CARPENTER TECHNOLOGY CORP

Form 11-K

| June 28, 2017 Table of Contents |
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| UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 |
| FORM 11-K |
| ANNUAL REPORT Pursuant to Section 15(d) of the Securities Exchange Act of 1934 |
| (Mark One) |
| x ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 |
| For the year ended December 31, 2016 |
| or |
| o TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 |
| For the transition period from to |
| Commission File Number 1-5828 |
| Savings Plan of Carpenter Technology Corporation (Full title of the plan) |
| CARPENTER TECHNOLOGY CORPORATION (Name of issuer of the securities held pursuant to the plan) |
| 1735 Market Street, 15th Floor Philadelphia, Pennsylvania, 19103 (Address of principal executive office of the issuer) |

Table of Contents

Savings Plan of Carpenter Technology Corporation Table of Contents December 31, 2016 and 2015

| Report of Independent Registered Public Accounting Firm | Page 1 |
|--|-----------|
| Financial Statements: | |
| Statements of Net Assets Available for Benefits as of December 31, 2016 and 2015 | 2 |
| Statement of Changes in Net Assets Available for Benefits for the Year Ended December 31, 2016 | <u>3</u> |
| Notes to Financial Statements | <u>4</u> |
| Supplementary Information: | |
| Schedule H, Line 4(i) - Schedule of Assets (Held at End of Year) as of December 31, 2016 | <u>14</u> |

Table of Contents

Report of Independent Registered Public Accounting Firm

To the Participants and Administrator of the Savings Plan of Carpenter Technology Corporation

We have audited the accompanying statements of net assets available for benefits of the Savings Plan of Carpenter Technology Corporation (the "Plan") as of December 31, 2016 and 2015, and the related statement of changes in net assets available for benefits for the year ended December 31, 2016. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2016 and 2015, and the changes in net assets available for benefits for the year ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

The supplemental information in the accompanying Schedule H, Line 4(i) - Schedule of Assets (Held at End of Year) as of December 31, 2016 has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental information is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental information is the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information in the accompanying schedule, we evaluated whether the supplemental information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information in the accompanying schedule is fairly stated in all material respects in relation to the financial statements as a whole.

/s/ Baker Tilly Virchow Krause, LLP

Wyomissing, Pennsylvania June 28, 2017

Table of Contents

Savings Plan of Carpenter Technology Corporation Statements of Net Assets Available for Benefits December 31, 2016 and 2015

| Dollars in thousands | 2016 | 2015 |
|--|-----------|-----------|
| Investments, at fair value: | | |
| Registered investment companies | \$399,713 | \$370,809 |
| Interest in Carpenter Technology Master Trust Fund | 25,628 | 30,012 |
| Common collective trust | 23,381 | _ |
| Total investments at fair value | 448,722 | 400,821 |
| Investment, at contract value: | | |
| Interest in Carpenter Technology Master Trust Fund | 67,326 | 59,369 |
| Total investments | 516,048 | 460,190 |
| Notes receivable from participants | 13,959 | 12,036 |
| Net assets available for benefits | \$530,007 | \$472,226 |

See accompanying notes to financial statements.

Table of Contents

Savings Plan of Carpenter Technology Corporation Statement of Changes in Net Assets Available for Benefits Year Ended December 31, 2016

| Dollars in thousands | 2016 | |
|---|-----------|---|
| Investment income: | | |
| Net appreciation in fair value of investments | \$19,639 | |
| Interest in Carpenter Technology Master Trust Fund income | 7,375 | |
| Dividends | 8,839 | |
| Total investment income | 35,853 | |
| Interest income from notes receivable from participants | 457 | |
| Contributions: | | |
| Participant | 12,621 | |
| Participant rollover | 225 | |
| Employer | 4,596 | |
| Total contributions | 17,442 | |
| Net transfers in | 79,790 | |
| Benefits paid to participants | (75,417) |) |
| Administrative expenses | (344) |) |
| Net increase in net assets available for benefits | 57,781 | |
| Net assets available for benefits, beginning of year | 472,226 | |
| Net assets available for benefits, end of year | \$530,007 | |

See accompanying notes to financial statements.

Table of Contents

Savings Plan of Carpenter Technology Corporation Notes to Financial Statements

1. Description of the Plan

The following description of the Savings Plan of Carpenter Technology Corporation (the "Plan") provides general information. A more complete description of the Plan's provisions can be found in the plan document, which is available to participants upon request from Carpenter Technology Corporation, or any participating affiliate (collectively referred to as the "Company").

