries (the "Guarantors"). From time to time, the Company may be required to cause additional material domestic subsidiaries to become Guarantors under the Credit Agreement.

Generally, amounts outstanding under the Credit Facility bear interest, at the Company's option, at either the Base Rate or the London interbank offered rate ("LIBOR"), in each case, plus an applicable margin. Base Rate advances bear interest at a rate per annum equal to the sum of (i) the highest of (A) the Administrative Agent's prime rate, (B) the Federal Funds Open Rate plus 0.5% or (C) the Daily LIBOR Rate for a one month interest period plus 1%, and (ii) an applicable margin that ranges from 0.25% to 0.50% based upon the Company's consolidated total leverage ratio. LIBOR Rate advances bear interest at a rate based upon the LIBOR Rate for the applicable interest period, plus an applicable margin that ranges from 1.25% to 1.50% based upon the Company's consolidated total leverage ratio. Under the terms of the Credit Agreement, (i) accrued interest on each loan bearing interest at the Base Rate is payable quarterly in arrears and (ii) accrued interest on each loan bearing interest at the LIBOR Rate is payable in arrears on the earlier of (A) quarterly and (B) the last day of each applicable interest payment date for each loan. The Credit Facility is scheduled to mature on October 10, 2019, at which time all amounts outstanding thereunder will be due and payable.

The Company is required to pay certain fees in connection with the Credit Facility, including a quarterly commitment fee equal to the product of the amount of the average daily available revolving commitments under the Credit Agreement multiplied by a percentage that ranges from 0.20% to 0.25% depending upon the Company's consolidated total leverage ratio, as well as customary administrative fees.

The Credit Agreement contains customary representations, warranties, covenants and default provisions for a Credit Facility of this type, including, but not limited to, financial covenants, limitations on liens and the incurrence of debt, covenants to preserve corporate existence and comply with laws and covenants regarding the use of proceeds of the Credit Facility. The financial covenants include a maximum consolidated total leverage ratio, which is the ratio of

consolidated total funded indebtedness to consolidated EBITDA (earnings before interest, taxes, depreciation and amortization expense), as defined in the Credit Agreement, of 3.00 to 1.00, and a minimum interest coverage ratio, which is the ratio of consolidated EBITDA to cash interest expense, of 3.50 to 1.00. The Company is only required to be in compliance with the financial covenants as of the end of any fiscal quarter in which there are any loans outstanding at any time during such fiscal quarter. Based on the Company's current results of operations and financial covenants set forth in the Credit Agreement, availability at June 30, 2016 would be approximately $150,000. Future results may impact availability.

The payment of dividends on the Company's common stock is restricted under provisions of the Credit Facility, which limits the amount of cash dividends that the Company may pay in any one fiscal year to $30,000. The Company currently does not pay, and has not paid, any dividends on its common stock, and currently intends to retain any future earnings for use in its business.

There was no outstanding balance on the Credit Facility as of June 30, 2016 or December 31, 2015.

Capitalized Lease Obligations

The Company's capitalized lease obligations primarily include a lease agreement that was entered into during 2006 with respect to the Company's corporate headquarters located in Rock Hill, SC. Capitalized lease obligations decreased to $8,481 at June 30, 2016 from $8,716 at December 31, 2015, due to the normal scheduled timing of payments.

(8) Stock-based Compensation Plans

Effective May 19, 2004, the Company adopted its 2004 Incentive Stock Plan, as further amended and restated on February 3, 2015 (the "2004 Stock Plan"), and its 2004 Restricted Stock Plan for Non-Employee Directors, as further amended and restated on April 1, 2013 (the "Director Plan"). On May 19, 2015, the Company's stockholders approved the 2015 Incentive Plan of 3D Systems Corporation (the "2015 Plan" and, together with the 2004 Stock Plan, the "Incentive Plans").

The 2004 Stock Plan authorizes shares of restricted stock, restricted stock units, stock appreciation rights and the grant of options to purchase shares of the Company's common stock. The 2004 Stock Plan also designates measures that may be used for performance awards.

The Director Plan authorizes shares of restricted stock for non-employee directors of the Company.

The 2015 Plan authorizes shares of restricted stock, restricted stock units, stock appreciation rights, cash incentive awards and the grant of options to purchase shares of the Company's common stock. The 2015 Plan also designates measures that may be used for performance awards.

Generally, awards granted prior to November 13, 2015 become fully-vested on the three-year anniversary of the grant date and awards granted after November 13, 2015 will vest one third each year over three years.

The Company records stock-based compensation expense in selling, general and administrative expenses in the condensed consolidated statements of operations and comprehensive income (loss). Stock-based compensation expense for the quarters and six months ended June 30, 2016 and 2015 was as follows:

| | Quarter Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| (in thousands) | 2016 | 2015 | 2016 | 2015 |
| Stock-based compensation expense | $ 7,226 | $ 9,721 | $ 18,893 | $ 20,050 |

Restricted Stock

The number of shares and units of restricted common stock awarded and the weighted average fair value per share and unit for the quarters and six months ended June 30, 2016 and 2015 were as follows:

| | Quarter Ended June 30, | | | |
|---|---|---|---|---|
| | 2016 | | 2015 | |
| (in thousands, except per share amounts) | Number of Shares/Units | Weighted Average Fair Value | Number of Shares/Units | Weighted Average Fair Value |
| Restricted stock awards granted under the: | | | | |
| Incentive Plans — non-executive employees, service condition | 85 | $ 12.33 | 226 | $ 22.68 |
| Incentive Plans — non-executive employees, market and service condition | 46 | 12.33 | — | — |
| Incentive Plans — executive officers, service condition | 150 | 15.12 | 25 | 22.61 |
| Incentive Plans — executive officers, market and service condition | 75 | 15.12 | — | — |
| Incentive Plans — non-employee directors | 39 | 12.78 | — | — |
| Director Plan — non-employee directors | 24 | 12.78 | 24 | 22.61 |
| Total restricted stock awards | 419 | $ 13.90 | 275 | $ 22.67 |

| | Six Months Ended June 30, | | | |
|---|---|---|---|---|
| | 2016 | | 2015 | |
| (in thousands, except per share amounts) | Number of Shares/Units | Weighted Average Fair Value | Number of Shares/Units | Weighted Average Fair Value |
| Restricted stock awards granted under the: | | | | |
| Incentive Plans — non-executive employees, service condition | 85 | $ 12.33 | 439 | $ 25.86 |
| Incentive Plans — non-executive employees, market and service condition | 46 | 12.33 | — | — |
| Incentive Plans — executive officers, service condition | 150 | 15.12 | 85 | 27.50 |
| Incentive Plans — executive officers, market and service condition | 75 | 15.12 | — | — |
| Incentive Plans — non-employee directors | 64 | 10.79 | — | — |
| Director Plan — non-employee directors | 24 | 12.78 | 24 | 22.61 |
| Total restricted stock awards | 444 | $ 13.55 | 548 | $ 26.00 |

Stock Options

The Company estimates the fair value of stock options and restricted stock awards with market conditions using a binomial lattice Monte Carlo simulation model. The weighted-average fair value and the assumptions used to measure fair value were as follows:

| | Quarter Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| Stock option assumptions: | | | | |
| Weighted-average fair value | $ 7.54 | $ — | $ 7.54 | $ — |
| Expected volatility | 60.0% | — | 60.0% | — |
| Risk-free interest rate | 0.76%-1.46% | — | 0.76%-1.46% | — |
| Expected dividend yield | 0% | — | 0% | — |
| Derived term in years | 3-4 | — | 3-4 | — |

Stock option activity for the six months ended June 30, 2016 was as follows:

| | Six Months Ended June 30, 2016 | | |
|---|---|---|---|
| (in thousands, except per share amounts) | Number of Shares | Weighted Average Exercise | Weighted Average Remaining Term (in years) |
| Stock option activity: | | | |
| Outstanding at beginning of period | — | $ — | |
| Granted | 720 | 14.27 | |
| Exercised | — | — | |
| Forfeited and expired | — | — | |
| Outstanding at end of period | 720 | $ 14.27 | 10 |
| Exercisable at end of period | 720 | $ 14.27 | 10 |

(9) Loss Per Share

The Company presents basic and diluted loss per share amounts. Basic loss per share is calculated by dividing net loss attributable to 3D Systems Corporation by the weighted average number of common shares outstanding during the applicable period. Diluted loss per share is calculated by dividing net loss by the weighted average number of common and common equivalent shares outstanding during the applicable period.

The following table reconciles basic weighted average outstanding shares to diluted weighted average outstanding for the quarters and six months ended June 30, 2016 and 2015:

| | Quarter Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| (in thousands, except per share amounts) | 2016 | 2015 | 2016 | 2015 |
| Numerator for basic and diluted net loss per share: | | | | |
| Net loss attributable to 3D Systems Corporation | $ (4,648) | $ (13,696) | $ (22,436) | $ (26,877) |
| Denominator for basic and diluted net loss per share: | | | | |
| Weighted average shares | 111,166 | 112,017 | 111,288 | 111,875 |
| Net loss per share, basic and diluted | $ (0.04) | $ (0.12) | $ (0.20) | $ (0.24) |
| Weighted average stock options excluded from diluted loss per share calculation (a) | 8 | — | 4 | — |

(a) The calculation for weighted average outstanding diluted loss per share excludes stock options with an exercise price that exceeds the average market price of shares during the period. Additionally, the effect of their inclusion would have been anti-dilutive due to the Company’s net loss for the quarter and six months ended June 30, 2016 and 2015.

