

ALLEGHENY TECHNOLOGIES INC  
Form 11-K  
June 12, 2014

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

✓ ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
[NO FEE REQUIRED]  
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2013

.. TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF  
1934 [NO FEE REQUIRED]  
FOR THE TRANSITION PERIOD FROM TO  
COMMISSION FILE NUMBER 1-12001

TDY INDUSTRIES, INC. PROFIT SHARING PLAN  
FOR CERTAIN EMPLOYEES OF METALWORKING PRODUCTS  
(Title of Plan)  
ALLEGHENY TECHNOLOGIES INCORPORATED  
(Name of Issuer of securities held pursuant to the Plan)  
1000 Six PPG Place, Pittsburgh, Pennsylvania 15222-5479  
(Address of Plan and principal executive offices of Issuer)

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FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULE  
TDY Industries, Inc. 401(k) Profit Sharing Plan for Certain Employees of  
Metalworking Products  
As of December 31, 2013 and 2012 and for the Year Ended December 31, 2013

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Financial Statements

And Supplemental Schedule

TDY Industries, Inc. 401(k) Profit Sharing Plan for

Certain Employees of Metalworking Products

As of December 31, 2013 and 2012 and for the Year Ended December 31, 2013

(Unaudited)

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TDY Industries, Inc. 401(k) Profit Sharing Plan for  
 Certain Employees of Metalworking Products  
 Statements of Net Assets Available for Benefits  
 (Unaudited)

	December 31	
	2013	2012
Investments at fair value:		
Interest in Allegheny Technologies Incorporated Master Trust	\$4,884,650	\$4,441,940
Interest in registered investment companies	528	—
Notes receivable from participants	279,654	275,785
Net assets available reflecting investments at fair value	5,164,832	4,717,725
Adjustment from fair value to contract value for fully benefit-responsive investment contracts	(12,263	) (36,966
Net assets available for benefits	\$5,152,569	\$4,680,759
See accompanying notes.		

TDY Industries, Inc. 401(k) Profit Sharing Plan for  
 Certain Employees of Metalworking Products  
 Statement of Changes in Net Assets Available for Benefits  
 (Unaudited)  
 Year ended December 31, 2013

	Year Ended December 31, 2013	
Contributions:		
Employer	\$159,562	
Employee	171,712	
Total contributions	331,274	
Interest income on notes receivable from participants	13,266	
Net gains from interest in registered investment companies	36	
Investment income:		
Net investment income from Plan interest in Allegheny Technologies Incorporated Master Trust	741,183	
Total investment income	741,183	
	1,085,759	
Distributions to participants	(613,849	)
Administrative expenses and other, net	(100	)
	(613,949	)
Net increase in net assets available for benefits	471,810	
Net assets available for benefits at beginning of year	4,680,759	
Net assets available for benefits at end of year	\$5,152,569	
See accompanying notes.		

TDY Industries, Inc. 401(k) Profit Sharing Plan for  
 Certain Employees of Metalworking Products  
 Notes to Financial Statements  
 December 31, 2013

1. Description of the Plan

The TDY Industries, Inc. 401(k) Profit Sharing Plan for Certain Employees of Metalworking Products (the Plan) is a defined contribution plan and is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). The Plan's sponsor is Allegheny Technologies Incorporated (ATI, the Plan Sponsor). Further information about the Plan, including eligibility, vesting, contributions, and withdrawals, is contained in the plan documents. Copies of these documents are available from the Plan Sponsor. On November 4, 2013, certain operations which included eligible employees of the Plan were sold to Kennametal, Inc. During a transition period after the sale date, the plan accepted employee and employer contributions from Kennametal, Inc. with respect to such employees. Following the end of that transition period on December 31, 2013, no further employee or employer contributions were made to the plan with respect to such employees.

The purpose of the Plan is to provide retirement benefits to eligible employees through company contributions and to encourage employee thrift by permitting eligible employees to defer a part of their compensation and contribute such deferral to the Plan. The Plan allows employees to contribute a portion of eligible wages each pay period through payroll deductions subject to Internal Revenue Code (the Code) limitations. The respective employing companies, which are affiliates of ATI, will match 100% up to the first 3% of employee contributions and 50% of the next 2% of employee contributions. In addition, profit sharing contributions can be made to participant accounts at the employing company's discretion. Unless otherwise specified by the participant, contributions are made to the QDIA (Qualified Default Investment Alternative), The Vanguard Target Retirement Fund that most closely matches the participants 65<sup>th</sup> birthday date (e.g. Vanguard Target Retirement Income 2020 Fund). The Plan allows participants to direct their contributions, and contributions made on their behalf to any of the investment options offered by the Plan.

