

OCTOBER 1, 2022



**THE RESEARCH & DEVELOPMENT
TAX CREDIT REPORT to the
PENNSYLVANIA GENERAL ASSEMBLY**

Tom Wolf, Governor

C. Daniel Hassell, Secretary of Revenue

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PENNSYLVANIA RESEARCH & DEVELOPMENT TAX CREDIT - 2022 REPORT

INTRODUCTION

AUTHORIZATION

Act 7 of 1997 created the Pennsylvania Research & Development (R&D) tax credit. The R&D tax credit provision became Article XVII-B of the Tax Reform Code of 1971 (TRC). The intent of the R&D tax credit was to encourage taxpayers to increase R&D expenditures within the Commonwealth in order to enhance economic growth. The terms and concepts used in the calculation of the Commonwealth's R&D tax credit are based on the federal government's R&D tax credit definitions for qualified research expenses.

Act 7 of 1997 authorized the Department of Revenue (Department) to approve up to \$15 million in total tax credits per fiscal year. \$3 million of the \$15 million was set aside for "small businesses," which are defined as a "for-profit corporation, limited liability company, partnership or proprietorship with net book value of assets totaling...less than five million dollars (\$5,000,000)."

APPLICATION

Taxpayers must submit an application to the Department by December 1st to apply for the R&D tax credit. The credit is for qualified Pennsylvania research expenditures made in the taxable year ending in the prior calendar year. The Department has until May 1st of the following year to notify taxpayers of their approved tax credit amount.

TAX CREDIT CAP

The current cap of \$55 million, of which \$11 million is set aside for "small" businesses, has been in effect since December 2011. The cap is increased to \$60 million for fiscal year 2022-23 and onward, with small businesses receiving \$12 million, maintaining their 20% set-aside. For a history of changes in the cap, see the Legislative Changes page.

TAX CREDIT CALCULATION

The tax credit is calculated using the increase over the taxpayer's base year research expenses for qualified R&D conducted within Pennsylvania. For "not small" businesses, the tentative credit is equal to 10% of the increase in expenses. Since Act 116 of 2006, the tentative credit for "small" businesses is 20% of the increase in expenses.

TAX TYPES

The R&D tax credit may be claimed against the following taxes: the Capital Stock and Franchise Tax (CSFT), the Corporate Net Income Tax (CNIT), and the Personal Income Tax (PIT).

SALE OR ASSIGNMENT

Tax credits awarded in 2003 and later may be sold or assigned. In order to sell an unused credit, the taxpayer must file an application with DCED. The application identifies the seller and the R&D tax credit that it intends to sell, along with the buyer and the amount for which the credit is being sold or assigned. (See Legislative Changes page for more information.)

APPEALS

Act 25 of 2021 enacted an appeals process for taxpayers, brokers, and the Department concerning administration of tax credits and benefits. This includes a taxpayer's right to appeal determinations by the department. The most recent award year, 2021, is the first year in which appeals are allowed. The effects of any appeals for the current award year will be reflected in the subsequent year's report.

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LEGISLATIVE CHANGES

TAX CREDIT CAP LEGISLATION

LEGISLATION	AWARD YEARS	TOTAL CREDIT CAP	SMALL BUSINESS SET ASIDE
ACT 7 OF 1997	1997 - 2003	\$15.0 Million	\$3.0 Million
ACT 46 OF 2003	2004 - 2005	\$30.0 Million	\$6.0 Million
ACT 116 OF 2006	2006 - 2008	\$40.0 Million	\$8.0 Million
ACT 48 OF 2009	2009	\$20.0 Million	\$4.0 Million
ACT 48 OF 2009	2010	\$18.0 Million	\$3.6 Million
ACT 26 OF 2011	2011 - 2021	\$55.0 Million	\$11.0 Million
ACT 53 OF 2022	2022 FORWARD	\$60.0 Million	\$12.0 Million

OTHER LEGISLATIVE CHANGES

ACT 46 - 2003 This act allowed R&D tax credit recipients to apply to the Department of Community and Economic Development (DCED) to sell or assign an R&D tax credit if there has been no claim for allowance filed within one year from the date that the Department approved the credit. The purchaser or assignee must use the newly obtained R&D tax credit in the taxable year in which the purchase or assignment of the credit is made. The purchased or assigned R&D credit cannot be used to offset more than 75% of a tax liability for a taxable year. The purchased or assigned credit cannot be carried over, carried back, resold, or refunded. The provision to sell or assign unused R&D tax credits applies to credits awarded in December 2003 and forward, but the initial sale or assignment could not take place until at least December 2004.

Additionally, this act mandated that the Department report to the General Assembly the names of all taxpayers awarded R&D tax credits in each year starting in 2004.

ACT 48 - 2009 This act removed the one year holding period established by Act 46 of 2003. Credits awarded in 2009 and later can be sold immediately.

ACT 85 - 2012 This act repealed the sunset date for the R&D tax credit in Section 1712-B of the law, but left the reference to the sunset date in Section 1707-B unchanged.

ACT 85 - 2016 This act repealed the reference to the sunset date in Section 1707-B.

ACT 43 - 2017 This act authorizes the Department of Revenue to perform tax clearances on taxpayers prior to the awarding of a tax credit to ensure all taxpayers are compliant with tax payment and filing obligations.

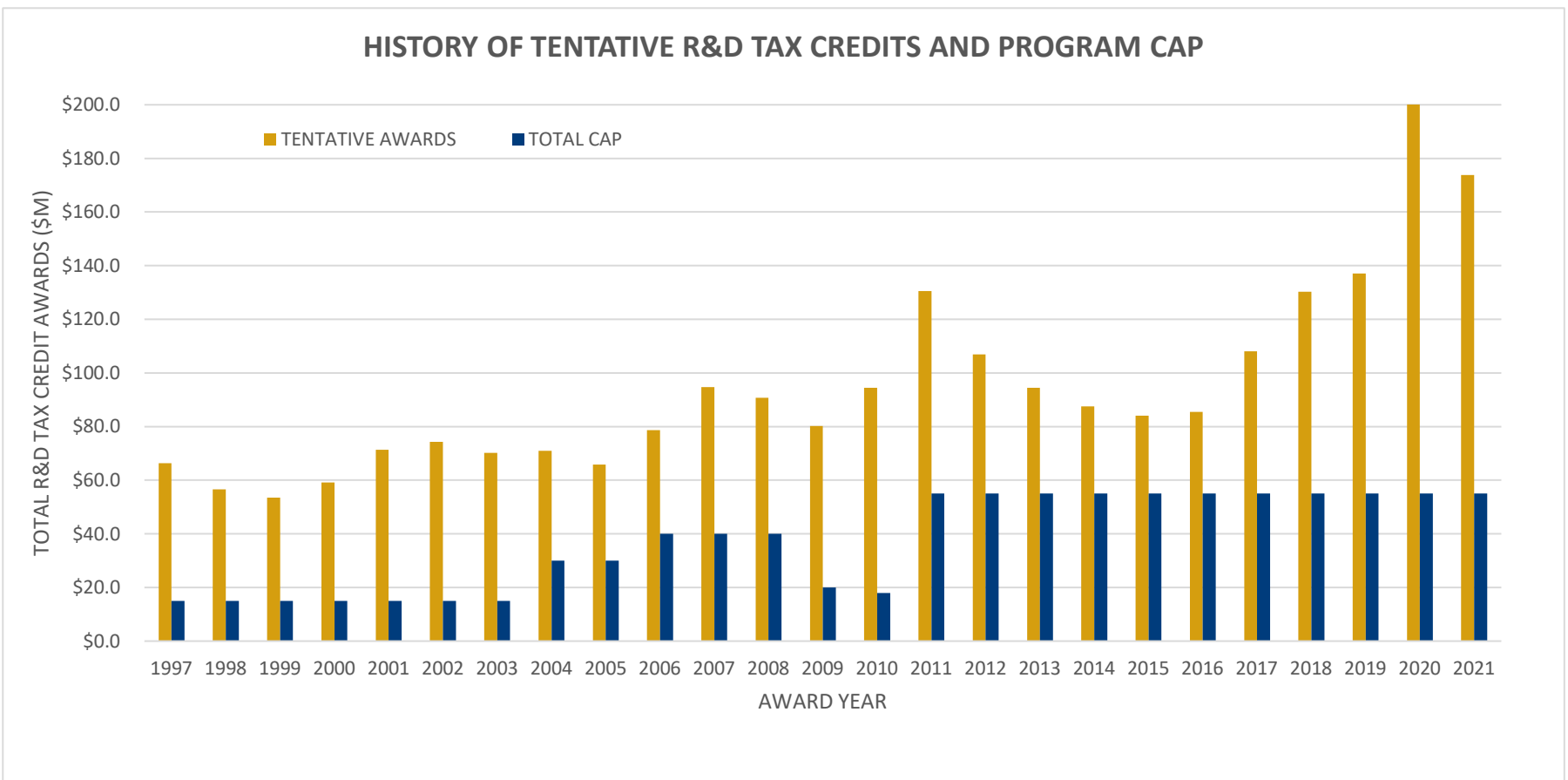
ACT 25 - 2021 This act moves several deadlines for the R&D tax credit, and creates an appeals process for tax credits. The application deadline is moved from September 15 to December 1. The act moves the deadline for departmental approval from December 15 of the calendar year following to May 1 of the second calendar year following the close of the taxable year during which the expense was incurred. The deadline for the annual report has also been moved, from March 15 of the following calendar year to October 1, starting with this 2022 report. Additional reporting requirements regarding the sale and transfer of credits were also added, starting with the 2023 report.

