CARPENTER TECHNOLOGY CORP

Form 11-K

June 19, 2018 **Table of Contents 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, 2017 or oTRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from _____ to ____ Commission File Number 1-5828 Latrobe Steel Company Voluntary Investment Program (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

Latrobe Steel Company Voluntary Investment Program Table of Contents
December 31, 2017 and 2016

Report of Independent Registered Public Accounting Firm	Page 1
Financial Statements:	
Statements of Net Assets Available for Benefits as of December 31, 2017 and 2016	<u>3</u>
Statement of Changes in Net Assets Available for Benefits for the Year Ended December 31, 2017	<u>4</u>
Notes to Financial Statements	<u>5</u>
Supplementary Information:	
Schedule H, Line 4(i) - Schedule of Assets (Held at End of Year) as of December 31, 2017	<u>14</u>

Table of Contents

Report of Independent Registered Public Accounting Firm

To the plan administrator and plan participants of the Latrobe Steel Company Voluntary Investment Program

Opinion on the Financial Statements

We have audited the accompanying statements of net assets available for benefits of the Latrobe Steel Company Voluntary Investment Program (the "Plan") as of December 31, 2017 and 2016, and the related statement of changes in net assets available for benefits for the year ended December 31, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2017 and 2016, and the changes in net assets available for benefits for the year ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on the Plan's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Plan in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Table of Contents

Supplemental Information

The supplemental Schedule H, Line 4(i) - Schedule of Assets (Held at End of Year) as of December 31, 2017 has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. 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, 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 is fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ Baker Tilly Virchow Krause, LLP

We have served as the Plan's auditor since 2004. Wyomissing, Pennsylvania June 19, 2018

Table of Contents

Latrobe Steel Company Voluntary Investment Program Statements of Net Assets Available for Benefits December 31, 2017 and 2016

Dollars in thousands	2017	2016
Investments, at fair value:		
Registered investment companies	\$20,521	\$16,168
Interest in Carpenter Technology Master Trust Fund	230	223
Common collective trust	494	408
Total investments at fair value	21,245	16,799
Investment, at contract value:		
Interest in Carpenter Technology Master Trust Fund	2,586	2,571
Total investments	23,831	19,370
Notes receivable from participants	398	505
Net assets available for benefits	\$24,229	\$19,875

See accompanying notes to financial statements.

Table of Contents

Latrobe Steel Company Voluntary Investment Program Statement of Changes in Net Assets Available for Benefits Year Ended December 31, 2017

Dollars in thousands	2017	
Investment income:		
Net appreciation in fair value of investments	\$2,746	
Interest in Carpenter Technology Master Trust Fund income	128	
Dividends	758	
Total investment income	3,632	
Interest income from notes receivable from participants	19	
Contributions:		
Participant	1,490	
Participant rollover	24	
Total contributions	1,514	
Benefits paid to participants	(803))
Net transfers out	(8)
Net increase in net assets available for benefits	4,354	
Net assets available for benefits, beginning of year	19,875	
Net assets available for benefits, end of year	\$24,229)

See accompanying notes to financial statements.

Table of Contents

Latrobe Steel Company Voluntary Investment Program Notes to Financial Statements

1. Description of the Plan

The following description of the Latrobe Steel Company Voluntary Investment Program (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 Latrobe Specialty Metals Company (the "Company") or Carpenter Technology Corporation (the "Plan Sponsor").

General

The Plan is a profit-sharing and stock bonus plan which covers substantially all 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, as defined by the plan document. 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 does not match participant contributions in accordance with 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 and an allocation of plan earnings based on account balances, as defined. When applicable, participants are charged transaction fees. 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.

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 four years for a general purpose loan. The loans are secured by the balance in the participant's account and bear interest at rates that range from 4.25% to 5.25% at December 31, 2017, which represents 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 semi-monthly payroll deductions.

Table of Contents

Latrobe Steel Company Voluntary Investment Program Notes to Financial Statements

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 and non-hardship withdrawals, 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 the Plan Sponsor's common stock or cash, at the participant's option. All other payments of benefits are made in cash.

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.

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, 2017 and 2016.

Table of Contents

Latrobe Steel Company Voluntary Investment Program Notes to Financial Statements

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 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 Standard

In February 2017, the Financial Accounting Standards Board issued Accounting Standards Update ("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. The Plan retrospectively adopted Topic 962 effective with the December 31, 2017 financial statements. Topics 960 and 965 are not applicable to the Plan.

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.

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, 2017 and 2016.

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.

Table of Contents

Latrobe Steel Company Voluntary Investment Program Notes to Financial Statements

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, 2017 and 2016.