In addition to unexercised stock options, there was an immaterial number of additional shares issuable upon the vesting of restricted stock units that were excluded from the diluted share calculations because they were anti-dilutive.

(10) Fair Value Measurements

ASC 820, “Fair Value Measurements and Disclosures,” defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs that may be used to measure fair value:

- Level 1 - Quoted prices in active markets for identical assets or liabilities;

- Level 2 - Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; or

- Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

For the Company, the above standard applies to cash equivalents and earnout consideration. The Company utilizes the market approach to measure fair value for its financial assets and liabilities. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities.

Assets and liabilities measured at fair value on a recurring basis are summarized below:

| | Fair Value Measurements as of June 30, 2016 | | | |
|---|---|---|---|---|
| (in thousands) | Level 1 | Level 2 | Level 3 | Total |
| Description | | | | |
| Cash equivalents (a) | $ 33,502 | $ — | $ — | $ 33,502 |

| | | | | |
|---|---|---|---|---|
| Earnout consideration (b) | $ — | $ — | $ 9,302 | $ 9,302 |

| | Fair Value Measurements as of December 31, 2015 | | | |
|---|---|---|---|---|
| (in thousands) | Level 1 | Level 2 | Level 3 | Total |
| Description | | | | |
| Cash equivalents (a) | $ 26,648 | $ — | $ — | $ 26,648 |
| Earnout consideration (b) | $ — | $ — | $ 9,673 | $ 9,673 |

(a) Cash equivalents include 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 and are included in cash and cash equivalents in the consolidated balance sheet.

(b) The fair value of the earnout consideration, which is based on the present value of the expected future payments to be made to the sellers of the acquired businesses, was derived by analyzing the future performance of the acquired businesses using the earnout formula and performance targets specified in each purchase agreement and adjusting those amounts to reflect the ability of the acquired entities to achieve the stated targets. Given the significance of the unobservable inputs, the valuations are classified in Level 3 of the fair value hierarchy. The change in earnout consideration reflects a $917 adjustment to the expected payment, partially offset by $546 of accretion.

The Company did not have any transfers of assets and liabilities between Level 1, Level 2 and Level 3 of the fair value measurement hierarchy during the quarter and six months ended June 30, 2016. In addition to the assets and liabilities included in the above table, certain of our assets and liabilities are to be initially measured at fair value on a non-recurring basis. This includes goodwill and other intangible assets measured at fair value for impairment assessment, in addition to redeemable noncontrolling interests. For additional discussion, refer to “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies and Significant Estimates” in our Form 10-K.

(11) Income Taxes

For the quarter and six months ended June 30, 2016, the Company recorded a provision of $1,700 and $2,879, respectively, resulting in effective tax rates of 48.4% and 14.3% of expense, respectively, compared to tax rates of 42.2% and 38.7% of benefit for the quarter and six months ended June 30, 2015, respectively. The difference in the effective tax rates is primarily attributable to valuation allowances that were recorded in the fourth quarter of 2015 in the United States and certain foreign jurisdictions.

The Company has not provided for any taxes on the unremitted earnings of its foreign subsidiaries, as the Company intends to permanently reinvest all such earnings outside of the U.S. We believe a calculation of the deferred tax liability associated with these undistributed earnings is impracticable.

Tax years 1997 through 2015 remain subject to examination by the U.S. Internal Revenue Service, with most of the years open to examination due to the generation and utilization of net operating losses. The Company files income tax returns (which are open to examination beginning in the year shown in parentheses) in Australia (2011), Belgium (2013), Brazil (2011), China (2012), France (2013), Germany (2011), India (2012), Israel (2013), Italy (2012), Japan (2011), Korea (2011), Mexico (2011), Netherlands (2011), Switzerland (2011), the United Kingdom (2014) and Uruguay (2010).

(12) Segment Information

The Company operates in one reportable business segment. The Company conducts its business through various offices and facilities located throughout the Asia Pacific region (Australia, China, India, Japan and Korea), Europe (Belgium, France, Germany, Italy, the Netherlands, Switzerland and the United Kingdom), Israel, Latin America (Brazil, Mexico and Uruguay), Russia and the United States. The Company has historically disclosed summarized financial information for the geographic areas of operations as if they were segments in accordance with ASC 280, “Segment Reporting.” Financial information concerning the Company’s geographical locations is based on the location of the selling entity. Such summarized financial information concerning the Company’s geographical operations is shown in the following tables:

| | Quarter Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| (in thousands) | 2016 | 2015 | 2016 | 2015 |
| Revenue from unaffiliated customers: | | | | |
| Americas | $ 83,601 | $ 90,396 | $ 167,091 | $ 176,658 |
| Germany | 20,547 | 21,345 | 39,429 | 42,595 |
| Other EMEA | 28,207 | 30,958 | 56,756 | 58,412 |
| Asia Pacific | 25,756 | 27,805 | 47,390 | 53,561 |

| | | | | |
|---|---|---|---|---|
| Total revenue | $ 158,111 | $ 170,504 | $ 310,666 | $ 331,226 |

| | Quarter Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| (in thousands) | 2016 | 2015 | 2016 | 2015 |
| Revenue by class of product and service: | | | | |
| Products | $ 54,322 | $ 68,176 | $ 106,817 | $ 130,891 |
| Materials | 40,577 | 36,401 | 79,046 | 73,508 |
| Services | 63,212 | 65,927 | 124,803 | 126,827 |
| Total revenue | $ 158,111 | $ 170,504 | $ 310,666 | $ 331,226 |

| | Quarter Ended June 30, 2016 Intercompany Sales to | | | | |
|---|---|---|---|---|---|
| (in thousands) | Americas | Germany | Other EMEA | Asia Pacific | Total |
| Americas | $ 989 | $ 9,013 | $ 2,804 | $ 6,604 | $ 19,410 |
| Germany | 2,730 | — | 827 | 64 | 3,621 |
| Other EMEA | 16,805 | 345 | 1,484 | 1,087 | 19,721 |
| Asia Pacific | 634 | — | 16 | 915 | 1,565 |
| Total | $ 21,158 | $ 9,358 | $ 5,131 | $ 8,670 | $ 44,317 |

| | Quarter Ended June 30, 2015 Intercompany Sales to | | | | |
|---|---|---|---|---|---|
| (in thousands) | Americas | Germany | Other EMEA | Asia Pacific | Total |
| Americas | $ 840 | $ 9,676 | $ 5,366 | $ 3,469 | $ 19,351 |
| Germany | 206 | — | 1,089 | — | 1,295 |
| Other EMEA | 16,399 | 881 | 719 | 3,745 | 21,744 |
| Asia Pacific | 804 | — | 5 | 584 | 1,393 |
| Total | $ 18,249 | $ 10,557 | $ 7,179 | $ 7,798 | $ 43,783 |

| | Six Months Ended June 30, 2016 Intercompany Sales to | | | | |
|---|---|---|---|---|---|
| (in thousands) | Americas | Germany | Other EMEA | Asia Pacific | Total |
| Americas | $ 1,278 | $ 15,214 | $ 6,069 | $ 9,560 | $ 32,121 |
| Germany | 3,364 | — | 1,278 | 64 | 4,706 |
| Other EMEA | 29,974 | 1,178 | 2,365 | 2,248 | 35,765 |
| Asia Pacific | 1,664 | — | 19 | 1,806 | 3,489 |
| Total | $ 36,280 | $ 16,392 | $ 9,731 | $ 13,678 | $ 76,081 |

| | Six Months Ended June 30, 2015 Intercompany Sales to | | | | |
|---|---|---|---|---|---|
| (in thousands) | Americas | Germany | Other EMEA | Asia Pacific | Total |
| Americas | $ 1,320 | $ 19,810 | $ 11,203 | $ 8,442 | $ 40,775 |
| Germany | 206 | — | 1,893 | — | 2,099 |
| Other EMEA | 31,314 | 1,535 | 1,583 | 4,391 | 38,823 |
| Asia Pacific | 1,430 | — | 18 | 1,342 | 2,790 |
| Total | $ 34,270 | $ 21,345 | $ 14,697 | $ 14,175 | $ 84,487 |

| | Quarter Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| (in thousands) | 2016 | 2015 | 2016 | 2015 |
| Income (loss) from operations: | | | | |
| Americas | $ (4,747) | $ (29,186) | $ (18,933) | $ (52,292) |
| Germany | 3,960 | (548) | 4,971 | 1,292 |
| Other EMEA | (8,064) | (938) | (16,182) | (2,273) |
| Asia Pacific | 5,921 | 7,342 | 11,103 | 12,926 |
| Subtotal | (2,930) | (23,330) | (19,041) | (40,347) |
| Intercompany elimination | (787) | (512) | (1,435) | (1,019) |
| Total | $ (3,717) | $ (23,842) | $ (20,476) | $ (41,366) |

| (in thousands) | June 30, 2016 | December 31, 2015 |
|---|---|---|
| Assets: | | |
| Americas | $ 380,206 | $ 384,054 |
| Germany | 39,408 | 36,782 |
| Other EMEA | 353,114 | 369,302 |
| Asia Pacific | 111,583 | 103,137 |
| Total | $ 884,311 | $ 893,275 |

| (in thousands) | June 30, 2016 | December 31, 2015 |
|---|---|---|
| Cash and cash equivalents: | | |
| Americas | $ 110,817 | $ 98,913 |
| Germany | 7,879 | 3,901 |
| Other EMEA | 29,797 | 30,487 |
| Asia Pacific | 27,755 | 22,342 |
| Total | $ 176,248 | $ 155,643 |

(13) Commitments and Contingencies

The Company leases office space and certain furniture and fixtures under various non-cancelable operating leases. For the quarter and six months ended June 30, 2016, rent expense under operating leases was $2,919 and $6,175, respectively, compared to $3,408 and $6,612 for the quarter and six months ended June 30, 2015, respectively.