General

The Plan is a profit-sharing and stock bonus plan which covers substantially all domestic non-union employees of the Company. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA").

Contributions

Each year, participants may contribute up to 100% of annual compensation on a pre-tax basis, and up to 100% of annual compensation on an after-tax basis, as defined by the plan document. The combined contributions cannot exceed 100% of annual compensation on both a pre-tax and after-tax basis. Participants who have attained age 50 before the end of the plan year are eligible to make "catch-up contributions", which are additional pre-tax contributions. Participants may also contribute amounts representing rollover distributions from other qualified pension plans. Participant contributions to the Plan are recorded in the period that payroll deductions are made from the participants. The Company contributes an amount equal to 3% of each participant's base pay and a matching contribution of up to 3% for certain participants of a participating affiliate, as defined by the plan document. Participants direct the investment of all contributions into various investment options offered by the Plan. Contributions are subject to certain Internal Revenue Service ("IRS") limitations.

Participant Accounts

Each participant's account is credited with the participant's contribution, the Company's contribution on behalf of the participant, and an allocation of plan earnings based on account balances, as defined. When applicable, participants are charged transaction fees. Participants invested in the Carpenter Technology Stock Fund are charged an administrative fee based on the fund balance. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting

All contributions and plan earnings thereon are immediately and fully vested and non-forfeitable.

Table of Contents

Savings Plan of Carpenter Technology Corporation Notes to Financial Statements

Notes Receivable from Participants

Participants may borrow from their accounts a minimum of \$1,000 up to a maximum equal to the lesser of \$50,000 minus the amount of the highest outstanding loan balance on any plan loan during the preceding twelve months, or 50% of their vested account balance minus the current outstanding balance on any other plan loan. Terms range from one to five years for a general purpose loan, and one to ten years for a primary residence loan. The loans are secured by the balance in the participant's account and bear interest at rates that range from 4.25% to 9.25% at December 31, 2016, which represent the Prime Rate on the last business day of the month preceding the month in which the loan was distributed plus 1%. Principal and interest are paid ratably through bi-weekly payroll deductions.

Payment of Benefits

Benefits paid to participants include participant withdrawals and participant distributions. Participant withdrawals are withdrawals taken while an active employee of the Company and include hardship withdrawals, non-hardship withdrawals, and withdrawals after age 59½. Participant withdrawals are subject to certain restrictions as defined by the plan document. Upon termination of service due to death, disability, retirement, or other reasons, participants are eligible to receive a lump sum distribution. A participant may elect to defer such distribution provided the account balance is at least \$5,000. The total distribution of benefits to all separated participants must occur by April 1st of the year following the year in which the participant attains age 70½. The payment of benefits from the Carpenter Technology Stock Fund is made in shares of Carpenter Technology Corporation (the "Plan Sponsor") common stock or cash, at the participant's option. All other payments of benefits are made in cash.

Transfers

Effective December 31, 2016, another qualified plan of the Company with net assets available for benefits of \$81,254,000, was merged with and into the Plan. In addition, the Plan had transfers out of \$1,464,000 representing transfers to or from one or more other qualified benefit plans of the Plan Sponsor as a result of participant transfers between companies of the Plan Sponsor or other such events that may result in a change of plan eligibility.

2. Summary of Significant Accounting Policies

Basis of Accounting

The financial statements of the Plan are prepared on the accrual method of accounting.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Table of Contents

Savings Plan of Carpenter Technology Corporation Notes to Financial Statements

Investment Valuation and Income Recognition

A portion of the Plan's assets are invested in fully benefit-responsive investment contracts through its investment in the Standish Mellon Stable Value Fund within the Carpenter Technology Master Trust Fund ("Master Trust") and are reported at contract value. Contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. See Note 4 for further discussion of the Master Trust investment.

All other investments are reported at fair value. Fair value is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 3 for further discussion of fair value measurements.

Purchases and sales of investments are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation and interest in Master Trust income include the gains and losses on investments bought and sold as well as held during the year.

Notes Receivable from Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Interest income is recorded on the accrual basis. Delinquent notes receivable are recorded as distributions based upon the terms of the plan document. No allowance for credit losses has been recorded as of December 31, 2016 and 2015.