This act also puts in place an appeals process for taxpayers, brokers, and the Department of Revenue concerning the administration of tax credits and tax benefits.

ACT 53 - 2022 This act increases the credit cap from to \$55 million to \$60 million, effective for fiscal year 2022-23. Small businesses are earmarked \$12 million, continuing to receive 20% of the total credit awarded. The act further provides that the program cap may not be changed by the legislature before June 30, 2025.

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TENTATIVE VS. ACTUAL



Without caps on annual awards, \$2,373.0 million in R&D tax credits would have been awarded from the tax credit's inception through May 2022 (award year 2021). Actual R&D tax credit awards have totaled \$928.0 million over that timeframe. Over the years, the varying annual credit caps have reduced the amount of R&D tax credit that would have been awarded to 39.1% of what was requested.

Since inception, "small" businesses have received \$156.5 million of the \$208.3 million in tentative R&D tax credits (75.1%). In the credit's 25 years of existence, "small" businesses have requested more than the small business set aside 11 times, including each of the past seven years.

Since inception, "not small" businesses have received \$771.5 million of the \$2,164.8 million in tentative R&D tax credits (35.6%).

The table below shows tentative vs. actual credits for May 2022 awards (\$K):

ACTUAL CREDIT RANGE	APPLICANTS	TENTATIVE	ACTUAL	% OF ACTUAL	% OF TENTATIVE
\$0 - \$4.9	253	\$1,736.9	\$591.5	1.1%	34.1%
\$5.0 - \$19.9	367	\$10,640.4	\$4,017.2	7.3%	37.8%
\$20.0 - \$49.9	208	\$15,307.3	\$6,518.6	11.9%	42.6%
\$50.0 - \$99.9	87	\$15,265.6	\$5,858.9	10.7%	38.4%
\$100.0 - \$499.9	55	\$29,407.2	\$9,615.4	17.5%	32.7%
\$500.0 - \$999.9	7	\$15,689.8	\$4,389.8	8.0%	28.0%
\$1,000.0 OR GREATER	8	\$85,810.2	\$24,008.6	43.7%	28.0%
	985	\$173,857.3	\$55,000.0	100.0%	31.6%

Overall, taxpayers received 31.6% of the tentative R&D tax credit awards in the most recent program year.

The vast majority of taxpayers (98.5%) received less than \$500,000 in R&D tax credits. These business received 48.4% of total R&D tax credit awards. Taxpayers receiving \$500,000 or more in R&D credits for this program year (1.5% of total applicants) received 51.6% of total R&D awards.

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2022 RECIPIENTS

R&D CREDITS - MAY 2022 (\$M)

BUSINESS TYPE	APPLICANTS	% OF APPLICANTS	TENTATIVE	ACTUAL	% OF ACTUAL
SMALL	423	42.9%	\$16.6	\$11.0	20.0%
NOT SMALL	562	57.1%	\$157.3	\$44.0	80.0%
TOTAL	985	100.0%	\$173.9	\$55.0	100.0%

BUSINESS TYPE	APPLICANTS	% OF APPLICANTS	ACTUAL	% OF ACTUAL
MANUFACTURING	355	36.0%	\$18.5	33.6%
INFORMATION	50	5.1%	\$12.9	23.5%
SERVICES	285	28.9%	\$11.6	21.1%
MISCELLANEOUS	295	29.9%	\$12.0	21.8%
TOTAL	985	100.0%	\$55.0	100.0%

BUSINESS TYPE	2019 CNIT LIABILITY (\$M)
MANUFACTURING	\$105.4
INFORMATION	\$46.3
SERVICES	\$73.4
MISCELLANEOUS	\$15.3
TOTAL	\$240.4

"Small" taxpayers received \$11.0 million in R&D tax credits in May 2022. This is the seventh straight year that "small" taxpayers have requested more than the "small" business set-aside (\$11.0 million). "Small" taxpayers received 66.3% of their tentative award amount.

"Not small" taxpayers received 28.0% of their tentative award amount.

Manufacturers received \$18.5 million of the total \$55.0 million awarded in May 2022. The largest amount of awards in the manufacturing sector was given to the 16 pharmaceutical and medicine manufacturers, which received \$10.9 million combined.

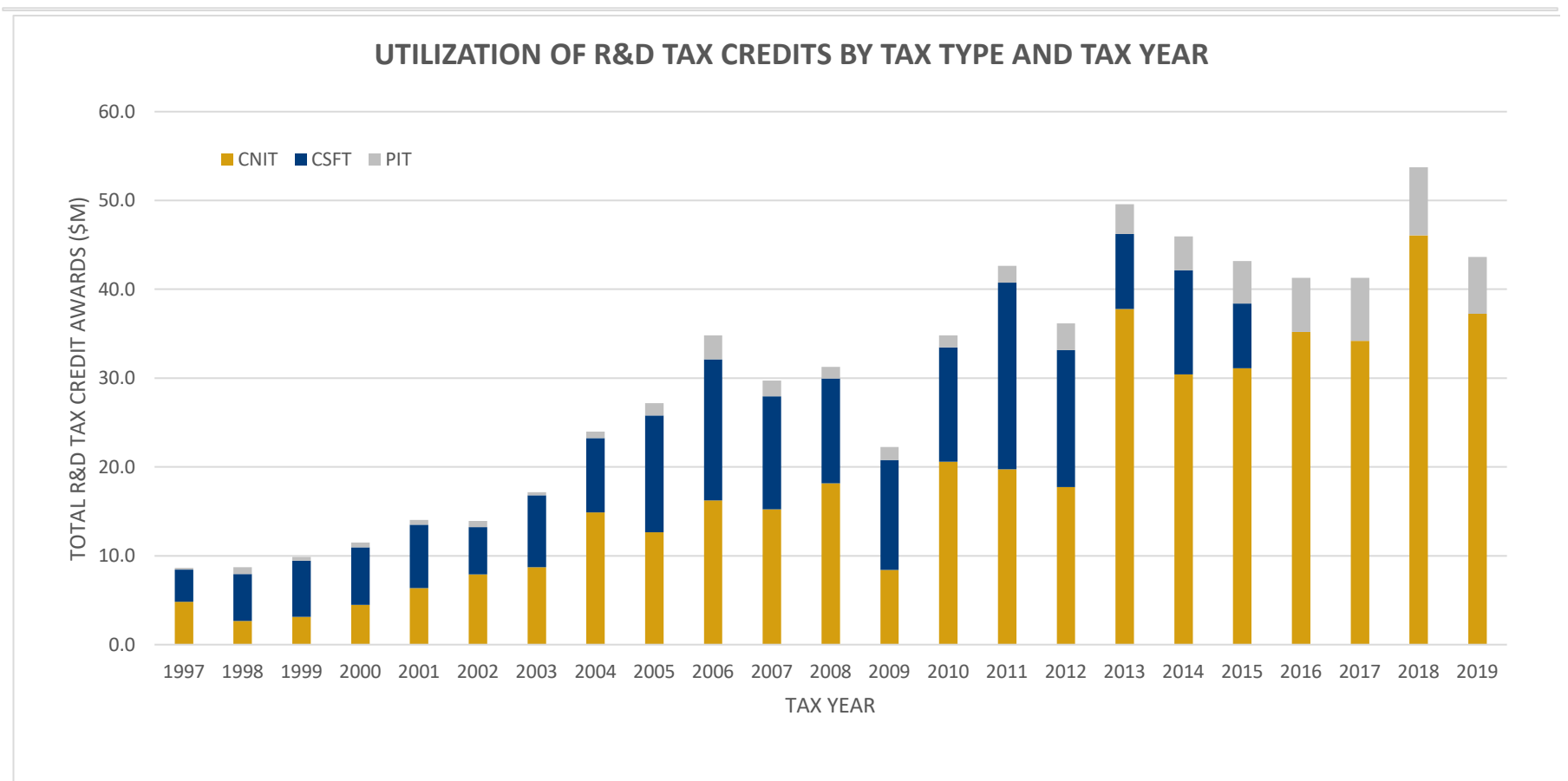
The Information sector received the largest amount of R&D tax credit per recipient - approximately \$258,000.

In the Service sector, the largest group of recipients were the 71 computer system designers, which received \$2.9 million.

In order to provide an idea of the relative value of the R&D tax credit to recipients, an analysis was conducted comparing the R&D tax credit awarded in 2021 to the total tax year 2019 self-assessed CNIT, the latest year for which reports are available for all taxpayers. Of the 985 taxpayers receiving the R&D tax credit in 2022, 165 had positive CNIT liabilities, with a total self-assessed 2019 tax year liability of \$240.4 million.