Dollars in thousands	Fair Value Measurement Using Inputs Considered as	2017	2016
Registered investment companies	Level 1	\$20,521	\$16,168
Interest in Carpenter Technology Master Trust			
Fund:			
Carpenter Technology Stock Fund	Level 1	136	215
Short-term investment fund	Level 1	94	8
Common collective trust	(1)	494	408
Total investments at fair value		\$21,245	\$16,799

(1) Investments that are measured at NAV or is equivalent per share as a practical expedient are excluded from the fair value hierarchy. The fair value presented herein permits reconciliation to the Statements of Net Assets Available for Benefits.

The following table represents the investment at fair value based on NAV per share as of December 31, 2017 and 2016.

Dollars in thousands 2017 2016 Unfunded Commitments Redemption Frequency Redemption Notice Period Common collective trust (1) \$494 \$408 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.

Table of Contents

Latrobe Steel Company Voluntary Investment Program Notes to Financial Statements

4. Investment in the Master Trust

The Master Trust is comprised of 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.

The Master Trust, which is administered by the Trustee, holds the investments of these funds for the Plan Sponsor's participating plans, which include the Plan, the Savings Plan of Carpenter Technology Corporation and the Savings Plan of Amega West Services, LLC. Use of the Master Trust permits the commingling of trust assets for investment and administrative purposes. Although the assets of each plan are commingled in the Master Trust, the Trustee maintains separate supporting records for the purpose of tracking the individual activity of each plan. The investments held in the Master Trust are accounted for at the plan level since the participating plans have a divided interest in assets held in the Master Trust.

The net assets of the Master Trust and the Plan's divided interest in the Master Trust as of December 31, 2017 and 2016 are as follows:

Dollars in thousands Trust Divided Interest Investments, at fair value: Standish Mellon Stable Value Fund Short-term investment fund Carpenter Technology Corporation Stock Fund Total investments at fair value Investments, at contract value: Standish Mellon Stable Value Fund Fixed maturity synthetic GIC Constant duration synthetic GICs Total investments at contract value Total investments at contract value Standish Mellon Stable Value Fund Fixed maturity synthetic GIC T,442 343 Constant duration synthetic GICs Total investments at contract value 56,157 2,586		2017	
Standish Mellon Stable Value Fund Short-term investment fund \$2,031 \$94 Carpenter Technology Corporation Stock Fund 30,801 136 Total investments at fair value 32,832 230 Investments, at contract value: Standish Mellon Stable Value Fund Fixed maturity synthetic GIC 7,442 343 Constant duration synthetic GICs 48,715 2,243 Total investments at contract value 56,157 2,586	Dollars in thousands		
Short-term investment fund \$2,031 \$94 Carpenter Technology Corporation Stock Fund 30,801 136 Total investments at fair value 32,832 230 Investments, at contract value: Standish Mellon Stable Value Fund Fixed maturity synthetic GIC 7,442 343 Constant duration synthetic GICs 48,715 2,243 Total investments at contract value 56,157 2,586	Investments, at fair value:		
Carpenter Technology Corporation Stock Fund 30,801 136 Total investments at fair value 32,832 230 Investments, at contract value: Standish Mellon Stable Value Fund Fixed maturity synthetic GIC 7,442 343 Constant duration synthetic GICs 48,715 2,243 Total investments at contract value 56,157 2,586	Standish Mellon Stable Value Fund		
Total investments at fair value 32,832 230 Investments, at contract value: Standish Mellon Stable Value Fund Fixed maturity synthetic GIC 7,442 343 Constant duration synthetic GICs 48,715 2,243 Total investments at contract value 56,157 2,586	Short-term investment fund	\$2,031	\$ 94
Investments, at contract value: Standish Mellon Stable Value Fund Fixed maturity synthetic GIC 7,442 343 Constant duration synthetic GICs 48,715 2,243 Total investments at contract value 56,157 2,586	Carpenter Technology Corporation Stock Fund	30,801	136
Standish Mellon Stable Value Fund Fixed maturity synthetic GIC 7,442 343 Constant duration synthetic GICs 48,715 2,243 Total investments at contract value 56,157 2,586	Total investments at fair value	32,832	230
Fixed maturity synthetic GIC 7,442 343 Constant duration synthetic GICs 48,715 2,243 Total investments at contract value 56,157 2,586	Investments, at contract value:		
Constant duration synthetic GICs 48,715 2,243 Total investments at contract value 56,157 2,586	Standish Mellon Stable Value Fund		
Total investments at contract value 56,157 2,586	Fixed maturity synthetic GIC	7,442	343
	Constant duration synthetic GICs	48,715	2,243
Net assets in Master Trust \$88,989 \$ 2,816	Total investments at contract value	56,157	2,586
	Net assets in Master Trust	\$88,989	\$ 2,816

Table of Contents

Latrobe Steel Company Voluntary Investment Program Notes to Financial Statements

	2016	
Dollars in thousands	Master Trust	Plan's Divided Interest
Investments, at fair value:		
Standish Mellon Stable Value Fund		
Short-term investment fund	\$226	\$8
Carpenter Technology Corporation Stock Fund	25,734	215
Total investments at fair value	25,960	223
Investments, at contract value:		
Standish Mellon Stable Value Fund		
Fixed maturity synthetic GIC	9,705	357
Constant duration synthetic GICs	60,197	2,214
Total investments at contract value	69,902	2,571
Net assets in Master Trust	\$95,862	\$ 2,794