Administrative Expenses

The Plan's assets are administered under a contract with The Vanguard Fiduciary Trust Company (the "Trustee"). The Trustee invests funds received from contributions, investment sales, interest and dividend income and makes benefit payments to participants. Transaction fees and certain administrative fees are paid by the participant. The remaining administrative fees are netted against investment income in the Statement of Changes in Net Assets Available for Benefits. All other fees are paid by the Company and are excluded from these financial statements.

Payment of Benefits

Benefit payments to participants are recorded when paid.

Recent Accounting Standards

In May 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2015-07, Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent). ASU 2015-07 removes the requirement to include investments in the fair value hierarchy for which fair value is measured using the net asset value per share practical expedient. The Plan retrospectively adopted this ASU effective with the December 31, 2016 financial statements. The adoption has been reflected in Note 3.

Table of Contents

Savings Plan of Carpenter Technology Corporation Notes to Financial Statements

In July 2015, the FASB issued ASU No. 2015-12, Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), and Health and Welfare Benefit Plans (Topic 965) - I. Fully Benefit-Responsive Investment Contracts; II. Plan Investment Disclosures, and III. Measurement Date Practical Expedient. Part I eliminates the requirements to measure the fair value of fully benefit-responsive investment contracts and provide certain disclosures. Contract value is the only required measure for fully benefit-responsive investment contracts. Part II eliminates the requirements to disclose individual investments that represent 5 percent or more of net assets available for benefits and the net appreciation or depreciation in fair value of investments by general type. Part II also simplifies the level of disaggregation of investments that are measured using fair value. Plans will continue to disaggregate investments that are measured using fair value by general type; however, plans are no longer required to also disaggregate investments by nature, characteristics and risks. Further, the disclosure of information about fair value measurements shall be provided by general type of plan asset. The Plan retrospectively adopted Parts I and II effective with the December 31, 2016 financial statements. Part III is not applicable to the Plan.

In February 2017, the FASB issued ASU 2017-06, Plan Accounting: Defined Benefit Pensions Plans (Topic 960); Defined Contribution Pension Plans (Topic 962); Health and Welfare Benefit Plans (Topic 965): Employee Master Trust Reporting. The amendments in ASU 2017-06 clarify presentation requirements for a plan's interest in a master trust. The amendments also eliminate redundancy relating to 401(h) account disclosures. ASU 2017-06 is effective for fiscal years beginning after December 15, 2018. Early adoption is permitted. The amendments should be applied retroactively to each period for which financial statements are presented. Management is currently assessing the impact of adopting the provisions of the new standard.

3. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy under authoritative guidance are described as follows:

Level 1 Inputs: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the Plan has the ability to access.

Level 2 Inputs: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 Inputs: Unobservable inputs for the asset or liability.

Table of Contents

Savings Plan of Carpenter Technology Corporation Notes to Financial Statements

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2016 and 2015.

Registered Investment Companies - Valued at closing price reported on the active market on which the individual funds are traded. These funds are required to publish their daily net asset value ("NAV") and to transact at that price, and are considered to be actively traded.

Carpenter Technology Stock Fund held within the Master Trust - Valued at closing price of the Plan Sponsor's common stock as reported on the active market on which the securities are traded.

Short-term investment funds held within the Master Trust – Valued based on quoted market values reported on active markets on which the individual securities are traded.

Common Collective Trust - Valued at the NAV of units of a collective trust. The NAV is used as a practical expedient to estimate fair value and is based on the fair value of the underlying investments held by the fund less its liabilities.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observables and minimize the use of unobservable inputs.

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2016 and 2015.

| Dollars in thousands | Fair Value Measurement Using Inputs Considered as | 2016 | 2015 |
|---|--|-----------|-----------|
| Registered investment companies | Level 1 | \$399,713 | \$370,809 |
| Interest in Carpenter Technology Master Trust | | | |
| Fund: | | | |
| Carpenter Technology Stock Fund | Level 1 | 25,410 | 26,823 |
| Short-term investment funds | Level 1 | 218 | 3,189 |
| Common collective trust | (1) | 23,381 | _ |
| Total investments at fair value | | \$448,722 | \$400,821 |

(1) As discussed in Note 2, ASU 2015-07 allows investments that are measured at NAV or its equivalent per share as a practical expedient to be excluded from the fair value hierarchy. The fair value presented herein permits reconciliation to the Statements of Net Assets Available.