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UTILIZATION



The chart above shows the amount of R&D tax credit that has been applied against the Corporate Net Income Tax (CNIT), Capital Stock/Foreign Franchise Tax (CSFT), and the Personal Income Tax (PIT). The figures shown are from taxpayers that have directly received the tax credit from the Department, as well as those taxpayers that have purchased unused R&D tax credits. For PIT, individuals who received the credit directly are included, as are any individual owners of S corporations or limited liability companies (LLCs) who received the pass-through benefit. All credit amounts are as of September 2022.

R&D tax credit utilizations by tax type for tax years 1997-2019 (\$M):

TAX TYPE	UTILIZATION	SHARE OF UTILIZATION
CNIT	433.8	63.3%
CSFT	193.3	28.2%
PIT	58.3	8.5%
	685.3	100.0%

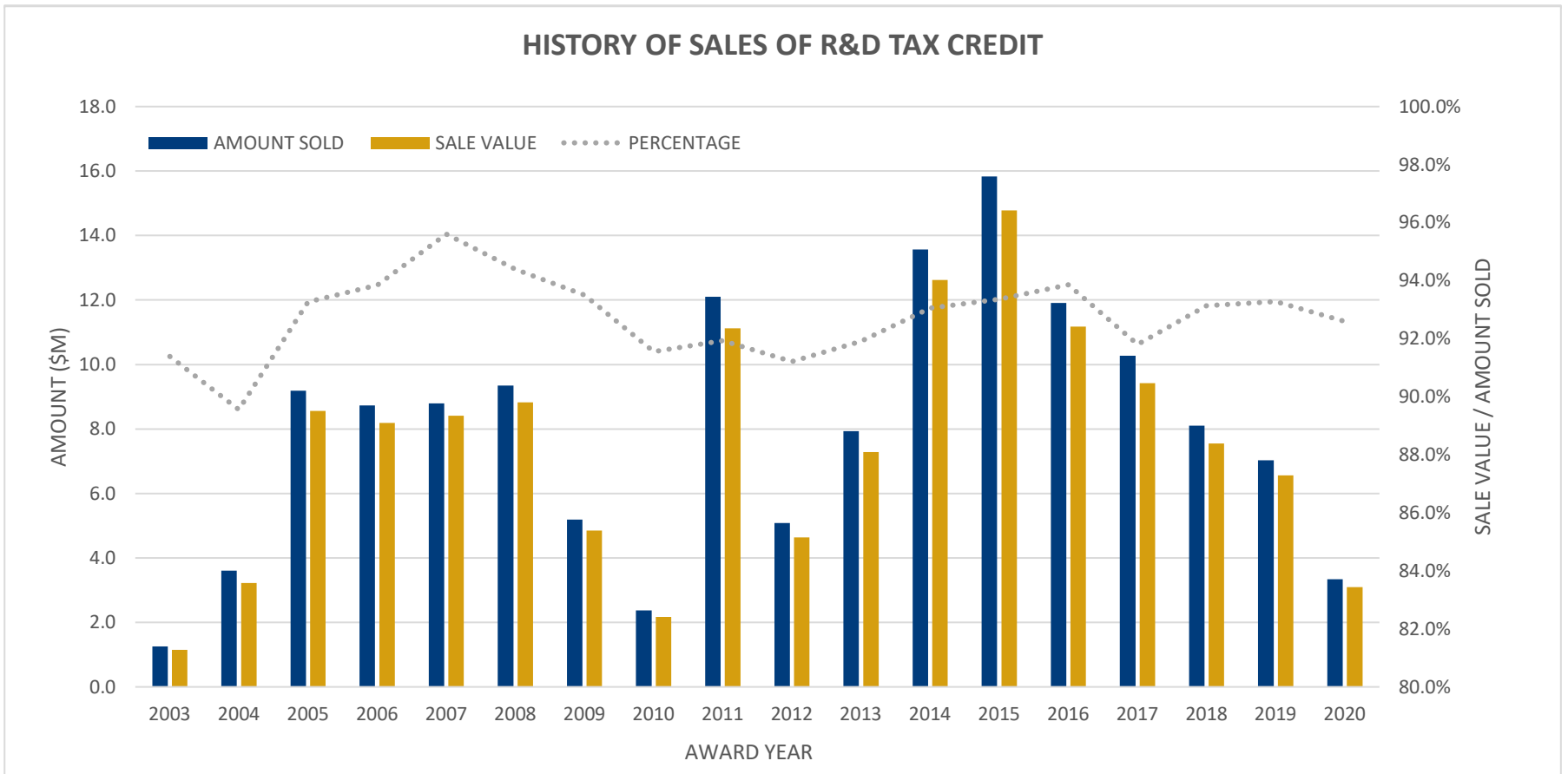
Utilizations of \$685.3M represents 73.9% of the total amount awarded between 1997 and 2019.

In the chart above, utilizations of the R&D tax credit against CSFT stop after tax year 2015 because CSFT was repealed for tax year 2016.

Also, it is important to note that the amount of tax credit applied to a particular taxable year can vary over time as a taxpayer's taxable year liability may change due to assessment or the application of other credits.

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SALES & ASSIGNMENTS



As noted on the Legislative Changes page, Act 46 of 2003 permits taxpayers with unused R&D tax credits to sell them for cash to other taxpayers who can use them. The earliest that unused R&D tax credits could be sold was December 2004, for credits awarded by the Department in December 2003. Taxpayers can only sell unused amounts of tax credits that exceed any collectible tax liability against which the credit may be offset. S Corporations may not apply to sell or assign any credit that has been passed-through to its shareholders. In order to sell an unused credit, the taxpayer must file an application with DCED. The application identifies the seller and the R&D tax credit that it intends to sell, along with the buyer and the amount for which the credit is being sold or assigned.

The buyer of the unused R&D tax credit can use it to offset up to 75% of a qualified tax liability. The buyer cannot carry forward, carry back, get a refund, or reassign the purchased credit. Further, the buyer must use the purchased tax credit against a qualified tax liability in the taxable year in which it was transferred. Lastly, the buyer must identify to the Department the taxpayer from which they bought the unused tax R&D tax credit.

As of September 2022, \$143.6 million of the \$783.0 million in R&D tax credits awarded between 2003 and 2020 have been sold (17.1%). Taxpayers purchasing the tax credits paid \$133.6 million (93.0% of the value of the credits).

The chart above shows the value of the tax credits sold and the sales price for each award year between 2003 and 2020. The dotted line shows the amount paid for the tax credits divided by the value of the tax credit.

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STATE COMPARISONS

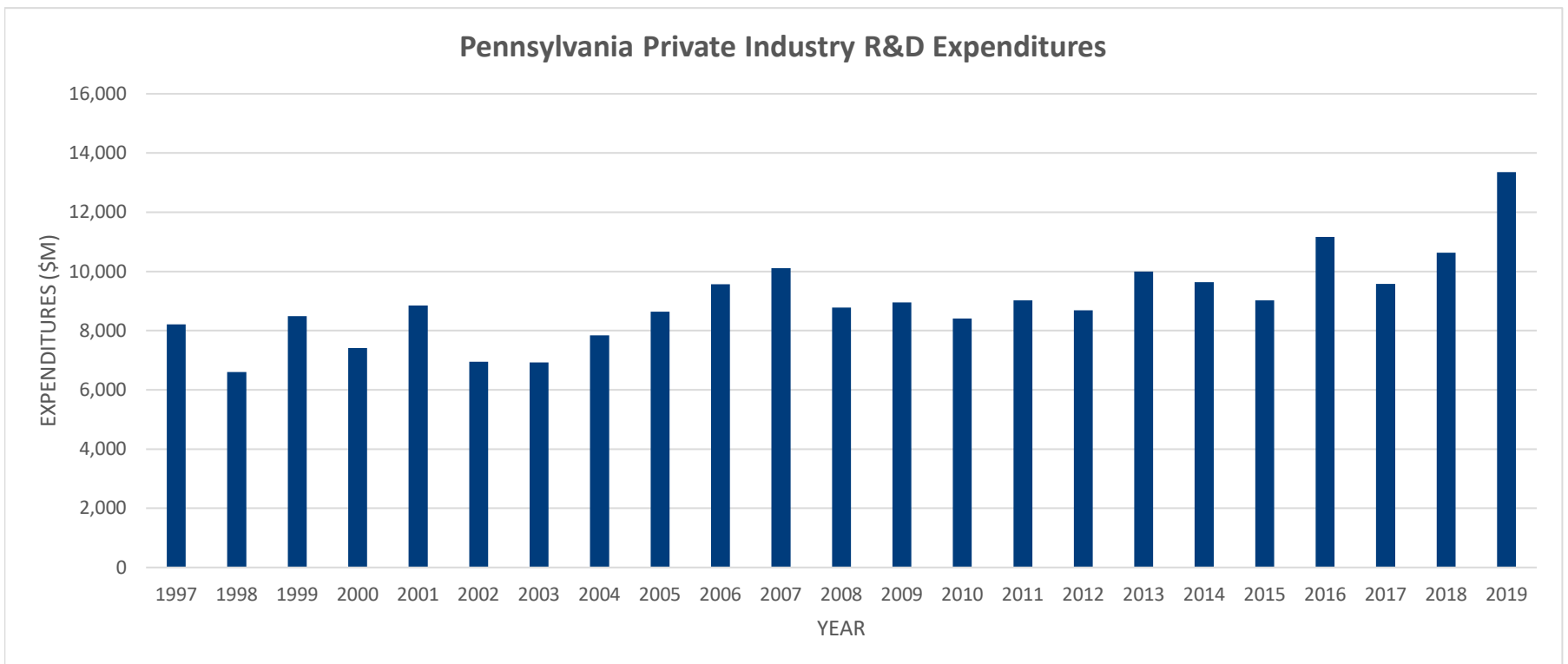
A majority of states have sought to capture the potential benefits of encouraging R&D within their state by enacting an R&D tax credit. There are 40 states, including Pennsylvania, that have provided for R&D tax credits in recent law. Credits are usually applied against either corporate net income (CNIT) tax or the personal income tax (PIT) liabilities, depending on the existing business tax structure of the state. The table below details the R&D tax credit structure of bordering states.