As of June 30, 2016 and December 31, 2015, the Company had supply commitments on printer assemblies that totaled $40,634 and $50,663, respectively.

Certain of the Company’s acquisitions contain earnout and deferred payment provisions under which the sellers of the acquired businesses can earn additional amounts. The total liability recorded for these earnouts and deferred payments at June 30, 2016 and December 31, 2015 was $9,468 and $9,832, respectively.

Put Options

The minority interest shareholders of a certain subsidiary have the right in certain circumstances to require the Company to acquire either a portion of or all of the remaining ownership interests held by them. The owners’ ability to exercise any such “put option” right is subject to the satisfaction of certain conditions, including conditions requiring notice in advance of exercise. In addition, these rights cannot be exercised prior to a specified exercise date. The exercise of these rights at their earliest contractual date would result in obligations of the Company to fund the related amounts in 2019.

Management estimates, assuming that the subsidiary owned by the Company at June 30, 2016, performs over the relevant future periods at its forecasted earnings levels, that these rights, if exercised, could require the Company, in future periods, to pay approximately $8,872 to the owners of such put rights that require the Company to acquire such

ownership interests in the relevant subsidiary. This amount has been recorded as redeemable noncontrolling interests on the balance sheet as of June 30, 2016 and December 31, 2015. The ultimate amount payable relating to this transaction will vary because it is dependent on the future results of operations of the subject business.

Litigation

Securities and Derivative Litigation

The Company and certain of its 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 District of South Carolina. The consolidated action is styled KBC Asset Management NV v. 3D Systems Corporation, et al., Case No. 0:15-cv-02393-MGL. The Amended Consolidated Complaint (the “Complaint”), which was filed on December 9, 2015, alleges that defendants violated the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Rule 10b-5 promulgated thereunder by making false and misleading statements and omissions and that the former officers are control persons under Section 20(a) of the Exchange Act. The Complaint was filed on behalf of stockholders who purchased shares of the Company’s common stock between October 29, 2013, and May 5, 2015 and seeks monetary damages on behalf of the purported class. Defendants filed a motion to dismiss the Complaint in its entirety on January 14, 2016, which was denied by Memorandum Opinion and Order dated July 25, 2016.

Six related derivative complaints have been filed by purported Company stockholders against certain of the Company's former executive officers and members of its Board of Directors. The Company is named as a nominal defendant in all six actions. The derivatives complaints are styled as follows: (1) Steyn v. Reichental, et al., Case No. 2015-CP-46-2225, filed on July 27, 2015 in the Court of Common Pleas for the 16th Judicial Circuit, County of York, South Carolina; (2) Piguing v. Reichental, et al., Case No. 2015-CP-46-2396, filed on August 7, 2015 in the Court of Common Pleas for the 16th Judicial Circuit, County of York, South Carolina; (3) Booth v. Reichental, et al., Case No. 15-692-RGA, filed on August 6, 2015 in the United States District Court for the District of Delaware ("Booth"); (4) Nally v. Reichental, et al., Case No. 15-cv-03756-MGL, filed on September 18, 2015 in the United States District Court for the District of South Carolina; (5) Gee v. Hull, et al., Case No. BC-610319, filed on February 17, 2016 in the Superior Court for the State of California, County of Los Angeles; and (6) Foster v. Reichental, et al., Case No. 0:16-cv-01016-MGL, filed on April 1, 2016 in the United States District Court for the District of South Carolina.

The derivative complaints allege claims for breach of fiduciary duty, abuse of control, gross mismanagement, waste of corporate assets and unjust enrichment and seek, among other things, monetary damages and certain corporate governance actions.

All of the derivative complaints have been stayed until the earlier of the close of discovery or the deadline for appealing a dismissal in the KBC Asset Management NV securities class action.

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

Ronald Barranco and Print3D Corporation v. 3D Systems Corporation, et. al.

On August 23, 2013, Ronald Barranco, a former Company employee, filed two lawsuits against the Company and certain officers in the United States District Court for the District of Hawaii. The first lawsuit ("Barranco I") is captioned Ronald Barranco and Print3D Corporation v. 3D Systems Corporation, 3D Systems, Inc., and Damon Gregoire, Case No. CV 13-411 LEK RLP, and alleges seven causes of action relating to the Company's acquisition of Print3D Corporation (of which Mr. Barranco was a 50% shareholder) and the subsequent employment of Mr. Barranco by the Company. The second lawsuit ("Barranco II") is captioned Ronald Barranco v. 3D Systems Corporation, 3D Systems, Inc., Abraham Reichental, and Damon Gregoire, Case No. CV 13-412 LEK RLP, and alleges the same seven causes of action relating to the Company's acquisition of certain website domains from Mr. Barranco and the subsequent employment of Mr. Barranco by the Company. Both Barranco I and Barranco II allege the Company breached certain purchase agreements in order to avoid paying Mr. Barranco additional monies pursuant to royalty and earn out provisions in the agreements. The Company and its officers timely filed responsive pleadings on October 22, 2013 seeking, inter alia, to dismiss Barranco I due to a mandatory arbitration agreement and for lack of personal jurisdiction and to dismiss Barranco II for lack of personal jurisdiction.

With regard to Barranco I, the Hawaii district court, on February 28, 2014, denied the Company's motion to dismiss and its motion to transfer venue to South Carolina for the convenience of the parties. However, the Hawaii court recognized that the plaintiff's claims are all subject to mandatory and binding arbitration in Charlotte, North Carolina. Because the Hawaii court was without authority to compel arbitration outside of Hawaii, the court ordered that the case be transferred to the district court encompassing Charlotte (the United States District Court for the Western District of North Carolina) so that court could compel arbitration in Charlotte. On April 17, 2014, Barranco I was transferred in to the Western District of North Carolina. Plaintiff filed a demand for arbitration on October 29, 2014. On December 9, 2014, the Company filed its answer to plaintiff's demand for arbitration. On February 2, 2015, plaintiff filed an amended demand that removed Mr. Gregoire as a defendant from the matter, and on February 4, 2015 the Company filed its amended answer. The parties selected an arbitrator and arbitration took place in June 2015 in Charlotte, North Carolina.

On September 28, 2015, the arbitrator issued a final award in favor of Mr. Barranco with respect to two alleged breaches of contract and implied covenants arising out of the contract. The arbitrator found that the Company did not commit fraud or make any negligent misrepresentations to Mr. Barranco. Pursuant to the award, the Company is to pay approximately $11,282, which includes alleged actual damages of $7,254, fees and expenses of $2,318 and prejudgment interest of $1,710. The Company disagrees with the single arbitrator's findings and conclusions and believes the arbitrator's decision exceeds his authority and disregards the applicable law. As an initial response, the Company filed a motion for modification on September 30, 2015, based on mathematical errors in the computation of damages and fees. On October 16, 2015, the arbitrator issued an order denying the Company's motion and sua sponte issuing a modified final award in favor of Mr. Barranco in the same above-referenced amounts, but making certain substantive changes to the award, which changes the Company believes were improper and outside the scope of his authority and the American Arbitration Association rules. On November 20, 2015, the Company filed a motion to vacate the arbitration award in the federal court in the Western District of North Carolina. Claimants also filed a motion to confirm the arbitration award. A hearing was held on the motions on June 29, 2016 in federal court in the Western District of North Carolina. The court requested supplemental briefing by the parties, which briefs were filed on July 11, 2016. Both motions are not fully briefed and pending before the court.

Notwithstanding the Company's right to appeal, given the arbitrator's decision, the Company recorded an $11,282 expense provision for this matter in the quarter ended September 30, 2015. The provision is subject to adjustment based on the ultimate outcome of the Company's appeal. If it is ultimately determined that money is owed following the full appellate process in federal court, the Company intends to fund any amounts to be paid from cash on hand. This amount has been classified as a long-term liability given the customary timeline of an appeals process. The Company will review this classification periodically.

With regard to Barranco II, the Hawaii district court, on March 17, 2014, denied the Company's motion to dismiss and its motion to transfer venue to South Carolina. However, the Hawaii court dismissed Count II in plaintiff's complaint alleging breach of the employment agreement. The Company filed an answer to the complaint in the Hawaii district court on March 31, 2014. On November 19, 2014, the Company filed a motion for summary judgment on all claims which was heard on January 20, 2015. On January 30, 2015, the court entered an order granting in part and denying in Part the Company's motion for summary judgment. The Order narrowed the plaintiff's claim for breach of contract and dismissed the plaintiff's claims for fraud and negligent misrepresentation. As a result, Messrs. Reichental and Gregoire were dismissed from the lawsuit. The case was tried to a jury in May 2016, and on May 27, 2016 the jury found that the Company was not liable for either breach of contract or breach of the implied covenant of good faith and fair dealing. Additionally, the jury found in favor of the Company on its counterclaim against Mr. Barranco and determined that Mr. Barranco violated his non-competition covenant with the Company. The Court is expected to order an accounting with respect to the counterclaim.

The Company is involved in various other legal matters incidental to its business. Although the Company cannot predict the results of litigation with certainty, the Company believes that the disposition of these legal matters will not have a material adverse effect on its consolidated results of operations or consolidated financial position.