Table of Contents

Savings Plan of Carpenter Technology Corporation Notes to Financial Statements

The following table represents the investment at fair value based on NAV per share as of December 31, 2016.

Dollars in thousands 2016 Unfunded Commitments Redemption Frequency Redemption Notice Period Common collective trust (1) \$23,381 None Daily 30 days

(1) The Plan invests in the Prudential Core Plus Bond Fund Collective Trust, which invests in investment-grade fixed income securities, and seeks to outperform the Barclays Capital U.S. Aggregate Bond Index, which broadly represents the performance of debt securities publicly traded in the U.S.

4. Investment in the Master Trust

The Master Trust holds certain investments of the Plan Sponsor's participating plans, which include the Plan, the Savings Plan of Amega West Services, LLC, the Savings Plan of Carpenter Technology Corporation Effective January 1, 2012 (through December 31, 2016) and the Latrobe Steel Company Voluntary Investment Program. The Master Trust maintains a separate account for each of the participating plans' assets and liabilities held. As of December 31, 2016 and 2015, the Plan's undivided interest in the net assets of the Master Trust was 97.0% and 91.0%, respectively.

The Master Trust is invested in two funds – the Carpenter Technology Stock Fund and the Standish Mellon Stable Value Fund.

Carpenter Technology Stock Fund - The Carpenter Technology Stock Fund holds investments in the common stock of the Plan Sponsor. These investments are reported at fair value.

Standish Mellon Stable Value Fund - This fund holds investments in a short-term investment fund which is reported at fair value, as well as investments held in fully benefit-responsive guaranteed investment contracts ("GICs") which are reported at contract value. See Note 5 for further discussion of fully benefit-responsive GICs.

Table of Contents

Savings Plan of Carpenter Technology Corporation

Notes to Financial Statements

The net assets of the Master Trust and the Plan's interest in the Master Trust as of December 31, 2016 and 2015 are as follows:

| Dollars in thousands | 2016 | 2015 |
|---|----------|----------|
| Investments, at fair value: | | |
| Standish Mellon Stable Value Fund | | |
| Short-term investment fund | \$226 | \$3,597 |
| Carpenter Technology Corporation Stock Fund | 25,734 | 27,678 |
| Total investments at fair value | 25,960 | 31,275 |
| Investments, at contract value: | | |
| Standish Mellon Stable Value Fund | | |
| Traditional GICs | _ | 8,393 |
| Fixed maturity synthetic GIC | 9,705 | 2,004 |
| Constant duration synthetic GICs | 60,197 | 56,573 |
| Total investments at contract value | 69,902 | 66,970 |
| Net assets in Master Trust | \$95,862 | \$98,245 |
| | | |

Dollars in thousands 2016 2015 Plan interest in Master Trust, net assets \$92,954 \$89,381

The change in the net assets of the Master Trust for the year ended December 31, 2016 was as follows:

Dollars in thousands 2016

Investment income:

Net appreciation in fair value of investments

Carpenter Technology Corporation Stock Fund \$5,867

Interest and dividends

Standish Mellon Stable Value Fund 1,309 Carpenter Technology Corporation Stock Fund 596 Total investment income 7,772 Net transfers (10,155)Net decrease (2,383)Net assets available for benefits, beginning of year 98,245 Net assets available for benefits, end of year \$95,862

<u>Table of Contents</u>
Savings Plan of Carpenter Technology Corporation
Notes to Financial Statements

5. Fully Benefit-Responsive Investment Contracts

The Standish Mellon Stable Value Fund within the Master Trust holds a portfolio of GICs that comprises both traditional and synthetic GICs. These contracts meet the fully benefit-responsive investment contract criteria and therefore are reported at contract value. Contract value is the relevant measure for fully benefit-responsive investment contracts because this is the amount received by participants if they were to initiate permitted transactions under the terms of the Plan. Contract value represents contributions made under each contract, plus earnings, less participant withdrawals and administrative expenses.

The key difference between a synthetic GIC and a traditional GIC is that the Plan owns the underlying assets of the synthetic GIC. A synthetic GIC includes a wrapper contract, which is an agreement for the wrap issuer, such as a bank or insurance company, to make payments to the Plan in certain circumstances. The wrapper contract typically include certain conditions and limitations on the underlying assets owned by the Plan. With traditional GICs, the Plan owns only the contract itself. Synthetic and traditional GICs are designed to accrue interest based on crediting rates established by the contract issuers.