STATE	TAX TYPES	CREDIT CAP
DELAWARE	CNIT & PIT	None
MARYLAND	CNIT & PIT	Total R&D credits are capped at \$12 million, with \$3.5 million reserved for qualified small businesses.
NEW JERSEY	CNIT	None
NEW YORK	CNIT & PIT	Excelsior R&D credits are limited to Excelsior Jobs Program participants and contain multiple credit components. Credit components in the aggregate shall not exceed \$133 million in TY 2022; caps in other tax years vary.
		The Life Sciences R&D tax credit is capped at \$10 million per year. If the tax credits applied for exceed the cap, then the excess credits will be treated as having been applied for in the subsequent year.
OHIO	Commercial Activities Tax & PIT	None
WEST VIRGINIA	No Credit	N/A

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EFFECTIVENESS OF THE PENNSYLVANIA TAX CREDIT PROGRAM

The timeframe for R&D projects in the private sector can be lengthy. It is not uncommon for businesses to have R&D projects extend for 10 to 15 years or more. The Pennsylvania R&D tax credit has thus far had a potential impact on increasing research expenses in twenty-four years, 1997 through 2020. The chart below illustrates Pennsylvania private industry R&D expenditures by year.



Source: 1997 through 2019 from National Science Foundation

Recent studies can help point to the potential impact of R&D credits on statewide research expenditure. On the high side, a study released by the Milken Institute in December 2015 estimated that a proposal to expand the California R&D tax credit could generate an additional amount of private expenditure six times the credit increase, and over a ten-year period contribute a 0.4% increase in the state's gross domestic product. A survey of available research done by the U.S. Treasury in 2016, paints a less enthusiastic picture. They found "recent estimates suggest that an elasticity of one is still a good benchmark", meaning that for each dollar in R&D tax credit, research expenditures increased by one dollar. The report notes several studies which found R&D expenditures increased by more than the amount of the credit, and that "smaller financially constrained firms" were more likely to respond in this way.

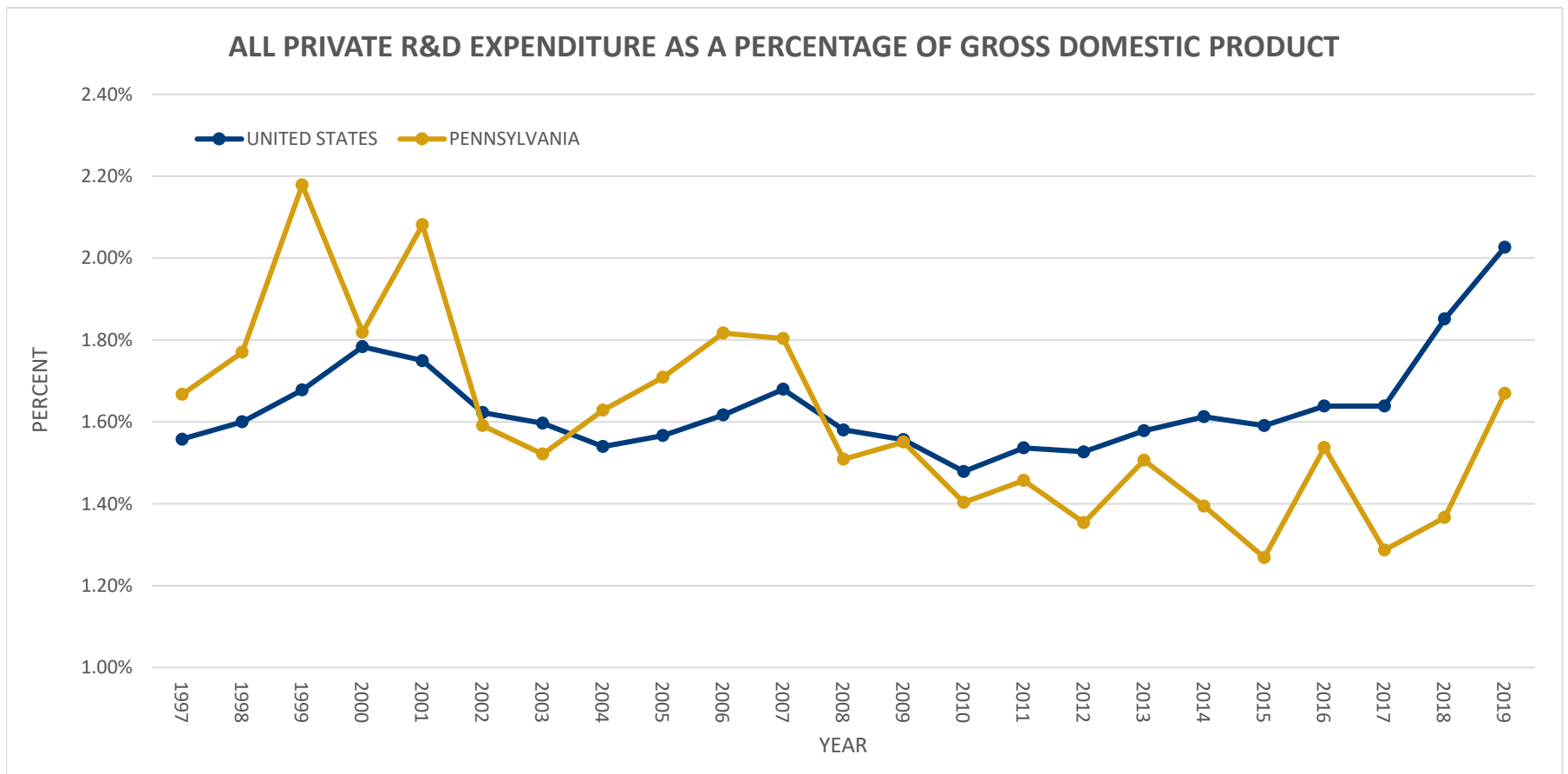
Pennsylvania has a very different mix of economic activity from California, so it is unclear that the same conclusions could be drawn relative to the Commonwealth. In fact, in 2019 California was home to \$158.9 billion in private R&D spending, over 36% of the US total, and issued between \$1.6 and \$1.8 billion in R&D tax credits. Given that massive difference in R&D infrastructure, it is likely that Pennsylvania firms are affected differently by tax incentives, with small to moderate increases in overall expenditures.

State and even country level statistical analysis is greatly complicated by small sample size, idiosyncratic behaviors amongst a few firms, and accurately comparing various taxing regimes. While a higher level analysis may not provide lessons directly applicable to Pennsylvania, a 2017 study by Russel Thomson at MIT does seek to address some of the aforementioned statistical issues. Looking at a panel data from 29 industries in 26 OECD countries over 20 years, the study found that in the long-run, incentivizing R&D through tax credits does produce increased R&D expenditures. Reducing the tax price of R&D (the breakeven benefit-cost ratio where incremental R&D investment is profitable after tax) by 10% produced a corresponding 5% increase in R&D spending. While this effect is unlikely to be exactly the same in Pennsylvania, the MIT study does suggest that R&D spending could have been positively affected over the more than two decades the R&D credit has been part of the tax code.

The R&D tax credit does generate additional economic activity, which can be seen by the tax revenue attributable to the credit. The Independent Fiscal Office found that for every dollar of R&D tax credit there was 16 cents in corresponding revenue, indicating the program partially pays for itself.

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EFFECTIVENESS OF THE PENNSYLVANIA TAX CREDIT PROGRAM (CONTINUED)



Source: 1997 through 2019 from National Science Foundation

As shown in the chart above, the pattern of total R&D expenditure as a percentage of GDP does not conform to the one seen in recent years on the national level. The drop in GDP during the recession does initially inflate the R&D share of the US economy, but once the recovery began in 2010, the R&D share is largely flat and resumes growth after 2015. By contrast the R&D share of the Pennsylvania economy is much more volatile, particularly from 2013 onward. An analysis of this deviation would require more data points, but the expansion of the natural gas industry and related manufacturing in Pennsylvania specifically may be related.