Indemnification

In the normal course of business, the Company periodically enters into agreements to indemnify customers or suppliers against claims of intellectual property infringement made by third parties arising from the use of the Company's products. Historically, costs related to these indemnification provisions have not been significant, and the Company is unable to estimate the maximum potential impact of these indemnification provisions on its future results of operations.

To the extent permitted under Delaware law, the Company indemnifies its directors and officers for certain events or occurrences while the director or officer is, or was, serving at the Company's request in such capacity, subject to limited exceptions. The maximum potential amount of future payments the Company could be required to make under these indemnification obligations is unlimited; however, the Company has directors and officers insurance coverage that may enable the Company 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.

(14) Accumulated Other Comprehensive Loss

The changes in the balances of accumulated other comprehensive loss by component are as follows:

| (in thousands) | Foreign currency translation adjustment | Defined benefit pension plan | Total |
|---|---|---|---|
| Balance at December 31, 2015 | $ (37,675) | $ (1,873) | $ (39,548) |
| Other comprehensive income (loss) | 1,239 | 36 | 1,275 |
| Balance at June 30, 2016 | $ (36,436) | $ (1,837) | $ (38,273) |

The amounts presented above are included in other comprehensive income (loss) and are net of taxes. For additional information about foreign currency translation, see Note 6.

(15) Noncontrolling Interests

As of June 30, 2016, the Company owned approximately 95% of the capital and voting rights of Phenix Systems, a global provider of direct metal 3D printers. Phenix Systems was acquired on July 15, 2013.

As of June 30, 2016, the Company owned approximately 70% of the capital and voting rights of Robtec, a service bureau and distributor of 3D printing and scanning products. Robtec was acquired on November 25, 2014.

As of June 30, 2016, the Company owned approximately 65% of the capital and voting rights of Easyway, a service bureau and distributor of 3D printing and scanning products in China. Easyway was acquired on April 2, 2015.

(16) Subsequent Events

Effective July 1, 2016, the Board of Directors of the Company appointed Mr. John N. McMullen as the Company's Executive Vice President and Chief Financial Officer.

On July 26, 2016, the Board of Directors of the Company elected Mr. Vyomesh Joshi, the Company's President and Chief Executive Officer, as a director of the Company. Mr. Joshi will serve until the next annual meeting of the stockholders of the Company and until his successor has been elected and qualified or until his earlier death, resignation or removal.

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

This discussion should be read in conjunction with the unaudited condensed consolidated financial statements and the notes thereto included in Item 1 (the "Financial Statements") of this Quarterly Report on Form 10-Q ("Form 10-Q").

We are subject to a number of risks and uncertainties that may affect our future performance that are discussed in greater detail in the sections entitled "Forward-Looking Statements" and "Cautionary Statements and Risk Factors" at the end of this Item 2 and that are discussed or referred to in Item 1A of Part II of this Form 10-Q.

Business Overview

3D Systems Corporation ("3D Systems" or the "Company" or "we" or "us") is a holding company incorporated in Delaware in 1993 that operates through subsidiaries in the Americas, Europe and the Middle East (collectively referred to as "EMEA") and the Asia Pacific region ("APAC" or "Asia Pacific"). We market our products and services in those areas as well as in other parts of the world. We provide comprehensive 3D products and services, including 3D printers, print materials, on demand manufacturing services and digital design tools. Our precision healthcare capabilities include simulation, Virtual Surgical Planning ("VSP™"), and printing of medical and dental devices as well as patient-specific surgical instruments. Our products and services support advanced applications from the product design shop to the factory floor to the operating room. 3D Systems has a 30 year history of enabling professionals and companies to optimize their designs, transform their workflows, bring innovative products to market and drive new business models.

Recent Developments

In June 2016, our Board of Directors (the "Board") appointed Mr. John N. McMullen as the Company's Executive Vice President and Chief Financial Officer, effective July 1, 2016. Prior to joining the Company, Mr. McMullen served as Executive Vice President and Chief Financial Officer of Eastman Kodak Company since June 15, 2014. Prior to joining Kodak, Mr. McMullen worked at Hewlett Packard Company and its acquired companies, Compaq Computer and Digital Equipment Corporation, for 32 years. From 2007 to 2013, he served as Senior Vice President of Finance at HP, and from 2002 to 2007, Mr. McMullen served as Vice President of Finance and Chief Financial Officer of HP's Imaging and Printing Group.

Second Quarter Highlights

Total consolidated revenue for the quarter ended June 30, 2016 decreased by 7.3%, or $12.4 million, to $158.1 million, compared to $170.5 million for the quarter ended June 30, 2015. These results primarily reflect a decrease in products and services revenue, partially offset by an increase in materials revenue, as further discussed below.

As of June 30, 2016 and December 31, 2015, our backlog was $35.1 million and $38.4 million, respectively, compared to backlog of $38.8 million at June 30, 2015. Backlog is primarily dependent on timing of orders and customers' requested deliveries. As of June 30, 2016 and December 31, 2015, backlog included $9.2 million and $13.0 million of on demand parts manufacturing service orders, respectively, compared to $13.4 million at June 30, 2015.

Healthcare revenue includes sales of products, materials and services for health-related applications, including simulation, training and planning, and printing of surgical instruments and medical and dental devices. For the quarter ended June 30, 2016, healthcare revenue increased by 11.4%, to $38.8 million, and made up 24.5% of total revenue, compared to $34.8 million, or 20.4% of total revenue for the quarter ended June 30, 2015. The increase in healthcare revenue reflects increased materials and services sales in healthcare-related applications that were driven by customers increasing their investments and expanding their capabilities in precision healthcare.

Gross profit for the quarter ended June 30, 2016 decreased by 1.5%, or $1.2 million, to $80.4 million, compared to $81.6 million for the quarter ended June 30, 2015, reflecting lower revenue from products and services, partially offset by an increase in materials revenue.

Gross profit margin for the quarter ended June 30, 2016 was 50.9%, compared to 47.9% for the quarter ended June 30, 2015, reflecting an increase in products margins, partially offset by lower materials and services margins.

Operating expenses for the quarter ended June 30, 2016 decreased by 20.2%, to $84.1 million, compared to $105.5 million for the quarter ended June 30, 2015. These results primarily reflect lower amortization expense, in addition to lower research and development expenses, as further discussed below.

Our operating loss for the quarter ended June 30, 2016 was $3.7 million, compared to an operating loss of $23.8 million for the quarter ended June 30, 2015, reflecting lower operating expenses and improved gross profit margin, as further discussed below.

Our operating activities for the quarter ended June 30, 2016 generated $31.0 million of cash, which is discussed in further detail below. We used $9.4 million to fund our strategic investing activities for the quarter ended June 30, 2016. Financing activities for the quarter ended June 30, 2016 used $1.8 million of cash. In total, our unrestricted cash balance at June 30, 2016 was $176.2 million, compared to $155.6 million at December 31, 2015.

Results of Operations

Comparison of revenue by class

We earn revenues from the sale of products, materials and services. The products category includes 3D printers, healthcare simulators and digitizers and design tools including software products, scanners and haptic devices. The materials category includes a wide range of print materials to be used with our 3D printers, the majority of which are proprietary. The services category includes warranty and maintenance on 3D printers and simulators, software maintenance, on demand parts manufacturing services and healthcare services.

Due to the relatively high price of certain 3D printers and a corresponding lengthy selling cycle and relatively low unit volume of the higher priced professional printer sales in any particular period, a shift in the timing and concentration of orders and shipments from one period to another can affect reported revenue in any given period. Revenue reported in any particular period is also affected by timing of revenue recognition under rules prescribed by U.S. generally accepted accounting principles (“GAAP”).

In addition to changes in sales volumes, including the impact of revenue from acquisitions, there are two other primary drivers of changes in revenue from one period to another: the combined effect of changes in product mix and average selling prices, sometimes referred to as price and mix effects, and the impact of fluctuations in foreign currencies. As used in this Management’s Discussion and Analysis, the price and mix effects relate to changes in revenue that are not able to be specifically related to changes in unit volume.

Table 1 and Table 2 below set forth change in revenue by class for the quarter and six months ended June 30, 2016, respectively.

Table 1

| (Dollars in thousands) | Products | | Materials | | Services | | Totals | |
|---|---|---|---|---|---|---|---|---|
| Revenue – second quarter 2015 | $ 68,176 | 40.0 % | $ 36,401 | 21.3 % | $ 65,927 | 38.7 % | $ 170,504 | 100 % |
| Change in revenue: | | | | | | | | |
| Volume | (6,629) | (9.7) | 5,240 | 14.4 | (2,681) | (4.1) | (4,070) | (2.4) |
| Price/Mix | (7,121) | (10.4) | (1,324) | (3.6) | — | — | (8,445) | (5.0) |
| Foreign currency translation | (104) | (0.2) | 260 | 0.7 | (34) | (0.1) | 122 | 0.1 |
| Net change | (13,854) | (20.3) | 4,176 | 11.5 | (2,715) | (4.2) | (12,393) | (7.3) |
| Revenue – second quarter 2016 | $ 54,322 | 34.3 % | $ 40,577 | 25.7 % | $ 63,212 | 40.0 % | $ 158,111 | 100 % |

Table 2

| (Dollars in thousands) | Products | | Materials | | Services | | Totals | |
|---|---|---|---|---|---|---|---|---|
| Revenue – six months 2015 | $ 130,891 | 39.5 % | $ 73,508 | 22.2 % | $ 126,827 | 38.3 % | $ 331,226 | 100 % |
| Change in revenue: | | | | | | | | |
| Volume | (16,227) | (12.4) | 9,014 | 12.3 | (973) | (0.8) | (8,186) | (2.5) |
| Price/Mix | (7,432) | (5.7) | (3,417) | (4.6) | — | — | (10,849) | (3.3) |
| Foreign currency translation | (415) | (0.3) | (59) | (0.1) | (1,051) | (0.8) | (1,525) | (0.5) |
| Net change | (24,074) | (18.4) | 5,538 | 7.6 | (2,024) | (1.6) | (20,560) | (6.3) |
| Revenue – six months 2016 | $ 106,817 | 34.4 % | $ 79,046 | 25.4 % | $ 124,803 | 40.2 % | $ 310,666 | 100 % |

For the quarter and six months ended June 30, 2016, total consolidated revenue decreased by 7.3% and 6.2%, respectively, driven by lower products and services revenue, partially offset by higher materials revenue.