The change in the net assets of the Master Trust for the year ended December 31, 2017 was as follows:

\$88,989

Dollars in thousands

Investment income:

Net appreciation in fair value of investments

Net assets available for benefits, end of year

Carpenter Technology Corporation Stock Fund	\$10,152
Interest and dividends	
Standish Mellon Stable Value Fund	1,074
Carpenter Technology Corporation Stock Fund	492
Total investment income	11,718
Net transfers out	(18,591)
Net decrease in net assets available for benefits	(6,873)
Net assets available for benefits, beginning of year	95,862

Table of Contents

Latrobe Steel Company Voluntary Investment Program Notes to Financial Statements

5. Fully Benefit-Responsive Investment Contracts

The Standish Mellon Stable Value Fund within the Master Trust holds a portfolio of synthetic GICs. The Plan owns the underlying assets of the 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 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 underperformance 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.

The Plan's ability to receive amounts due in accordance with fully benefit-responsive synthetic 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.

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.

Table of Contents

Latrobe Steel Company Voluntary Investment Program Notes to Financial Statements

Certain of the Plan's investments are managed by the Trustee, and therefore, these transactions qualify as party-in-interest transactions.

The Carpenter Technology Stock Fund held in the Master Trust at December 31, 2017 is invested in shares of the Plan Sponsor, therefore these transactions qualify as related party and party-in-interest transactions. In addition, total purchases and sales in 2017 and 2016, at market value, were \$25,000 and \$184,000, respectively. The Plan's interest in the Carpenter Technology Stock Fund included 2,669 and 5,953 of equivalent shares with a share price of \$50.99 and \$36.17 as of December 31, 2017 and 2016, respectively.

Certain administrative functions of the Plan are performed by officers or employees of the Company or Plan Sponsor. 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 October 10, 2017 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.

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, 2017, 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 2014.

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, 2017 and 2016, the Plan had investments of \$11,631,000 and \$10,045,000, respectively, that were concentrated in four funds.

Table of Contents

Latrobe Steel Company Voluntary Investment Program Notes to Financial Statements

10. Subsequent Event

Effective January 1, 2018, the Company will contribute an amount equal to 3% of each participant's base pay, and a matching contribution of up to 3% of each participant's base pay, for participants hired on or after January 1, 2018, as defined by the plan document.

Table of Contents

Latrobe Steel Company Voluntary Investment Program

Schedule of Assets (Held at End of Year) EIN: 23-0458500

Form 5500 - Schedule H - Line 4(i) PN: 019

December 31, 2017

Identity of Issue, Borrower, Description of Investment, including Maturity Date, Currer	ıt
Lessor or Similar Party Interest Rate, Collateral, Par or Maturity Value Value	
Registered Investment Companies:	
American Funds American Funds EuroPacific Growth Fund; Class R-6 \$1,700	0,000
Dodge & Cox Dodge & Cox Stock Fund 709,00	0
T. Rowe Price T. Rowe Price Inst Large Cap Growth Fund; Inst Class 2,290,	000
* Vanguard Vanguard Institutional Index Fund 1,940,	000
* Vanguard Wid-Cap Index Fund; Institutional Shares 243,00	0
* Vanguard Small-Cap Index Fund; Institutional Shares 192,00	0
* Vanguard Target Retirement 2015 Fund 99,000)
* Vanguard Target Retirement 2020 Fund 2,806,	000
* Vanguard Target Retirement 2025 Fund 1,278,	000
* Vanguard Target Retirement 2030 Fund 3,388,	000
* Vanguard Target Retirement 2035 Fund 449,00	0
* Vanguard Target Retirement 2040 Fund 1,471,	000
* Vanguard Target Retirement 2045 Fund 228,00	00
* Vanguard Target Retirement 2050 Fund 221,00	0
* Vanguard Target Retirement 2055 Fund 145,00	0
* Vanguard Target Retirement 2060 Fund 19,000)
* Vanguard Target Retirement Income 577,00	0
* Vanguard Total Bond Market Index Fund; Inst Shares 63,000)
* Vanguard Total International Stock Index Fund; Inst Shares 16,000)
* Vanguard Treasury Money Market Fund 66,000)
Wasatch Computer Tech Wasatch Core Growth Fund; Institutional Class Shares 2,621,	000
Total Registered Investment Companies 20,521	,000
Common Collective Trust:	
Prudential Prudential Core Plus Bond Fund Collective Trust; Class 6 494,00	00
* Participant Loans Loans to Participants - Interest rate range 4.25% - 5.25% 398,00	
Total \$21,4:	3,000

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.

Latrobe Steel Company Voluntary Investment Program (Name of Plan)

June 19, 2018 /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