These contributions follow an age-weighted formula, based on the following schedule:

CURRENT AGE	COMPANY CONTRIBUTION	
Less than age 35	2.0	%
35 – 39	2.5	%
40 – 44	3.0	%
45 – 49	3.5	%
50 – 54	4.0	%
55 – 59	4.5	%
Age 60 or above	5.0	%

Separate accounts are maintained by the Plan Sponsor for each participating employee. Trustee fees and asset management fees charged by the Plan's trustee, Mercer Trust Company, for the administration of all funds are charged against net assets available for benefits of the respective fund. Certain other expenses of administering the Plan are paid by the Plan Sponsor.

Participants may make "in-service" and hardship withdrawals as outlined in the Plan document. Active employees can borrow up to 50% of their vested account balances minus any outstanding loans. The loan amounts are further limited to a minimum of \$500 and a maximum of \$50,000, and an employee can obtain no more than three loans at one time. Interest rates are determined based on commercially accepted criteria, and payment schedules vary based on the type of the loan.

General-purpose loans are repaid over 12 to 60 months, and primary residence loans are repaid over 12 months up to 180 months. Principal and interest payments are made by payroll deductions.

2. Significant Accounting Policies

Use of Estimates and Basis of Accounting

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements,

accompanying notes and supplemental schedules. Actual results could differ from those estimates. The financial statements are prepared under the accrual basis of accounting.

### Investment Valuation

Certain assets of the Plan have been commingled in the Allegheny Technologies Incorporated Master Trust (the Master Trust) with the assets of various ATI sponsored defined contribution plans for investment and administrative purposes. The investment in the Master Trust represents the Plan's interest in the net assets of the Master Trust, and is stated at fair value.

Master Trust assets as well as income/losses are allocated among the participating plans by assigning to each plan those transactions (primarily contributions, benefit payments, and plan-specific expenses) that can be specifically identified and by allocating among all plans, in proportion to the fair value of the assets assigned to each plan, income and expenses resulting from the collective investment of the assets of the Master Trust.

Fully benefit-responsive investment contracts held by a defined contribution plan are reported at fair value in the Plan's statement of net assets available for benefits with a corresponding adjustment to reflect these investments at contract value. Contract value is the relevant measurement attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. The contract value represents contributions plus earnings, less participant withdrawals and administrative expenses.

### Payment of Benefits

Benefits are recorded when paid.

### Notes Receivable from Participants

Notes receivable from participants represent participant loans that are recorded at their unpaid principal balance plus any accrued but unpaid interest. Interest income on notes receivable from participants is recorded when it is earned. Related fees are recorded as administrative expenses and are expensed when they are incurred. No allowance for credit losses were recorded as of December 31, 2013 or 2012. If a participant ceases to make a note repayment and the plan administrator deems the note to be a distribution, the note receivable balance is reduced and a benefit payment is recorded.

### 3. Investments

Certain assets of the Plan along with the assets of various other ATI sponsored plans are part of the Master Trust. The Plan's interest in the net assets of the Master Trust was approximately 1% at December 31, 2013 and 2012. The Plan also permits self-directed investments in registered investment companies that are maintained in accounts separate from the Master Trust.

None of the Plan's share of the various investment types held by the Master Trust at December 31, 2013 and 2012 were greater than 1% of the Master Trusts assets.

The following table is a summary, at fair value, of the net assets of the Master Trust by investment type as of December 31, 2013 and 2012:

	2013	2012
Common collective trusts	\$412,878,005	\$323,922,840
Registered investment companies	288,684,301	232,490,850
Synthetic investment contracts (a)	177,723,536	184,046,579
Corporate common stocks	78,694,750	66,692,496
Guaranteed investment contracts	41,571,159	39,622,255
Total investments held by the Master Trust at fair value	\$999,551,751	\$846,775,020

This class includes approximately 2% government and government agency bonds, 3% corporate bonds, 3% residential mortgage-backed securities, 4% commercial mortgage-backed securities, 85% common collective trusts, (a) and 3% asset-backed securities in 2013, and approximately 4% government and government agency bonds, 3% corporate bonds, 4% residential mortgage-backed securities, 8% commercial mortgage-backed securities, 77% common collective trusts, and 4% asset-backed securities in 2012.





Investment income attributable to the Master Trust for the year ended December 31, 2013 was as follows:

Net appreciation in fair value of investments:		
Common collective trusts	\$66,682,495	
Synthetic investment contracts	3,520,061	
Guaranteed investment contracts	677,379	
Registered investment companies	59,371,131	
Corporate common stocks	13,291,253	
Net appreciation in fair value of investments	143,542,319	
Expenses		
Administrative expenses and other, net	(1,354,893	)
Total investment gain	\$142,187,426	

The BNY Mellon Stable Value Fund (the Fund) investment alternative invests in guaranteed investment contracts (GICs), a pooled separate account, actively managed structured or synthetic investment contracts (SICs), and a common collective trust (CCT). The GICs are promises by a bank or insurance company to repay principal plus a fixed rate of return through contract maturity. SICs differ from GICs in that there are specific assets supporting the SICs and these assets are owned by the Plan. The bank or insurance company issues a wrapper contract that allows participant-directed transactions to be made at contract value. The assets supporting the SICs are comprised of government agency bonds, corporate bonds, residential mortgage backed securities, asset-backed securities (ABOs), common collective trusts (CCT), and collateralized mortgage obligations (CMOs).