The synthetic GICs held by the Plan include wrapper contracts that provide a guarantee that the credit rate will not fall below 0%. Cash flow volatility (for example, timing of the benefit payments) as well as asset can be passed through to the Plan through adjustments to future contract crediting rates. Formulas are provided in each contract that adjust renewal crediting rates to recognize the difference between the fair value and the book value of the underlying assets. Crediting rates are reviewed periodically for resetting.

With the traditional GICs held by the Plan, the contract issuer is contractually obligated to repay the principal and interest at the specified interest rate that is guaranteed to the Plan. The crediting rate is based on a formula established by the contract issuer but may not be less than 0%. The crediting rate is reviewed periodically for resetting. The contract cannot be terminated before the scheduled maturity date.

The Plan's ability to receive amounts due in accordance with fully benefit-responsive GICs is dependent on the third-party issuer's ability to meet its financial obligations. The issuer's ability to meet its contractual obligations may be affected by future economic and regulatory developments.

Certain events might limit the ability of the Plan to transact at contract value with the contract issuer. These events may be different under each contract. Examples of such events include the following: (1) the Plan's failure to qualify under Section 401(a) of the Internal Revenue Code ("IRC") or the failure of the trust to be tax-exempt under Section 501(a) of the IRC, (2) premature termination of the contracts, (3) plan termination or merger into an unaffiliated plan, (4) changes to the Plan's prohibition on competing investment options, and (5) bankruptcy of the plan sponsor or other plan sponsor events (for example, divestitures or spinoffs of a subsidiary) that significantly affect the Plan's normal operations.

No events are probable of occurring that might limit the ability of the Plan to transact at contract value with the contract issuers and that also would limit the ability of the Plan to transact at contract value with the participants.

Table of Contents

Savings Plan of Carpenter Technology Corporation Notes to Financial Statements

In addition, certain events allow the issuer to terminate the contracts with the Plan and settle at an amount different from contract value. Those events may be different under each contract. Examples of such events include the following: (1) an uncured violation of the Plan's investment guidelines, (2) a breach of material obligation under the contract, (3) a material misrepresentation, and (4) a material amendment to the agreements without the consent of the issuer.

6. Related Party and Party-in-Interest Transactions

The Plan issues loans to participants, which are secured by the participants' account balances. These transactions qualify as party-in-interest. Fees paid by the Plan in 2016 for loan services totaled \$59,000.

Certain of the Plan's investments are managed by the Trustee, and therefore, these transactions qualify as party-in-interest transactions. Fees paid by the Plan in 2016 to the Trustee for investment management services related to these funds totaled \$271,000.

The Carpenter Technology Stock Fund held in the Master Trust at December 31, 2016 is invested in shares of the Plan Sponsor, therefore these transactions qualify as related party and party-in-interest transactions. Fees paid to the Trustee by the Plan in 2016 for investment management services related to this fund were \$10,000. In addition, total purchases and sales, at market value, for 2016 were \$10,102,705 and \$18,054,431 respectively. The Carpenter Technology Stock Fund included 702,521 and 886,135 of equivalent shares with a share price of \$36.17 and \$30.27 as of December 31, 2016 and 2015, respectively.

Certain administrative functions of the Plan are performed by officers or employees of the Company. No such officer or employee receives compensation from the Plan.

7. Plan Termination

Although it has not expressed any intent to do so, the Company has the right to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of plan termination, participants will remain fully vested in their accounts.

8. Tax Status

The IRS has determined and informed the Company by a letter dated April 23, 2014 that the Plan and related trust are designed in compliance with Section 401(a) of the IRC. Although the plan has been amended since receiving the determination letter, the plan administrator believes that the Plan is currently designed and being operated in compliance with the applicable requirements of the IRC and therefore believes that the Plan is qualified and the related trust is tax exempt. The Plan filed for a new determination letter in January 2016, which is pending from the IRS.

Table of Contents

Savings Plan of Carpenter Technology Corporation Notes to Financial Statements

Accounting principles generally accepted in the United States of America require management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2016, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The plan administrator believes it is no longer subject to income tax examinations for years prior to 2013.

9. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the Statements of Net Assets Available for Benefits.

As of December 31, 2016 and 2015, the Plan had investments of \$147,261,000 and \$141,226,000, respectively, that were concentrated in two funds.