ADMINISTRATION AND EVALUATION

In order to fairly and equitably award credits to businesses within the Commonwealth of Pennsylvania, the Department has taken steps to establish an on-line application process that creates transparency in the application itself, assists with the evaluation of those applicants, and provides insight into the economic benefits of the R&D Credits awarded to those businesses.

Beginning with the 2018 R&D Application, the department created the online application system with each applicant creating a unique User ID and Password. Implementing the R&D Credit online application provided the opportunity to add valuable business rules. These rules can require data entry in certain key fields that if in the past left blank would have resulted in a denial or mail correspondence. The rules also create the opportunity to present only relevant fields to the applicant based on the entry of information, such as after selecting an entity type. Once completed, the applicant receives a unique confirmation number to reference when accessing the application in the future and to identify related correspondence.

The electronic application process provided a mechanism to create a workflow that tracked the status of the application for the taxpayer, indicating whether the application was received, pending, reviewed, approved, or rejected. Once verification of the initial application was complete, the approval process continued confirming that the applicant and/or 20 percent owner was in compliance filing and paying all appropriate tax returns.

As the Department is tasked with the integrity of the application process and credits awarded, the department moved toward a system designed to further substantiate the applicant's PA-Qualified Expenditures, Total Expenditures, Direct Wages, and 3rd Party/Subcontracted Labor. Data analytics were developed and incorporated to group selected applicants based on information from the application and applicant history. Selected applicants were asked to provide records to substantiate areas including that wages were incurred for an employee conducting qualified research and development activities in Pennsylvania.

This review process provides greater assurance that the claimed research and development activities met the statutory qualifications for a tax credit.

Act 43-2017 authorizes the Department of Revenue to perform tax clearances on taxpayers prior to the awarding of a tax credit to ensure all taxpayers are compliant with tax payment and filing obligations.

The two issues for determination are entity tax compliance and ownership tax compliance for entity owners with a 20% or greater share of ownership.

On May 1, the statutory deadline for the Department to notify R&D applicants of their awards, 7.4% of applicants were deemed noncompliant and therefore not immediately eligible to receive the credit. However, a number of applicants have filed appeals, so the final noncompliant percentage is still pending.

The Department recommends that the General Assembly consider the following changes:

Move the period in which sales and assignments may be processed by the Department to June 1 following the immediate tax year in which the credit was awarded.

Require taxpayers to claim a federal income tax credit to qualify for the state credit.

Reduce the carryforward from 15 years to 5 years. This would ease the Department's administrative burden.

Many of the Department's recommendations from prior reports have become law due to Act 25 of 2021. Specifically, Act 25 instituted the following recommendations:

Created an appeals process for taxpayers, brokers, and the Department of Revenue concerning the administration of tax credits and tax benefits.

Moved the application deadline from September 1 to December 1. **[This sentence was corrected on 7/26/2023 to fix a typo on the application due date.]**

Moved the deadline for Departmental approval from December 15 of the calendar year to May 1 of the second calendar year following the close of the taxable year during which the expense was incurred.

Authorized the Department to require a taxpayer to hire an independent CPA to perform agreed upon procedures.

Allowed the Department to recapture credits in applicable cases.

Required tax credits brokers to be registered with the Department.

PENNSYLVANIA RESEARCH & DEVELOPMENT TAX CREDIT - 2022 REPORT

APPENDIX - TAXPAYERS RECEIVING CREDIT FOR APPLICATIONS IN 2019, 2020, OR 2021

NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
JANSSEN RESEARCH & DEVELOPMENT LLC	6,841.2	6,332.6	7,844.6	6,841.2	6,332.6
COMCAST HOLDINGS CORPORATION	6,466.0	4,857.3	3,687.3	6,466.0	4,857.3
UATC LLC		1,688.3	3,590.8		
VANGUARD GROUP INC		595.5	2,833.7		595.5
GOOGLE LLC	2,360.8		2,217.0		
BAE SYSTEMS LAND & ARMAMENTS INC	114.4	680.5	1,352.0	114.4	
ARGO AI, LLC	592.3	740.7	1,334.5		
JANSSEN BIOTECH INC	184.5	644.1	1,148.7	184.5	644.1
BOEING CO	1,247.1	740.0	818.4	805.3	
ANSYS INC	530.2	456.9	813.9	530.2	456.9
SAP AMERICA INC	719.9		640.0	719.9	
AMAZON.COM SERVICES LLC			563.0		
FACEBOOK INC	174.6	268.6	541.0	174.6	268.6
CSLB HOLDINGS, INC.	1,044.0	772.6	509.1	373.4	431.6
PASSAGE BIO INC			504.4		
MICROSOFT CORPORATION			404.1		
CERNER CORPORATION	268.0	265.8	378.3	268.0	265.8
RE2 INC		111.5	305.0		10.9
ELI LILLY & COMPANY	221.8	96.1	303.0	43.8	96.1
SHIRE HUMAN GENETIC THERAPIES INC	117.4	121.3	294.4	117.4	121.3
DUOLINGO INC	175.3	129.9	269.3	175.3	4.0
VICTAULIC COMPANY	54.0	70.6	261.1	54.0	70.6
APPLE INC		16.4	255.1		16.4
TITAN ROBOTICS INC			246.2		
BAYER HEALTHCARE LLC	165.7	36.0	242.5	165.7	
SEI GLOBAL SERVICES INC	655.1	75.2	237.0	130.6	
ASTROBOTIC TECHNOLOGY INC	46.5	171.2	231.6		39.6
EISAI INC		106.1	228.7		106.1
CISCO SYSTEMS INC	145.1		210.0	145.1	
THERAPYNOTES LLC		171.8	205.9		171.8
CARPENTER TECHNOLOGY CORPORATION		267.7	196.7		267.7
CENTURY THERAPEUTICS LLC			191.9		
COBHAM ADVANCED ELECTRONIC SOLUTIONS INC	24.2		187.7		
PRECISION PIPELINE LLC			184.2		
GT GLOBAL HOLDINGS INC			183.3		
IQVIA INC	309.1	179.6	175.7	309.1	179.6
COLDEGE TECHNOLOGIES INC		127.9	168.4		75.9
DICKS SPORTING GOODS INC		98.9	168.4		98.9
DOUGLAS PHARMA US INC.		122.0	160.8		45.8
INOVALON INC		59.6	160.0	28.8	
OMNICELL INC			150.6		
TMUNITY THERAPEUTICS INCORPORATED		168.7	145.6		
BLACK KNIGHT FINANCIAL SERVICES INC	13.0	105.4	145.2	13.0	105.4
ELSEVIER INC	58.8	90.4	143.8	58.8	90.4
PENN NATIONAL GAMING INC			140.8		
BILL ME LATER, INC		111.4	137.2		
KRYSTAL BIOTECH INC	47.6	96.7	135.4		
PFNONWOVENS US INC			134.3		
CABALETTA BIO INC.			133.6		

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APPENDIX - TAXPAYERS RECEIVING CREDIT FOR APPLICATIONS IN 2019, 2020, OR 2021

NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
PRODUCTION SYSTEMS ACQUISITION CO LLC	110.2	159.9	132.8		
PROVIDENCE ENGINEERING CORPORATION	15.0		130.8	15.0	
SCHELL GAMES LLC		15.9	130.6		15.9
BENTLEY SYSTEMS INCORPORATED	16.0		127.7	16.0	
COMMUNICATIONS TEST DESIGN INC	168.9	94.7	124.4	168.9	94.7
AMERICAN HYDRO CORPORATION		217.3	124.0		
ENERSYS DELAWARE INC	93.2	92.8	124.0		
DHUY ENGINEERING INC			123.7		
PPG ARCHITECTURAL FINISHES INC			122.3		
ABRIDGE AI INC.		74.6	120.9		
MAVEN MACHINES, INC.	57.6	11.9	119.7		
ATHENA GLOBAL ADVISORS, INC.	68.1	126.6	117.3	68.1	126.6
GLOBAL PAYMENT HOLDING COMPANY			116.4		
ERIE INDEMNITY COMPANY AS AIF FOR ERIE I		67.9	115.9		
SENSOR NETWORKS INC	100.6		115.5	18.8	
ROADBOTICS INC			113.7		
FARMERS PRIDE INC	120.7		113.5	102.2	
PHASEBIO PHARMACEUTICALS INC		53.8	109.6		
FUJIREBIO DIAGNOSTICS INC	210.7	150.7	107.1	19.4	2.3
ADVENT DESIGN CORPORATION	48.1		105.8	48.1	
SHARP EDGE LABS INC	27.6	57.2	104.0	27.6	57.2
GENEOS THERAPEUTICS, INC		67.4	97.1		
CAMELOT US ACQUISITION LLC			96.4		
THE CLEMENS FAMILY CORPORATION	42.2		94.5	42.2	
MSA SAFETY INCORPORATED		37.8	92.9		37.8
ADC THERAPEUTICS AMERICA INC	91.4	61.0	92.3		
ZYNERBA PHARMACEUTICALS INC	44.9		91.1		
B BRAUN MEDICAL INC			90.0		
GECKO ROBOTICS INC	158.5	62.0	87.9	158.5	62.0
GHOST ROBOTICS LLC		42.3	86.7		
RELIANCE STANDARD LIFE INS CO			84.5		
AMAZON WEB SERVICES INC			83.7		
INCYTE CORPORATION			83.7		
AUGUSTINE PLASTICS INC	40.3		83.1	40.3	
TELETRACKING TECHNOLOGIES INC	17.6	22.5	82.6	17.6	22.5
KUHN TOOL & DIE CO	30.8	67.8	81.0	30.8	23.4
MACHINED METALS MANUFACTURING GROUP, INC			80.3		
JAZZ PHARMACEUTICALS INC	132.1	115.0	80.2	132.1	115.0
GURU TECHNOLOGIES INC	45.0	63.6	80.0	45.0	63.6
SYNERGY MEDIA GROUP LLC	19.9	53.1	79.2		
MARINUS PHARMACEUTICALS INC		105.2	78.2		
HADFIELD ELEVATOR LLC			77.8		
IRALOGIX, INC			77.4		
RHOADS INDUSTRIES, INC.	160.6	25.5	77.2		
JETPACK WORKFLOW INC	49.2		74.2	49.2	
MAC SAFETY INC			74.0		
ASPINITY, INC		43.1	73.9		
SUSQUEHANNA CIVIL INC	27.3	32.3	73.5	27.3	32.3
PPG INDUSTRIES INC	62.4	2.6	73.3	62.4	