The decrease in products revenue for the quarter and six months ended June 30, 2016 was primarily driven by lower sales of 3D printers and the discontinuation of consumer products, combined with the unfavorable impact of mix.

For the quarter and six months ended June 30, 2016, software revenue included in the products category, including scanners and haptic devices, contributed $11.1 million and $20.9 million, respectively, compared to $12.7 and $21.6 million for the quarter and six months ended June 30, 2015, respectively.

The increase in materials revenue for the quarter and six months ended June 30, 2016 was primarily driven by increased demand for materials which was partially offset by the impact of lower printer sales, which typically include the sale of materials.

For the quarter ended June 30, 2016, sales of integrated materials increased by 13.3% to $31.9 million, or 78.5% of total materials revenue, compared to $28.1 million, or 77.2% for the quarter ended June 30, 2015. For the six months ended June 30, 2016, sales of integrated materials increased by 7.6% to $61.1 million, or 77.3% of total materials revenue, compared to $56.8 million, or 77.2% for the six months ended June 30, 2015.

The decrease in services revenue for the quarter and six months ended June 30, 2016 is driven by a decrease in on demand parts manufacturing services.

For the quarter ended June 30, 2016, services revenue from on demand parts manufacturing services decreased 20.2% to $27.1 million, compared to $33.9 million for quarter ended June 30, 2015. For the six months ended June 30, 2016, services revenue from on demand parts manufacturing services decreased 17.8% to $53.9 million, compared to $65.6 million for the six months ended June 30, 2015.

For the quarter and six months ended June 30, 2016, software revenue included in the services category contributed $10.9 million and $21.3 million of revenue, respectively, compared to $7.7 million and $15.4 million for the quarter and six months ended June 30, 2015, respectively.

Comparison of revenue by geographic region

Table 3 and Table 4 below set forth change in revenue by geographic area for the quarter and six months ended June 30, 2016, respectively.

Table 3

| (Dollars in thousands) | Americas | | EMEA | | Asia Pacific | | Total | |
|---|---|---|---|---|---|---|---|---|
| Revenue – second quarter 2015 | $ 90,396 | 53.0 % | $ 52,303 | 30.7 % | $ 27,805 | 16.3 % | $ 170,504 | 100 % |
| Change in revenue: | | | | | | | | |
| Volume | 1,579 | 1.7 | (3,654) | (7.0) | (1,995) | (7.2) | (4,070) | (2.4) |
| Price/Mix | (7,989) | (8.8) | (269) | (0.5) | (187) | (0.7) | (8,445) | (5.0) |
| Foreign currency translation | (385) | (0.4) | 374 | 0.7 | 133 | 0.5 | 122 | 0.1 |
| Net change | (6,795) | (7.5) | (3,549) | (6.8) | (2,049) | (7.4) | (12,393) | (7.3) |
| Revenue – second quarter 2016 | $ 83,601 | 52.9 % | $ 48,754 | 30.8 % | $ 25,756 | 16.3 % | $ 158,111 | 100 % |

Table 4

| (Dollars in thousands) | Americas | | EMEA | | Asia Pacific | | Total | |
|---|---|---|---|---|---|---|---|---|
| Revenue – six months 2015 | $ 176,658 | 53.3 % | $ 101,007 | 30.5 % | $ 53,561 | 16.2 % | $ 331,226 | 100 % |
| Change in revenue: | | | | | | | | |
| Volume | 1,925 | 1.1 | (3,642) | (3.6) | (6,469) | (12.1) | (8,186) | (2.5) |
| Price/Mix | (10,364) | (5.9) | (898) | (0.9) | 413 | 0.8 | (10,849) | (3.3) |
| Foreign currency translation | (1,128) | (0.6) | (282) | (0.3) | (115) | (0.2) | (1,525) | (0.5) |
| Net change | (9,567) | (5.4) | (4,822) | (4.8) | (6,171) | (11.5) | (20,560) | (6.3) |
| Revenue – six months 2016 | $ 167,091 | 53.8 % | $ 96,185 | 31.0 % | $ 47,390 | 15.2 % | $ 310,666 | 100 % |

The decrease in revenue in all geographic regions for the quarter and six months ended June 30, 2016, primarily reflects lower sales of 3D printers and on demand parts manufacturing services, partially offset by increased sales from materials, software and healthcare services.

For the quarter and six months ended June 30, 2016, revenue from operations outside the U.S., including Latin America, EMEA and Asia Pacific, was 51.7% and 50.7% of total revenue, respectively, compared to 47.0% and 46.7% for the quarter and six months ended June 30, 2015, respectively.

Gross profit and gross profit margins

Table 5 and Table 6 below set forth gross profit and gross profit margin for the quarters and six months ended June 30, 2016 and 2015, respectively.

Table 5

| | Quarter Ended June 30, | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | Change in Gross Profit | | Change in Gross Profit Margin | |
| (Dollars in thousands) | Gross Profit | Gross Profit Margin | Gross Profit | Gross Profit Margin | $ | % | Percentage Points | % |
| Products | $ 17,697 | 32.6 % | $ 18,943 | 27.8 % | $ (1,246) | (6.6) % | 4.8 | 17.3 % |
| Materials | 31,002 | 76.4 | 28,150 | 77.3 | 2,852 | 10.1 | (0.9) | (1.2) |
| Services | 31,712 | 50.2 | 34,534 | 52.4 | (2,822) | (8.2) | (2.2) | (4.2) |
| Total | $ 80,411 | 50.9 % | $ 81,627 | 47.9 % | $ (1,216) | (1.5) % | 3.0 | 6.3 % |

Table 6

| | Six Months Ended June 30, | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | Change in Gross Profit | | Change in Gross Profit Margin | |
| (Dollars in thousands) | Gross Profit | Gross Profit Margin | Gross Profit | Gross Profit Margin | $ | % | Percentage Points | % |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Products | $ 34,502 | 32.3 % | $ 40,707 | 31.1 % | $ (6,205) | (15.2)% | 1.2 | 3.9 % |
| Materials | 61,000 | 77.2 | 55,732 | 75.8 | 5,268 | 9.5 | 1.4 | 1.8 |
| Services | 62,422 | 50.0 | 64,172 | 50.6 | (1,750) | (2.7) | (0.6) | (1.2) |
| Total | $ 157,924 | 50.8 % | $ 160,611 | 48.5 % | $ (2,687) | (1.7) % | 2.3 | 4.7 % |

Total consolidated gross profit for the quarter and six months ended June 30, 2016 decreased, primarily driven by lower products and services revenue.

Gross profit margin for products increased for the quarter and six months ended June 30, 2016, primarily due to the benefit from the discontinuation of consumer products, coupled with sales mix, partially offset by facility consolidation expenses in the second quarter.

Gross profit margin for materials decreased for the quarter ended June 30, 2016, reflecting the unfavorable impact of mix, partially offset by improved supply chain efficiencies, while gross profit margin for materials increased for the six months ended June 30, 2016.

Gross profit margin for services decreased for the quarter and six months ended June 30, 2016, primarily driven by higher printer service costs.

For the quarter and six months ended June 30, 2016, on demand parts manufacturing services gross profit margin was 46.9% and 44.4%, respectively, compared to 45.3% and 44.9% for the quarter and six months ended June 30, 2015, respectively.

Operating expenses

Table 7 and Table 8 below set forth components of operating expenses for the quarters and six months ended June 30, 2016 and 2015, respectively.

Table 7

| | Quarter Ended June 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | Change | |
| (Dollars in thousands) | Amount | % Revenue | Amount | % Revenue | $ | % |
| Selling, general and administrative expenses | $ 63,228 | 40.0 % | $ 79,738 | 46.8 % | $ (16,510) | (20.7)% |
| Research and development expenses | 20,900 | 13.2 | 25,731 | 15.1 | (4,831) | (18.8) |
| Total operating expenses | $ 84,128 | 53.2 % | $ 105,469 | 61.9 % | $ (21,341) | (20.2)% |

Table 8

| | Six Months Ended June 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | Change | |
| (Dollars in thousands) | Amount | % Revenue | Amount | % Revenue | $ | % |
| Selling, general and administrative expenses | $ 137,195 | 44.2 % | $ 154,030 | 46.5 % | $ (16,835) | (10.9)% |
| Research and development expenses | 41,205 | 13.3 | 47,947 | 14.5 | (6,742) | (14.1) |
| Total operating expenses | $ 178,400 | 57.4 % | $ 201,977 | 61.0 % | $ (23,577) | (11.7)% |

Total operating expenses decreased for the quarter and six months ended June 30, 2016, reflecting lower selling, general and administrative expenses and lower research and development expenses, as discussed below.

Second quarter

For the quarter ended June 30, 2016, selling, general and administrative expenses decreased primarily due to an $8.6 million decrease in amortization expense, a $2.8 million decrease in compensation costs, primarily as a result of the timing of stock based compensation expense, a $2.0 million decrease in bad debt expense and a $1.4 million decrease in marketing costs.