10. Reconciliation of Financial Statements to Form 5500

The following is a reconciliation of net assets available for benefits and total investment income per the financial statements to the Form 5500:

| Dollars in thousands Net assets available for benefits, per the financial statements Adjustment from contract value to fair value for fully benefit-responsive investment contracts Net assets available for benefits, per the Form 5500 | December 31, 2015 \$472,226 548 \$472,774 |
|---|---|
| Dollars in thousands | Year Ended December 31, 2016 |
| Investment income, per the financial statements | \$35,853 |
| Change in adjustment from contract value to fair value for fully benefit-responsive investment contracts Investment income, per the Form 5500 11. Subsequent Event | (548) \$35,305 |

Effective January 1, 2017, the Company will contribute, in addition to an amount equal to 3% of each participant's base pay, a matching contribution of up to 6% of each participant's base pay, as defined by the plan document.

Table of Contents

Savings Plan of Carpenter Technology Corporation

Schedule of Assets

(Held at End of EIN: 23-0458500

Year)

Form 5500 -

Schedule H - Line PN: 020

4(i)

December 31, 2016

| (a)(b) | (c) | (e) |
|-------------------------------------|--|---------------|
| Identity of Issue, Borrower | , Description of Investment, including Maturity Date, | Current |
| Lessor or Similar Party | Interest Rate, Collateral, Par or Maturity Value | Value |
| Registered Investment Cor | npanies: | |
| American Funds | American Funds EuroPacific Growth Fund; Class R-6 | \$15,053,000 |
| Dodge & Cox | Dodge & Cox Stock Fund | 17,818,000 |
| T. Rowe Price | T. Rowe Price Inst Large Cap Growth Fund; Inst Class | 14,974,000 |
| * Vanguard | Vanguard Institutional Index Fund | 79,717,000 |
| * Vanguard | Vanguard Mid-Cap Index Fund; Institutional Shares | 26,247,000 |
| * Vanguard | Vanguard Small-Cap Index Fund; Institutional Shares | 20,395,000 |
| * Vanguard | Vanguard Target Retirement 2010 Fund | 2,996,000 |
| * Vanguard | Vanguard Target Retirement 2015 Fund | 17,116,000 |
| * Vanguard | Vanguard Target Retirement 2020 Fund | 16,839,000 |
| * Vanguard | Vanguard Target Retirement 2025 Fund | 39,875,000 |
| * Vanguard | Vanguard Target Retirement 2030 Fund | 13,949,000 |
| * Vanguard | Vanguard Target Retirement 2035 Fund | 29,039,000 |
| * Vanguard | Vanguard Target Retirement 2040 Fund | 6,671,000 |
| * Vanguard | Vanguard Target Retirement 2045 Fund | 18,444,000 |
| * Vanguard | Vanguard Target Retirement 2050 Fund | 3,086,000 |
| * Vanguard | Vanguard Target Retirement 2055 Fund | 6,299,000 |
| * Vanguard | Vanguard Target Retirement 2060 Fund | 779,000 |
| * Vanguard | Vanguard Target Retirement Income | 5,812,000 |
| * Vanguard | Vanguard Total Bond Market Index Fund; Admiral Shares | 23,827,000 |
| * Vanguard | Vanguard Total International Stock Index Fund; Inst Shares | 27,330,000 |
| * Vanguard | Vanguard Treasury Money Market Fund | 8,850,000 |
| Wasatch Computer Tech | Wasatch Core Growth Fund; Institutional Class Shares | 4,597,000 |
| Total Registered Investment | nt Companies | 399,713,000 |
| Common Collective Trust: | | |
| Prudential | Prudential Core Plus Bond Fund Collective Trust; Class 6 | 23,381,000 |
| Participant Loans | Loans to Participants - Interest rate range 4.25% - 9.25% | 13,959,000 |
| Total | | \$437,053,000 |

Cost information not included, as all investments are participant-directed

The investment in the Interest in Carpenter Technology Master Trust Fund has been excluded from this schedule.

^{*} indicates Party-in-Interest

Table of Contents

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, Carpenter Technology Corporation has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Savings Plan of Carpenter Technology Corporation (Name of Plan)

June 28, 2017 /s/ Damon J. Audia

Damon J. Audia Senior Vice President and Chief Financial Officer (Principal Financial Officer)

Table of Contents

EXHIBIT INDEX

Exhibit No. Description

23.1 Consent of Independent Registered Public Accounting Firm