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APPENDIX - TAXPAYERS RECEIVING CREDIT FOR APPLICATIONS IN 2019, 2020, OR 2021

NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
DEACOM INC	215.8	28.3	73.1	119.1	14.7
TASTEPOINT INC		53.2	73.0		
FENIX GROUP INTERNATIONAL LLC	60.7	28.7	70.9	60.7	
J B POINDEXTER & CO INC			70.0		
FQT HOLDING COMPANY LLC			70.0		
GENERAL DYNAMICS LAND SYSTEMS INC			69.7		
APOLLO NEUROSCIENCE INC	21.8	51.5	68.5	21.8	51.5
BANKMOBILE TECHNOLOGIES INC.			68.5		
SHEWARD PARTNERSHIP LLC			67.9		
ARBUTUS BIOPHARMA INC		62.0	67.2		37.5
IKOS HOLDINGS INC	35.7	61.9	65.7	35.7	61.9
LUTRON ELECTRONICS CO INC			65.1		
SCRUB DADDY INC	34.8	38.7	65.0	34.8	38.7
INDOVINA ASSOCIATES ARCHITECTS	31.3	29.0	64.3	31.3	
AGGREGATES EQUIPMENT INC	151.9	38.0	64.3	151.9	37.3
CODY COMPUTER SERVICES, INC.	1.8	22.8	63.3		
PROFI-VISION, INC		53.5	63.3		
SELECT MEDICAL CORPORATION		13.9	63.1		13.9
TITUS COMPANY	39.1	32.8	62.2	39.1	32.8
GALERA THERAPEUTICS INC	24.4	30.4	61.6	24.4	30.4
STP INVESTMENT SERVICES LLC	47.9	63.9	61.0	10.8	21.7
ENTERIN INC			61.0		
PROMPTWORKS, LLC	65.4	69.6	60.8		
IMVAX INC		15.4	60.5		
LUNGPACER MEDICAL USA INC	136.9	34.4	60.3		
DIGSAU ARCHITECTURE PC			59.9		
DELCO INNOVATIONS		68.8	59.8		
MEDCRYPT INC	12.5		59.5		
ABBOTT ACQUISITION COMPANY, LLC	28.7	36.2	59.4	28.7	36.2
KROLL BOND RATING AGENCY LLC	78.8	78.8	59.4	9.1	
SARRIS CANDIES, INC.	0.7	8.3	58.9	0.7	8.3
REMCOM, INC.	19.5	66.7	58.1	19.5	30.4
NUIX NORTH AMERICA INC	100.1	82.3	58.0		7.3
DOSSIER SYSTEMS INC	10.2	20.9	57.6	10.2	20.9
KAARTA, INC	45.4	61.8	57.4	45.4	61.8
AEROTECH INC	55.0	35.1	56.9	55.0	35.1
DURA METAL PRODUCTS CORP			56.8		
ADVANCED NETWORK PRODUCTS, INC.			56.5		
GP ENERGY PRODUCTS			56.3		
PROCESS COMBUSTION CORP	130.8		56.3	130.8	
ENTECH ENGINEERING, INC.			56.2		
PULFLEX TECHNOLOGIES LLC			56.2		
STREAMLIGHT INC	60.0	20.1	56.1	60.0	20.1
MOBILE OUTFITTERS LLC (CURIO HOLDING CO)	29.9	81.1	56.1	29.9	81.1
HIGH INDUSTRIES INC			56.1		
RETURN LOGIC, INC	17.6	15.2	56.0	17.6	15.2
GENERAL DYNAMICS ORDNANCE AND TACTICAL			55.9		
CYTOAGENTS, INC.			55.3		
MCCARL'S SERVICES INC.		22.2	53.9		

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
FIRST QUALITY BABY PRODUCTS, LLC			53.9		
ULTRAGENYX PHARMACEUTICAL INC	26.0	34.7	53.1	17.7	
GENERAL DYNAMICS INFORMATION TECHNOLOGY		26.0	52.7		26.0
GUIDEWIRE SOFTWARE INC	96.8	57.5	52.7	30.6	
BRASKEM AMERICA INC		47.3	52.0		47.3
GREENPHIRE INC			51.5		
STEM MONSTERS CORPORATION		24.7	51.3		22.1
CARNEGIE ROBOTICS LLC			51.0		
BERKADIA COMMERCIAL MORTGAGE LLC		59.2	51.0		59.2
NANOGRIPTech INC		14.3	50.2		14.3
QUIRE LLC	18.7	36.1	49.4	18.7	
MESH INC		34.6	49.2		
VESPER MEDICAL INC		11.6	49.1		
OBERG HOLDING COMPANY, LLC		37.0	48.4		
LAMINAR FLOW INC	18.4	15.2	47.9	18.4	15.2
PNEU DART INC		37.2	47.7		37.2
GREYGHT, INC. DBA MOBINITI	22.0	42.1	47.3	22.0	
PANACEA TECHNOLOGIES INC.		10.7	47.1		
KCF TECHNOLOGIES, INC.	92.1	28.3	46.9		
AEC GROUP LLC			46.6		
RUBY RENEWABLE RESOURCES LLC			46.3		
P J DICK INCORPORATED		19.0	46.0		19.0
RLB VENTURES INC D/B/A BENCH DOGS			46.0		
ORCHESTRA BIOMED, INC		25.7	45.9		10.4
APPLIED SYSTEMS ASSOCS INC	49.3	78.3	45.4	49.3	78.3
PAK-IT DISPLAYS LLC			45.3		
ADVANCED COOLING TECHNOLOGIES, INC.	21.5	52.0	45.1	21.5	52.0
BIMBO BAKERIES USA, INC	133.0	76.4	45.0	133.0	76.4
CURRY SUPPLY HOLDINGS, INC.		24.1	45.0		24.1
HARBOR BUSINESS COMPLIANCE CORPORATION	68.2	82.6	44.9	68.2	82.6
POCKET EXPERT LLC	18.2	38.5	44.7		
PINNACLE 21 LLC	103.8	24.1	44.5	103.8	24.1
VWR FUNDING INC			44.3		
COOK MYOSITE INCORPORATED	44.3	43.1	44.2		
INTERACTIVE LIQUID LLC	73.0	86.9	44.2	73.0	86.9
VELTEK ASSOCIATES INC			43.9		
XYLOCOR THERAPEUTICS INC		1.8	43.8		
BOHLER ENGINEERING PA LLC	68.2	29.5	43.6		
DIGITAL DREAM LABS			43.4		
PHOENIX CONTACT DEVELOPMENT &		23.1	43.4		
LARIMAR THERAPEUTICS INC			43.2		
GRIDWISE INC		18.8	43.0		
KENNAMETAL INC			41.9		
INTEGRATED DEVELOPMENT PARTNERS, LLC			41.8		
DRAEGER MEDICAL SYSTEMS INC			41.7		
PHRG HOLDING, INC.		26.4	41.5		26.4
CORE BUSINESS SOLUTIONS INC	33.5	30.1	41.5	11.8	22.1
GRAYBILL MACHINES INC	47.4	55.3	41.3	27.4	
ALTAIR INTEGRATED SERVICES LLC		45.7	40.7		23.4