Interest crediting rates on the GICs in the Fund are determined at the time of purchase. Such interest rates are reviewed and may be reset on a quarterly basis. Interest crediting rates on the SICs are either: (1) set at the time of purchase for a fixed term and crediting rate, (2) set at the time of purchase for a fixed term and variable crediting rate, or (3) set at the time of purchase and reset monthly within a "constant duration." A constant duration contract may specify a duration of 2.5 years, and the crediting rate is adjusted monthly based upon quarterly rebalancing of eligible 2.5 year duration investment instruments at the time of each resetting; in effect the contract never matures.

Average yields for all fully benefit-responsive investment contracts held by the Master Trust for 2013 and 2012 were as follows:

	Years Ended December 31		
	2013	2012	
Based on actual earnings	2.02	% 2.34	%
Based on interest rate credited to participants	1.79	% 2.11	%

Although it is management's intention to hold the investment contracts in the Fund until maturity, certain investment contracts provide for adjustments to contract value for withdrawals made prior to maturity. If the Plan was deemed to be in violation of ERISA or lose its tax exempt status, among other events, the issuers of the fully responsive investment contracts would have the ability to terminate the contracts and settle at an amount different from contract value.

Certain investments are subject to restrictions or limitations if the Plan Sponsor decided to entirely exit an investment. Investments in registered investment companies and the Fund may require at least 30 days prior notice to completely withdraw from the investments. The targeted date fund investments held in common collective trusts currently do not require the prior approval of the investment manager if the Plan Sponsor decides to entirely exit these investments, but prior trade date notification is necessary to effect timely securities settlement or delivery of an investment's liquidation and transfer to another investment.

#### 4. Fair Value Measurements

In accordance with accounting standards, 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 accounting standards establish a three-level hierarchy for fair value measurements based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date.

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### Determination of Fair Value

Fair value is based upon quoted market prices, where available. If listed prices or quotes are not available, fair value is based upon models that primarily use, as inputs, market-based or independently sourced market parameters, including yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates and credit curves. In addition to market information, models may also incorporate transaction details, such as maturity. Valuation adjustments, such as liquidity valuation adjustments, may be necessary when the Plan is unable to observe a recent market price for a financial instrument that trades in inactive (or less active) markets. Liquidity adjustments are not taken for positions classified within Level 1 (as defined below) of the fair value hierarchy.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date. There have been no changes in the methodologies used at December 31, 2013 and 2012.

### Valuation Hierarchy

The three levels of inputs to measure fair value are as follows:

Level 1 – Quoted prices in active markets for identical assets and liabilities.

Level 2 – Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

### Valuation Methodologies

The valuation methodologies used for assets and liabilities measured at fair value, including their general classification based on the fair value hierarchy, include the following:

Cash and cash equivalents – Where the net asset value (NAV) is a quoted price in a market that is active, it is classified within Level 1 of the valuation hierarchy. In certain cases, NAV is a quoted price in a market that is not active, or is based on quoted prices for similar assets and liabilities in active markets, and these investments are classified within Level 2 of the valuation hierarchy.

Corporate common stocks – These investments are valued at the closing price reported on the major market on which the individual securities are traded. Common stock is classified within Level 1 of the valuation hierarchy.

Common collective trust funds – These investments are investment vehicles valued using the NAV provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. The NAV is a quoted price in a market that is not active and classified within Level 2 of the valuation hierarchy.

Registered investment companies – These investments are public investment vehicles valued using the NAV provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. Where the NAV is a quoted price in a market that is active, it is classified within Level 1 of the valuation hierarchy. In certain cases, where NAV is a quoted price in a market that is not active, or is based on quoted prices for similar assets and liabilities in active markets, these investments are classified within Level 2 of the valuation hierarchy.

Corporate debt instruments, U.S. government and federal agency obligations, U.S. government-sponsored entity obligations, ABOs, CMOs and other – Where quoted prices are available in an active market, the investments are classified within Level 1 of the valuation hierarchy. If quoted market prices are not available for the specific security, then fair values are estimated by using pricing models, quoted prices of securities with similar characteristics or

discounted cash flows. When quoted market prices for the specific security are not available in an active market, they are classified within Level 2 of the valuation hierarchy.