For the quarter ended June 30, 2016, research and development expenses decreased primarily due to a $1.9 million decrease in materials purchases, a $1.7 million decrease in outside services associated with product development and a $1.3 million decrease in compensation costs.

Six months

For the six months ended June 30, 2016, selling, general and administrative expenses decreased primarily due to a $14.3 million decrease in amortization expense and a $1.7 million decrease in marketing costs.

For the six months ended June 30, 2016, research and development expenses decreased primarily due to a $2.8 million decrease in outside services associated with product development and a $2.5 million decrease in materials purchases.

Loss from operations

Table 9 below sets forth operating loss by geographic area for the quarters and six months ended June 30, 2016 and 2015, respectively.

Table 9

| | Quarter Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2016 | 2015 | 2016 | 2015 |
| Income (loss) from operations | | | | |
| Americas | $ (4,747) | $ (29,186) | $ (18,933) | $ (52,292) |
| Germany | 3,960 | (548) | 4,971 | 1,292 |
| Other EMEA | (8,064) | (938) | (16,182) | (2,273) |
| Asia Pacific | 5,921 | 7,342 | 11,103 | 12,926 |
| Subtotal | (2,930) | (23,330) | (19,041) | (40,347) |
| Intercompany elimination | (787) | (512) | (1,435) | (1,019) |
| Loss from operations | $ (3,717) | $ (23,842) | $ (20,476) | $ (41,366) |

The improvement in operating loss for the quarter and six months ended June 30, 2016 was due to lower operating expenses, which was partially offset by lower revenue and gross profit. See “Gross profit and gross profit margins” and “Operating expenses” above.

With respect to the Americas, for the quarter and six months ended June 30, 2016 and 2015, the changes in operating income (loss) by geographic area reflected the same factors relating to our consolidated operating income (loss) that are discussed above.

The changes in operating income (loss) in our operations outside the Americas for the quarter and six months ended June 30, 2016 and 2015 resulted primarily from transfer pricing, changes in sales volume and foreign currency translation.

Interest and other (income) expense, net

Table 10 below sets forth components of interest and other (income) expense, net, for the quarters and six months ended June 30, 2016 and 2015, respectively.

Table 10

| | Quarter Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2016 | 2015 | 2016 | 2015 |
| Interest and other expense, net: | | | | |
| Interest income | $ (231) | $ (155) | $ (447) | $ (242) |
| Foreign exchange (gain) loss | 55 | (428) | (1,463) | 1,767 |
| Interest expense | 361 | 692 | 781 | 933 |
| Other (income) expense, net | (393) | (20) | 795 | 198 |
| Total interest and other (income) expense, net | $ (208) | $ 89 | $ (334) | $ 2,656 |

Benefit and provision for income taxes

For the quarter and six months ended June 30, 2016, we recorded a $1.7 million and $2.9 million provision for income taxes, respectively, compared to a $10.1 million and $17.0 million benefit for the quarter and six months ended June 30, 2015. The difference in the tax expense was primarily driven by the valuation allowance that was recorded in the fourth quarter of 2015 in the U.S. and certain foreign jurisdictions.

Net loss

Table 11 and Table 12 below set forth components of net loss attributable to 3D Systems for the quarters and six months ended June 30, 2016 and 2015, respectively.

Table 11

| | Quarter Ended June 30, | | |
|---|---|---|---|
| (Dollars in thousands) | 2016 | 2015 | Change |
| Operating loss | $ (3,717) | $ (23,842) | $ 20,125 |
| Less: | | | |
| Interest and other (income) expense, net | (208) | 89 | (297) |
| Provision (benefit) for income taxes | 1,700 | (10,096) | 11,796 |
| Net loss attributable to noncontrolling interests | (561) | (139) | (422) |
| Net loss attributable to 3D Systems | $ (4,648) | $ (13,696) | $ 9,048 |
| | | | |
| Weighted average shares, basic and diluted | 111,166 | 112,017 | |
| Net loss per share, basic and diluted | $ (0.04) | $ (0.12) | |

Table 12

| | Six Months Ended June 30, | | |
|---|---|---|---|
| (Dollars in thousands) | 2016 | 2015 | Change |
| Operating loss | $ (20,476) | $ (41,366) | $ 20,890 |
| Less: | | | |
| Interest and other (income) expense, net | (334) | 2,656 | (2,990) |
| Provision (benefit) for income taxes | 2,879 | (17,039) | 19,918 |
| Net loss attributable to noncontrolling interests | (585) | (106) | (479) |
| Net loss attributable to 3D Systems | $ (22,436) | $ (26,877) | $ 4,441 |
| | | | |
| Weighted average shares, basic and diluted | 111,288 | 111,875 | |
| Net loss per share, basic and diluted | $ (0.20) | $ (0.24) | |

For further discussion of income taxes, see “Benefit and provision for income taxes” above and Note 11.

Other Financial Information

In addition to our results determined under GAAP discussed above, management believes non-GAAP financial measures, such as adjusted net income and earnings per share, are useful to investors in evaluating our operating performance and facilitate a better understanding of the impact that several strategic acquisitions had on our financial results.

These non-GAAP financial measures have not been prepared in accordance with GAAP, may be different from non-GAAP financial measures used by other companies and are subject to inherent limitations as they reflect the exercise of judgments by our management about which costs, expenses and other items are excluded from our GAAP financial statements in determining our non-GAAP financial measures. We have sought to compensate for these limitations by analyzing current and expected future results on a GAAP basis as well as a non-GAAP basis and also by providing GAAP financial statements as required in our public disclosures as well as reconciliations of our non-GAAP financial measures of adjusted net income and adjusted earnings per share to our GAAP financial measures of net income and earnings per share.

Our non-GAAP financial measures are not meant to be considered in isolation or as a substitute for the directly comparable financial measures prepared in accordance with GAAP. These non-GAAP financial measures are meant to supplement, and be viewed in conjunction with, GAAP financial measures. We urge investors to review the reconciliation of our non-GAAP financial measures to the comparable GAAP financial measures included below, and not to rely on any single financial measure to evaluate our business. Our non-GAAP financial measures, which adjust net income and earnings per share, are adjusted for the following:

- Amortization of intangibles. We exclude the tax-effected amortization of intangible assets from our cost of sales and operating expenses.
- Acquisition and severance expenses. We exclude the tax-effected charges associated with the acquisition of businesses and the related severance expenses from our operating expenses.

· Non-cash stock-based compensation expenses. We exclude the tax-effected stock-based compensation expenses from operating expenses primarily because they are non-cash.

Reconciliation of GAAP Net Loss to Non-GAAP Financial Measures

Table 13

| | Quarter Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| (in thousands, except per share amounts) | 2016 | 2015 | 2016 | 2015 |
| GAAP net loss attributable to 3D Systems | $ (4,648) | $ (13,696) | $ (22,436) | (26,877) |
| Cost of sales adjustments: | | | | |
| Amortization of intangibles | 81 | 76 | 165 | 151 |
| Operating expense adjustments: | | | | |
| Amortization of intangibles | 8,779 | 17,405 | 17,514 | 31,846 |
| Acquisition and severance expenses | 1,771 | 1,936 | 2,710 | 5,176 |
| Non-cash stock-based compensation expense | 7,226 | 9,721 | 18,893 | 20,050 |
| Tax effect (a) | — | (12,293) | 1,519 | (21,998) |
| Non-GAAP net income | $ 13,209 | $ 3,149 | $ 18,365 | $ 8,348 |
| | | | | |
| Non-GAAP basic and diluted earnings per share | $ 0.12 | $ 0.03 | $ 0.17 | $ 0.07 |

(a) Tax effect for the quarter ended March 31, 2016 and earlier periods was calculated quarterly, based on the Company's overall tax rate for each quarter. Tax effect for the quarter ended June 30, 2016 was calculated based on the Company's quarterly U.S. tax rate, which was 0% as a result of the valuation allowance that was recorded in the fourth quarter of 2015, in connection with GAAP net losses.

Financial Condition and Liquidity

Table 14

| (Dollars in thousands) | June 30, 2016 | December 31, 2015 | Change $ | Change % |
|---|---|---|---|---|
| Cash and cash equivalents | $ 176,248 | $ 155,643 | $ 20,605 | 13.2 % |
| Accounts receivable: | | | | |
| Gross accounts receivable | 141,246 | 171,545 | (30,299) | (17.7) |
| Allowance for doubtful accounts | (16,151) | (14,139) | (2,012) | 14.2 |
| Accounts receivable, net | 125,095 | 157,406 | (32,311) | (20.5) |
| Inventories: | | | | |
| Raw materials | 56,492 | 59,444 | (2,952) | (5.0) |
| Work in process | 7,384 | 4,067 | 3,317 | 81.6 |
| Finished goods | 81,562 | 70,591 | 10,971 | 15.5 |
| Inventories, gross | 145,438 | 134,102 | 11,336 | 8.5 |
| Inventory reserves | (22,281) | (28,225) | 5,944 | (21.1) |
| Inventories, net | 123,157 | 105,877 | 17,280 | 16.3 |
| Prepaid expenses and other current assets | 15,997 | 13,541 | 2,456 | 18.1 |
| Total current assets | $ 440,497 | $ 432,467 | $ 8,030 | 1.9 % |
| | | | | |
| Current portion of capitalized lease obligations | 564 | 529 | 35 | 6.6 |
| Accounts payable | 42,356 | 46,869 | (4,513) | (9.6) |
| Accrued and other liabilities | 50,756 | 54,699 | (3,943) | (7.2) |
| Customer deposits | 6,005 | 8,229 | (2,224) | (27.0) |
| Deferred revenue | 43,706 | 35,145 | 8,561 | 24.4 |
| Total current liabilities | $ 143,387 | $ 145,471 | $ (2,084) | (1.4) % |
| | | | | |
| Working capital | $ 297,110 | $ 286,996 | $ 10,114 | 3.5 % |
| | | | | |
| Stockholders' equity attributable to 3D Systems | $ 652,334 | $ 655,909 | $ (3,575) | (0.5) % |

We believe our existing cash and cash equivalents will be sufficient to satisfy our working capital needs, capital expenditures, outstanding commitments and other liquidity requirements associated with our existing operations in the foreseeable future, or to consummate significant acquisitions of other businesses, assets, products or technologies. However, it is possible that, in the future, we may need to raise additional funds to finance our activities. If needed, we may be able to raise such funds by issuing equity or debt securities to the public or selected investors, or by borrowing from financial institutions, selling assets or restructuring debt. There is no assurance, however, that funds will be available from these sources in the amounts or on terms acceptable to us. Cash equivalents comprise 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 limit exposure to any one issuer depending upon credit quality. See Cash flow, Credit facilities and Capitalized lease obligations below.