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
PARAGON ENGINEERING SERVICES INC	6.2	34.6	40.6	6.2	34.6
BRIO DESIGNS PARTNERS LLC	4.7		40.3		
ADEPT GROUP HOLDINGS LLC	51.2	48.7	40.1		
PENN STATE CONSTRUCTION, J&D, LLC	20.3	22.2	40.1	20.3	
ANTHONY FOLINO CONSTRUCTION, INC		29.2	40.0		
SENTINEL PROCESS SYSTEMS INC	23.6	8.5	39.9	4.8	
AAYUNA INC	39.6	29.2	39.8	39.6	29.2
D.GILLETTE INDUSTRIAL SERVICE INC.		24.2	39.7		
ARROW INTERNATIONAL LLC	41.5		39.1	41.5	
MOBILION SYSTEMS INC			39.1		
GRAVIC INC	12.4	43.9	39.0	12.4	
AREA TOOL & MANUFACTURING INC	25.0	16.6	39.0		
NETBEEZ, INC.	23.7	22.8	38.9	0.5	
PRO SHOPKEEPER COMPUTER SOFTWARE COMPANY	31.6	22.9	38.7	31.6	22.9
WEST PHARMACEUTICAL SERVICES INC	72.2	31.5	38.7	72.2	31.5
KINSLEY CONSTRUCTION INC	24.0	32.1	37.9	24.0	32.1
ENVIRONMENTAL CONTROL SERVICES II INC	7.2		37.7	7.2	
SAA ARCHITECTS INC		18.8	37.6		18.8
SNIFI INC	72.8	52.2	37.4	72.8	
MILNES ENGINEERING INC		31.2	37.4		
ENERGY MANAGEMENT SYSTEMS INC		47.9	36.7		19.7
RIEKER INSTRUMENT COMPANY INC		71.6	36.5		
ONE HEALTH SOLUTIONS, LLC			36.4		
MEI INC	87.8	36.1	36.4	81.4	5.4
COBBS CREEK HEALTHCARE, LLC			36.3		
WEBSTAIRANT STORE INC		1.4	36.2		1.4
INSTINCT SCIENCE LLC	23.5	26.0	36.1	23.5	26.0
INGMAR MEDICAL LLC	23.6	35.6	35.6	1.1	
INDEPENDENCE STEEL INC			35.3		
FXI INC			35.2		
CRYOCONCEPTS LP	34.0	65.5	35.1	34.0	
SAMTEC INC	9.5	19.8	35.0	9.5	
HAMILL MANUFACTURING COMPANY			34.9		
JOHNSTON MECHANICAL, LLC	16.3	27.2	34.7	16.3	
SAGE TECHNOLOGY SOLUTIONS INC	10.1	7.3	34.4	10.1	7.3
THE OTT GROUP, INC.	42.5	28.1	33.6		
CAMPUS ESP INC	18.5	18.4	33.2	18.5	18.4
SUVODA LLC		16.6	33.1		
ENERGYCAP INC.	15.1	33.8	33.0	15.1	33.8
ADVERTISING SPECIALTY INSTITUTE INC	62.5	26.3	32.8	48.7	26.3
LINDY PAVING INC	16.8	27.3	32.6	16.8	27.3
OMEGA SYSTEMS CONSULTANTS INC	16.2	16.1	32.6		
UNITED METAL FABRICATORS INC	5.6	13.3	32.3	5.6	
CHANNELAPE INC	45.3	31.6	32.3	45.3	31.6
RIVER POINT TECHNOLOGY			32.0		
MITSUBISHI ELECTRIC POWER PRODUCTS INC			31.8		
CHROMATAN INC			31.7		
MKSD, LLC		71.1	31.7		
MK FIRE PROTECTION & SUPPLY LLC			31.7		

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
SERIES U OF UM PARTNERS LLC	7.1	7.4	31.7		
GENERIAN PHARMACEUTICALS INC			31.6		
INVESTEDGE INC	17.2	3.8	31.6	10.2	3.8
KEF ROBOTICS INC		17.9	31.5		17.9
MICROCHIP TECHNOLOGY INCORPORATED	2.8		31.4		
INNOVATIVE SUPPLY SOLUTIONS LLC			31.1		
ASTARTE MEDICAL PARTNERS INC			30.3		
PIXELLE SPECIALTY SOLUTIONS LLC		32.2	30.2		
NAMSCO PLASTIC INDUSTRIES INC			30.2		
MYSTIC ASSEMBLY & DECORATING CO., INC.			30.1		
X-NAV TECHNOLOGIES LLC	34.1	7.1	29.9		
JARUS TECHNOLOGIES INCORPORATED			29.9		
EMDESCO INC			29.9		
MATERIALS RESEARCH & DESIGN INC	159.8	55.2	29.8	159.8	55.2
PRECISION SPRINKLER SERVICES INC			29.7		
SENTIENT INVESTMENT CORPORATION	0.7	1.5	29.6	0.7	1.5
PROCHEMTECH INTERNATIONAL INC			29.4		
BERNARDON PC		5.2	29.3		
E F E LABORATORIES INC			29.0		
THREE10 SOLUTIONS		11.0	28.8		
NEUEXCELL THERAPEUTICS INC	19.6	15.2	28.5	19.6	15.2
HEBI ROBOTICS INC	33.4	16.8	28.4	33.4	16.8
AVID RADIOPHARMACEUTICALS INC		9.0	28.3		1.8
C360 TECHNOLOGIES INC	10.4	6.2	28.3		
WEIS MARKETS INC		19.9	28.1		19.9
TRINITY AUTOMATED SOLUTIONS, INC.			28.1		
INTEGRESS INC		1.8	28.1		1.8
FOX CHASE MANAGEMENT, INC.		30.8	27.9		
PERPAY, INC	6.1	15.6	27.8		
LAKE REGION MEDICAL, INC.			27.8		
MULTI COLOR CORPORATION	41.1	23.4	27.7	41.1	23.4
LLI ENGINEERING LLC			27.5		
ALPHATHERA, LLC		23.8	27.4		23.8
MESHNET, INC.	5.6	18.5	27.3	5.6	18.5
GIORGI GLOBAL HOLDINGS			27.1		
NOVO NORDISK INC.			27.1		
EUROFINS LANCASTER LABORATORIES, INC			27.0		
PROXICAST, LLC	5.6	20.5	27.0		
G E M MECHANICAL SERVICES INC	4.2	16.2	26.8	4.2	16.2
LEHIGH DEFENSE LLC	2.9	20.8	26.7		
LIQUID FILLING SOLUTIONS LLC		17.4	26.6		17.4
EAFAB CORPORATION	8.6	8.6	26.4	8.6	8.6
ONEX INC	18.2	18.4	26.4	18.2	
GWYNEDD MANUFACTURING INC.	50.1	15.7	26.4	50.1	
FAZIO MECHANICAL SERVICES INC			26.1		
AMERICAN MILLWORK & CABINETRY INC		57.7	26.1		31.5
HERBERT ROWLAND & GRUBIC INC		7.8	26.1		7.8
KERITON INC	4.3	22.0	25.8	4.3	22.0
SHEETZ INC	7.3	2.3	25.6	7.3	2.3

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
PRINTMAIL SOLUTIONS INC	27.9	20.5	25.5	27.9	20.5
HATZEL&BUEHLER INC		12.2	25.5		12.2
RASER ACQUISITIONS LLC			25.5		
J D ECKMAN INC	74.3	22.4	25.4	74.3	22.4
ACUTEC PRECISION AEROSPACE, INC	22.3	13.8	25.3	22.3	
ACCIPITER SYSTEMS INC	0.6	10.9	25.3	0.6	10.9
JOHN R BROMILEY COMPANY INC	49.3	64.3	25.2		
FRANKLIN FARMS EAST INC			25.0		
MICRO-MOLD CO., INC.	3.6	143.4	24.8	3.6	143.4
VECTOR SYSTEMS			24.6		
JOHNSON MATTHEY INC			24.5		
VIPER NETWORK SYSTEMS LLC	27.9	29.9	24.4	27.9	
YORK PRECISION MACHING AND HYDRAULICS LL			24.3		
FIRST QUALITY PRODUCTS, INC.			24.3		
ALTRA INDUSTRIAL MOTION CORP.		18.8	24.3		18.8
BURKENTINE & SONS BUILDERS INC			24.3		
ECOLAB INC			24.2		
TRAFFIC PLANNING AND DESIGN, INC.			24.1		
NET HEALTH SYSTEMS INC	73.3	14.7	24.0		
LEAGUESIDE	38.1	40.8	24.0	38.1	40.8
SOCIAL MEDIA INFORMATION LLC		20.2	24.0		
BRENTMARK			23.6		
PDM CONSTRUCTORS, LLC	8.5	4.6	23.6	8.5	
GOLDEN PROPORTIONS MARKETING INC			23.5		
LIBERTY CC BEVERAGES PARENT LLC			23.5		
AMERIHEALTH INC			23.4		
SPOTME FITNESS COMPANY		21.6	23.3		
RAPID FLOW TECHNOLOGIES INC		19.5	23.3		19.5
FOCUS FORWARD LLC		11.7	23.0		
MID ATLANTIC TIMBERFRAMES LLC			22.9		
FOUR SEASONS PRODUCE INC		4.1	22.7		4.1
APOSTROPHE TECHNOLOGIES INCORPORATED			22.6		
RIMSYS, INC.			22.4		
TTMS, INC.		27.4	22.4		
HUMANISTIC ROBOTICS INC			22.3		
REFRIGERATION DESIGN & SERVICE, INC.			22.3		
DRUG PLASTICS & GLASS CO INC	40.6	7.5	22.2		7.5
SOCO, INC.		12.2	22.1		
STRADOS LABS LLC	4.1		22.1	4.1	
VEGAN TREATS INC	12.5	9.1	22.1		9.1
AMERICAN DENTAL DESIGNS INC		23.5	22.0		23.5
MBT PRODUCT DESIGN & MANUFACTURING INC			21.9		
PARAGON CONSULTING SERVICES INC			21.7		
VENATORX PHARMACEUTICALS INC	119.7	57.7	21.6		
GOODVILLE MUTUAL CASUALTY CO			21.5		
SIEMENS MEDICAL SOLUTIONS USA INC			21.5		
OHR PHARMACEUTICAL, INC.			21.5		
ITR LLC		4.9	21.5		
SIGNALLAMP HEALTH LLC		19.7	21.4		