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Synthetic investment contracts – Fair value is based on the underlying investments. The underlying investments include government agency bonds, corporate bonds, CCTs, ABOs and CMOs. Because inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, synthetic investment contracts are classified within Level 2 of the valuation hierarchy.

Guaranteed investment contracts – Guaranteed investment contracts are unsecured, general account obligations of insurance companies. The obligation is backed by the general account assets of the insurance company that writes the investment contract. The crediting rate on this product is typically fixed for the life of the investment. Fair values for traditional GICs are calculated using the present value of the contract's future cash flow values discounted by comparable duration market rates. GICs are classified within Level 2 of the valuation hierarchy.

The following table presents the financial instruments of the Master Trust at fair value by caption on the statements of net assets available for benefits and by category of the valuation hierarchy (as described above) as of December 31, 2013 and 2012. The Master Trust had no assets classified within Level 3 of the valuation hierarchy. There were no reclassifications of assets between levels of the fair value hierarchy for the period presented.

Master Trust assets measured at fair value on a recurring basis:

December 31, 2013	Level 1	Level 2	Total
Interest in common collective trusts (a)	\$—	\$412,878,005	\$412,878,005
Interest in registered investment companies (b)	288,684,301	—	288,684,301
Interest in synthetic investment contracts (c)	—	177,723,536	177,723,536
Corporate common stock (d)	78,694,750	—	78,694,750
Interest in guaranteed investment contracts	—	41,571,159	41,571,159
	\$367,379,051	\$632,172,700	\$999,551,751
December 31, 2012	Level 1	Level 2	Total
Interest in common collective trusts (a)	\$—	\$323,922,840	\$323,922,840
Interest in registered investment companies (b)	232,490,850	—	232,490,850
Interest in synthetic investment contracts (c)	—	184,046,579	184,046,579
Corporate common stock (d)	66,692,496	—	66,692,496
Interest in guaranteed investment contracts	—	39,622,255	39,622,255
	\$299,183,346	\$547,591,674	\$846,775,020

(a) This class includes approximately 4% fixed income funds, 15% equity funds and 81% target dated funds in 2013, and approximately 9% fixed income funds, 13% equity funds and 78% target dated funds in 2012. The target dated funds employ a strategy designed to become more conservative over time as the participant approaches the age of retirement.

(b) This class includes approximately 54% U.S. equity funds, 13% non-U.S. equity funds and 33% fixed income funds in 2013, and approximately 46% U.S. equity funds, 13% non-U.S. equity funds and 41% fixed income funds in 2012.

(c) This class includes approximately 2% government and government agency bonds, 3% corporate bonds, 3% residential mortgage-backed securities, 4% commercial mortgage-backed securities, 85% common collective trusts and 3% asset-backed securities in 2013, and approximately 4% government and government agency bonds, 3% corporate bonds, 4% residential mortgage-backed securities, 8% commercial mortgage-backed securities, 77% common collective trusts and 4% asset-backed securities in 2012. The CCTs within this asset class employ a strategy designed to satisfy investors seeking current income and capital appreciation.

(d) Comprised of ATI common stock.

##### 5. Income Tax Status

The Plan has received a determination letter from the Internal Revenue Service (IRS) dated December 16, 2010, stating that the Plan is qualified under Section 401(a) of the Code and, therefore, the related trust is exempt from taxation. Subsequent to this issuance of the determination letter, the Plan was amended on August 3, 2010. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualification. The plan administrator believes the Plan is being operated in compliance with the applicable requirements of the Code and,

therefore, believes that the Plan, as amended, is qualified and the related trust is tax-exempt. The plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2013 and 2012, there are no uncertain positions taken or expected to be taken. The earliest tax year open to U.S. Federal examination is 2010.

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6. Plan Termination

Although it has not expressed any intent to do so, the employing companies have the right under the Plan to discontinue their contributions at any time and to terminate their respective participation in the Plan subject to the provisions of ERISA. However, no such action may deprive any participant of any vested right.

7. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risk 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.



TDY Industries, Inc. 401(k) Profit Sharing Plan for  
Certain Employees of Metalworking Products  
EIN 25-1792394 Plan 040  
Schedule H, Line4(i) – Schedule of Assets (Held at End of Year)  
December 31, 2013

Description	Current Value
Participant loans* (4.25%, with maturities through 2018)	\$279,654
Self-directed Account:	
TDAM Money Market Portfolio	\$528
*Party-in-interest	

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the administrators of the Plan have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

ALLEGHENY TECHNOLOGIES INCORPORATED

TDY INDUSTRIES, INC. PROFIT SHARING  
PLAN FOR CERTAIN EMPLOYEES OF  
METALWORKING PRODUCTS

Date: June 12, 2014

By: /s/ Karl D. Schwartz  
Karl D. Schwartz  
Controller and Chief Accounting Officer  
(Principal Accounting Officer and Duly  
Authorized Officer)