If we need to raise additional funds in the future to fund our activities, or for other reasons, and raise additional funds by issuing equity or convertible debt securities, the ownership percentages of existing shareholders would be diluted. In addition, the equity or debt securities that we may issue may have rights, preferences or privileges senior to those of our common stock.

Cash and cash equivalents at June 30, 2016 included $69.1 million of cash held outside the U.S., compared to $59.0 million at December 31, 2015. Cash held outside the U.S. is used in our foreign operations for working capital purposes and is considered to be permanently invested; consequently, we have not provided for any taxes on repatriation.

Days’ sales outstanding was 72 days at June 30, 2016 compared to 79 days at December 31, 2015 and accounts receivable more than 90 days past due decreased to 13.9% of gross receivables, from 17.6% at December 31, 2015. We review specific receivables quarterly to determine the appropriate reserve for accounts receivable based on the change in days’ sales outstanding.

The majority of our inventory consists of finished goods, including products, materials and service parts. Inventory also consists of raw materials and spare parts for the in-house assembly and support service products. We outsource the assembly of certain 3D printers; therefore, we generally do not hold most parts for the assembly of these printers in inventory.

The changes that make up the other components of working capital not discussed above arose in 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

Table 15 below sets forth components of cash flow for the six months ended June 30, 2016 and 2015, respectively.

Table 15

| | Six Months Ended June 30, | |
|---|---|---|
| | 2016 | 2015 |
| (Dollars in thousands) | | |
| Cash provided by (used in) operating activities | $ 31,040 | $ (6,353) |
| Cash used in investing activities | (9,387) | (106,305) |
| Cash provided by (used in) financing activities | (1,831) | 963 |
| Effect of exchange rate changes on cash | 783 | (1,950) |
| Net increase (decrease) in cash and cash equivalents | $ 20,605 | $ (113,645) |

Further discussion of changes in operating, investing and financing cash flow activities is provided below.

Cash flow from operating activities

Table 16

| | Six Months Ended June 30, | |
|---|---|---|
| | 2016 | 2015 |
| (Dollars in thousands) | | |
| Net loss | $ (23,021) | $ (26,983) |
| Non-cash charges | 52,513 | 53,018 |
| Changes in working capital and all other operating assets | 1,548 | (32,388) |
| Net cash provided by (used in) operating activities | $ 31,040 | $ (6,353) |

For further discussion of net loss, see “Net loss” above.

Non-cash charges primarily consist of depreciation, amortization and stock-based compensation, partially offset by the benefit of deferred income taxes.

For further discussion of changes in working capital, see “Financial Condition and Liquidity” above. 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 from investing activities

Table 17

| | Six Months Ended June 30, | |
|---|---|---|
| | 2016 | 2015 |
| (Dollars in thousands) | | |
| Cash paid for acquisitions, net of cash assumed | $ — | $ (91,799) |
| Purchases of property and equipment | (7,597) | (12,196) |
| Other investing activities | (1,000) | (1,750) |
| Additions to license and patent costs | (790) | (560) |
| Net cash used in investing activities | $ (9,387) | $ (106,305) |

Purchases of property and equipment primarily consisted of expenditures for leasehold improvements, including expanding facilities and investing in infrastructure, equipment to support our on demand parts manufacturing service and printers associated with new product development efforts. Other investing activities consist of minority investments of less than 20% made through 3D Ventures, our venture investment initiative, in promising enterprises that we believe will benefit from or be powered by our technologies. We made no acquisitions during the quarter or six months ended June 30, 2016.

Cash flow from financing activities

Table 18

| | Six Months Ended June 30, | |
|---|---|---|
| | 2016 | 2015 |
| (Dollars in thousands) | | |
| Tax benefits from share-based payment arrangements | $ — | $ 547 |
| Proceeds (repurchase) — restricted stock | (1,307) | 942 |
| Repayment of capital lease obligations | (524) | (526) |
| Net cash provided by (used in) financing activities | $ (1,831) | $ 963 |

Contractual commitments and off-balance sheet arrangements

Credit facilities

In October 2014, we entered into a $150.0 million five-year revolving, unsecured credit facility. The agreement provides for advances in the initial aggregate principal amount of up to $150.0 million. Subject to certain terms and conditions contained in the agreement, we may, at our option, request an increase in the aggregate principal amount available under the credit facility by an additional $75.0 million. As of June 30, 2016 and December 31, 2015, there was no outstanding balance on the credit facility. Based on current financial covenant limitations at June 30, 2016, availability on the credit facility would be approximately $150.0 million. Future results may impact availability. See Note 7 for additional information related to the credit facility.

Capitalized lease obligations

Our capitalized lease obligations include a  lease agreement that we entered into during 2006 with respect to our Rock Hill, SC facility, in addition to other lease agreements assumed through acquisitions.  In accordance with ASC 840, “Leases,” we are considered an owner of the properties, therefore, we have recorded the amounts shown in the table below as “building” in our consolidated balance sheet with a corresponding capitalized lease obligation in the liabilities section of the consolidated balance sheet.

Table 19 below sets forth outstanding capitalized lease obligations carrying values as of June 30, 2016 and December 31, 2015, respectively.

Table 19

| (Dollars in thousands) | June 30, 2015 | December 31, 2015 |
|---|---|---|
| Capitalized lease obligations: | | |
| Capitalized lease obligations — current | $ 564 | $ 529 |
| Capitalized lease obligations — long term | 7,917 | 8,187 |
| Total capitalized lease obligations | $ 8,481 | $ 8,716 |

Other contractual arrangements

Certain of our acquisition purchase agreements contain earnout and deferred purchase payment provisions under which the sellers of the acquired businesses can earn additional amounts. The total amount of liabilities recorded for these earnouts and deferred payments is $9.5 million and $9.8 million at June 30, 2016 and December 31, 2015, respectively.

As of June 30, 2016, we have supply commitments related to printer assemblies that total $40.6 million compared to $50.7 million at December 31, 2015.

The minority interest shareholders of a certain subsidiary have the right to require us to acquire either a portion of or all ownership interest under certain circumstances pursuant to a contractual arrangement, and we have a similar call option under the same contractual terms. The amount of consideration under the put and call rights is not a fixed amount, but rather is dependent upon various valuation formulas and on future events, such as revenue and gross margin performance of the subsidiary through the date of exercise, as described in Note 13. Management estimates, assuming that the subsidiary owned by us at June 30, 2016, performs over the relevant future periods at its forecasted earnings levels, that these rights, if exercised, could require us, in future periods, to pay a maximum of approximately $8.9 million to the owners of such put rights that require the Company to acquire such ownership interests in the relevant subsidiary. This amount has been recorded as redeemable noncontrolling interests on the balance sheet at June 30, 2016 and December 31, 2015.

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.

Financial instruments

We conduct business in various countries using both the functional currencies of those countries and other currencies to effect cross border transactions. As a result, we are subject to the risk that fluctuations in foreign exchange rates between the dates that those transactions are entered into and their respective settlement dates will result in a foreign exchange gain or loss. When practicable, we endeavor to match assets and liabilities in the same currency on our balance sheet and those of our subsidiaries in order to reduce these risks. We also, when we consider it to be appropriate, enter into foreign currency contracts to hedge exposures arising from those transactions. There were no foreign exchange contracts at June 30, 2016 or December 31, 2015.

We do not hedge for trading or speculative purposes, and our foreign currency contracts are generally short-term in nature, typically maturing in 90 days or less. We have elected not to prepare and maintain the documentation to qualify for hedge accounting treatment under ASC 815, “Derivatives and Hedging,” and therefore, we recognize all gains and losses (realized or unrealized) in interest and other expense, net in our Consolidated Statements of Operations and Other Comprehensive Income (Loss).

Changes in the fair value of derivatives are recorded in interest and other expense, net, in our unaudited condensed consolidated statements of operations and comprehensive income (loss). Depending on their fair value at the end of the reporting period, derivatives are recorded either in prepaid and other current assets or in accrued liabilities in our unaudited condensed consolidated balance sheets.

Recent Accounting Pronouncements

For information with respect to recent accounting pronouncements and the impact of these pronouncements on our unaudited condensed consolidated financial statements, see Note 1.

Critical Accounting Policies and Significant Estimates

For a discussion of our critical accounting policies and estimates, refer to “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies and Significant Estimates” in our Annual Report on Form 10-K for the year ended December 31, 2015 (“Form 10-K”).

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,” “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 indicated by the forward-looking statements. These factors include without limitation:

- competitive industry pressures;
- our ability to deliver products that meet changing technology and customer needs;
- our ability to identify future, strategic acquisitions and to integrate such acquisitions into our business without disruption;
- 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 generate net cash flow from operations;
- our ability to obtain additional financing on acceptable terms;
- impact of global economic, political and social conditions and financial markets on our business;
- 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;

- product quality problems that 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 exposure to product liability claims and other claims and legal proceedings;
- disruption in our management information systems for inventory management, distribution, and other key functions;
- compliance with U.S. and other anti-corruption laws, trade controls, economic sanctions, and similar laws and regulations;
- changes in, or interpretation of, tax rules and regulations;
- compliance with, and related costs concerning, environmental, health and safety laws and regulations;
- compliance with, and related expenses and challenges concerning, conflict-free minerals 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 “Risk Factors” in Part I, Item 1A of our Form 10-K filed with the SEC.

Certain of these and other factors are discussed in more detail in “Item 1A. Risk Factors” of our Form 10-K. Readers are cautioned not to place undue reliance on these 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 review 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. 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, 2015, refer to Item 7A, “Quantitative and Qualitative Disclosures about Market Risk,” in our Form 10-K. During the quarter and six months ended June 30, 2016, there were no material changes or developments that would materially alter the market risk assessment performed as of December 31, 2015.

Item 4. Controls and Procedures.

Evaluation of disclosure controls and procedures

As of June 30, 2016, 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 were 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, including an evaluation of the rules referred to above in this Item 4, management has concluded that our disclosure controls and procedures were effective as of June 30, 2016 to provide reasonable assurance that the information required to be disclosed in the reports 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 management, including our Chief Executive Officer and Chief Financial Officer, in a manner to allow timely decisions regarding required disclosures.

Changes in Internal Controls over Financial Reporting

There were no material changes in our internal controls over financial reporting during the period covered by this Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings.

The information set forth in Note 13 to the Financial Statements in Part I, Item 1 of this Form 10-Q is incorporated herein by reference.

Item 1A. Risk Factors.

There have been no material changes from the risk factors as previously disclosed in our Form 10-K.

Item 6. Exhibits.

3.1 Certificate of Incorporation of Registrant. (Incorporated by reference to Exhibit 3.1 to 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 Designation of Rights, Preferences and Privileges of Preferred Stock. (Incorporated by reference to Exhibit 2 to Registrant's Registration Statement on Form 8-A filed on January 8, 1996.)

3.4 Certificate of Designation of the Series B Convertible Preferred Stock, filed with the Secretary of State of Delaware on May 2, 2003. (Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed on May 7, 2003.)

3.5 Certificate of Elimination of Series A Preferred Stock filed with the Secretary of State of Delaware on March 4, 2004. (Incorporated by reference to Exhibit 3.6 of Registrant's Annual Report on Form 10-K for the year ended December 31, 2003, filed on March 15, 2004.)

3.6 Certificate of Elimination of Series B Preferred Stock filed with the Secretary of State of Delaware on September 9, 2006. (Incorporated by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K, filed on September 9, 2006.)

3.7 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 of the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2004, filed on August 5, 2004.)

3.8 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 of the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2005, filed on August 1, 2005.)

3.9 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 Form 8-K filed on October 7, 2011.)

3.10 Certificate of Designations, Preferences and Rights of Series A Preferred Stock, filed with the Secretary of State of Delaware on December 9, 2008. (Incorporated by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K, filed on December 9, 2008.)

3. 11 Certificate of Elimination of Series A Preferred Stock, filed with the Secretary of State of Delaware on November 14, 2013. (Incorporated by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K, filed on November 15, 2013.)

3.12 Amended and Restated By-Laws of 3D Systems Corporation (as adopted February 16, 2015). (Incorporated by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K filed on February 17, 2015.)

3.13 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 of the Registrant's Current Report on Form 8-K, filed on May 22, 2013.)

10.1* Employment Agreement, dated June 15, 2016, between 3D Systems Corporation and John N. McMullen (Incorporated by reference to Exhibit 10.1 of the Registrant's current report on Form 8-K, filed June 16, 2016.)

10.2* Employment Agreement, dated June 15, 2016, between 3D Systems Corporation and Andrew M. Johnson (Incorporated by reference to Exhibit 10.2 of the Registrant's current report on Form 8-K, filed June 16, 2016.)

10.3* First Amendment, dated June 15, 2016, to Restricted Stock Purchase Agreement dated February 4, 2014, between 3D Systems Corporation and Andrew M. Johnson (Incorporated by reference to Exhibit 10.3 of the Registrant's current report on Form 8-K filed June 16, 2016).

10.4* First Amendment, dated June 15, 2016, to Restricted Stock Purchase Agreement dated February 3, 2015, between 3D Systems Corporation and Andrew M. Johnson (Incorporated by reference to Exhibit 10.4 of the Registrant's current report on Form 8-K filed June 16, 2016).

10.5* First Amendment, dated June 15, 2016, to Restricted Stock Award Agreement dated November 13, 2015, between 3D Systems Corporation and Andrew M. Johnson (Incorporated by reference to Exhibit 10.5 of the Registrant's current report on Form 8-K filed June 16, 2016).

10.6* Severance Agreement, dated June 15, 2016, between 3D Systems Corporation and Mark W. Wright (Incorporated by reference to Exhibit 10.1 of the Registrant's current report on Form 8-K/A filed June 16, 2016).

10.7* First Amendment, dated June 15, 2016, to the Restricted Stock Purchase Agreement, dated October 27, 2014, between 3D Systems Corporation and Mark W. Wright (Incorporated by reference to Exhibit 10.2 of the Registrant's current report on Form 8-K/A filed June 16, 2016).

10.8* First Amendment, dated June 15, 2016, to the Restricted Stock Purchase Agreement, dated November 13, 2015, between 3D Systems Corporation and Mark W. Wright (Incorporated by reference to Exhibit 10.3 of the Registrant's current report on Form 8-K/A filed June 16, 2016).

| | |
|---|---|
| 10.9* | Consulting Agreement, dated June 15, 2016, between 3D Systems Corporation and Mark W. Wright (Incorporated by reference to Exhibit 10.4 of the Registrant's current report on Form 8-K/A filed June 16, 2016). |
| 10.10* | Severance Agreement, dated June 15, 2016, between 3D Systems Corporation and Cathy L. Lewis (Incorporated by reference to Exhibit 10.5 of the Registrant's current report on Form 8-K/A filed June 16, 2016). |
| 10.11* | First Amendment, dated June 15, 2016, to the Restricted Stock Purchase Agreement, dated November 18, 2013, between 3D Systems Corporation and Cathy L. Lewis (Incorporated by reference to Exhibit 10.6 of the Registrant's current report on Form 8-K/A filed June 16, 2016). |
| 10.12* | First Amendment, dated June 15, 2016, to the Restricted Stock Purchase Agreement, dated November 17, 2014, between 3D Systems Corporation and Cathy L. Lewis (Incorporated by reference to Exhibit 10.7 of the Registrant's current report on Form 8-K/A filed June 16, 2016). |
| 10.13* | First Amendment, dated June 15, 2016, to the Restricted Stock Purchase Agreement, dated November 13, 2015, between 3D Systems Corporation and Cathy L. Lewis (Incorporated by reference to Exhibit 10.8 of the Registrant's current report on Form 8-K/A filed June 16, 2016). |
| 10.14* | Employment Agreement dated July 1, 2016, between 3D Systems Corporation and David R. Styka (Incorporated by reference to Exhibit 10.1 of the Registrant's current report on Form 8-K, filed July 5, 2016.) |
| 10.15* | First Amendment, dated July 1, 2016, to Restricted Stock Purchase Agreement dated January 14, 2015, between 3D Systems Corporation and David R. Styka (Incorporated by reference to Exhibit 10.2 of the Registrant's current report on Form 8-K filed July 5, 2016). |
| 10.16* | First Amendment, dated July 1, 2016, to Restricted Stock Award Agreement dated May 19, 2015, between 3D Systems Corporation and David R. Styka (Incorporated by reference to Exhibit 10.3 of the Registrant's current report on Form 8-K filed July 5, 2016). |
| 10.17* | First Amendment, dated July 1, 2016, to Restricted Stock Award Agreement dated November 13, 2015, between 3D Systems Corporation and David R. Styka (Incorporated by reference to Exhibit 10.4 of the Registrant's current report on Form 8-K filed July 5, 2016). |
| 31.1 | Certification of Principal Executive Officer filed pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 dated August 3, 2016. |
| 31.2 | Certification of Principal Financial Officer filed pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 dated August 3, 2016. |
| 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 August 3, 2016. |
| 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 August 3, 2016. |
| 101.INS | XBRL Instance Document. |
| 101.SCH | XBRL Taxonomy Extension Schema Document. |

101.CAL XBRL Taxonomy Extension Calculation Linkbase Document.

101.DEF XBRL Taxonomy Extension Definition Linkbase Document.

101.LAB XBRL Taxonomy Extension Label Linkbase Document.

101.PRE XBRL Taxonomy Extension Presentation Linkbase Document.

* Management contract or compensatory plan or arrangement

SIGNATURE

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/ John N. McMullen
John N. McMullen
Executive Vice President and Chief Financial Officer
(principal financial and accounting officer)
(duly authorized officer)

Date: August 3, 2016