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
PENCOYD IRON WORKS INC			21.4		
SOUDERS INDUSTRIES INC		12.0	21.3		12.0
APTAGEN, LLC	3.6	13.9	21.1		
TESSY PLASTICS CORP.		53.7	21.1		
THE CLOUSER GROUP			21.1		
INSTRUMENTATION INDUSTRIES INC			21.1		
NURSING ABC, INC.			21.1		
MISSION SURGICAL INNOVATIONS			21.0		
ANALYTICAL GRAPHICS INC	130.6	77.5	21.0	8.1	33.6
K&L GATES LLP			20.9		
ADVANCE MANAGEMENT SERVICES LLC			20.9		
ROBOTWITS LLC	20.4	42.6	20.8		
BENCHMARK CONSTRUCTION COMPANY INC	14.3	18.7	20.8	14.3	
CONCURRENT ELECTRONIC DESIGN AUTOMATION	8.8	3.9	20.8		
MEPUSH INC	5.4	23.9	20.6		6.9
LUCAS SYSTEMS INC	33.7	25.1	20.6	33.7	25.1
ROBERT BOSCH LLC	30.9		20.5	30.9	
BIOEX CONSULTING LLC			20.5		
MIWD HOLDING COMPANY LLC			20.4		
YORK BUILDING PRODUCTS CO INC		16.9	20.1		
GAP HOLDING COMPANY INC	29.9	13.7	20.1	21.0	9.6
DRAYNOW LLC		14.9	20.1		
ALLTURNA LLC			20.0		
CHAMPION HOME BUILDERS INC			19.9		
ASCENSUS HOLDINGS INC			19.8		
AMUNEAL MANUFACTURING CORP	47.3		19.7	47.3	
NVIDIA CORPORATION	83.1	73.7	19.7	33.0	28.8
GENERAL DYNAMICS MISSION SYSTEMS INC	28.9	30.0	19.7	28.9	30.0
GAMRY INSTRUMENTS INC	5.8	8.0	19.5	5.8	8.0
VINCENT PAYMENT SOLUTIONS, INC	69.3		19.4		
GILBERT ARCHITECTS INC			19.3		
ENGINUITY LLC			19.2		
TMNA SERVICES LLC	134.1	19.0	19.1	134.1	
WECREATE LLC	20.8	17.6	19.1	10.0	
OLIN PARTNERSHIP LTD			19.1		
BERK INTERNATIONAL LLC	3.9	0.5	19.1	3.9	0.5
NEUROFLOW, LLC	38.9	10.3	18.9		
PASCO TOOL & PLASTICS INC	3.4		18.9		
E B ENDRES, INC.	28.4	22.5	18.8	28.4	
PETCO ANIMAL SUPPLIES STORES INC		1.3	18.8		1.3
HYTECH TOOL & DESIGN CO	9.9	11.7	18.7	9.9	11.7
DUCK DUCK GO INC	4.7	11.6	18.7	4.7	11.6
SOUTHCO INC	63.0	46.7	18.7	16.7	28.9
BETTS INDUSTRIES INC	10.9	5.4	18.4	10.9	5.4
BSEG, LLC	26.5	7.7	18.3	26.5	
FOUR GROWERS INC			18.3		
SHEFFLER & CO INC			18.3		
AES CLEAN TECHNOLOGY INC		15.8	18.0		15.8
PRECISION MEDICAL INC	17.1	6.0	17.8	17.1	6.0

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
ATI OPERATING HOLDINGS LLC		1.3	17.8		
PEARL STREET TECHNOLOGIES, INC			17.8		
MORGAN, LEWIS & BOCKIUS LLP	71.8	52.0	17.8		
APPLIED ENERGY SYSTEMS, INC.			17.7		
SONOCO PROTECTIVE SOLUTIONS INC			17.7		
ERIE CUSTOM COMPUTER APPLICATIONS INC	21.6	17.2	17.7	21.6	17.2
GRANT STREET GROUP INC	18.9	15.4	17.7	18.9	15.4
PAYPAL INC	34.3	29.4	17.6	34.3	29.4
DYNAMIC ENERGY SOLUTIONS LLC	0.9	0.4	17.5	0.9	0.4
CLARIENCE TECHNOLOGIES	11.8	24.1	17.5		
LOBAR SITE DEVELOPMENT CORPORATION	1.6	21.2	17.4	1.6	21.2
GLOBAL FIRE PROTECTION GROUP, LLC.			17.4		
COGNISTIC LLC	33.7	55.1	17.3	33.7	55.1
CLARK ASSOCIATES INC	15.0	5.9	17.3	15.0	5.9
STEIN SEAL COMPANY		1.6	17.1		1.6
PREMIER AUTOMATION HOLDINGS INC	50.9	30.4	17.0	50.9	30.4
JUDCO MANAGEMENT INC	8.3		17.0		
PENN WELD INC	9.5	6.3	16.8	9.5	
FRENCHCREEK PRODUCTION INC	1.8		16.7	1.8	
CIMA NETWORK INC		47.3	16.7		47.3
BASEBALL INFO SOLUTIONS INC			16.6		
SWEET NOTE BAKERY INC	9.8	6.8	16.6	9.8	6.8
NUVENTIVE LLC	17.3	16.4	16.6		
TRUMBULL CORPORATION	43.3	16.1	16.5	43.3	16.1
REDSHIFT SPORTS LLC			16.4		
MARTINS FAMOUS PASTRY SHOPPE INC	13.2		16.4	13.2	
UNITED PARCEL SERVICE INC	27.3	17.9	16.4		
AMERICAN PROCESS LETTERING INC		16.8	16.4		16.8
DIVERSIFIED TRAFFIC PRODUCTS INC	4.9	5.4	16.4	4.9	5.4
PLEDGEPLATFORM, INC.			16.3		
TECHNOTECTS INC	2.0		16.3	2.0	
INNOTECH LASER		1.5	16.3		
SONOCO PRODUCTS COMPANY			16.1		
PHILADELPHIA D & M INC	14.2	13.2	16.1	14.2	13.2
COMPU CRAFT FABRICATORS INC		28.0	16.1		
EPIC WEB STUDIOS			16.0		
NSV INC	6.9	15.5	16.0	6.9	15.5
PHRASE HEALTH INC			15.9		
GLAXOSMITHKLINE CONSUMER HEALTHCARE HOLD			15.9		
NCC AUTOMATED SYSTEMS INC	43.9	16.7	15.9	43.9	16.7
UNITED PARCEL SERVICE GENERAL SERVICES	11.6	13.3	15.7	11.6	
STATE OF THE ARC WELDING AND FABRICATING	2.2	10.4	15.6	2.2	
APEXDROP, LLC		19.1	15.5		
VANZYVERDEN INC	9.9	9.4	15.4	9.9	9.4
CAPTIS DIAGNOSTICS LLC		8.7	15.4		8.7
ENDEAVOR CONSULTING GROUP, LLC			15.4		
QUALITY BRIDGE & FAB INC		8.7	15.3		8.7
PHILADELPHIA PROTECTION BUREAU INC	21.0	14.1	15.3	21.0	
POLYK TECHNOLOGIES LLC	5.3	14.3	15.3	5.3	

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
HUBERT C JASINSKI DENTAL LABORATORY INC	23.2	77.6	15.2	23.2	77.6
CUSTOM METAL FABRICATING, INC.	12.7	21.4	15.2	12.7	
SAPIENS USA INC		28.6	15.2		5.7
WAZOODLE FABRICS LLC	9.1	5.6	15.0		
AMERICAN INTERNATIONAL RELOCATION SOLUTI		14.5	14.8		
SIEMENS MOBILITY, INC		18.2	14.7		18.2
SILVERTIP INC	12.1	9.0	14.7	10.7	4.8
OZ COLLABORATIVE LLC			14.6		
GATEWAY TICKETING SYSTEMS INC	33.4	10.3	14.5		
GATTER & DIEHL INC	5.5		14.5	5.5	
MATRIX PDM ENGINEERING INC	46.5	34.2	14.5	23.5	
AMRING PHARMACEUTICALS INC		7.8	14.4		7.8
JUST PLAY PRODUCTS LLC	51.8	43.7	14.4	51.8	
NAVARRO & WRIGHT CONSULTING ENGINEERS			14.4		
SHADOWFAX INC	8.4	15.9	14.3	8.4	15.9
FETTEROLF CORPORATION			14.3		
DIAMOND KINETICS, INC.	18.5	19.7	14.3	18.5	19.7
GREAT ESTATES INC			14.3		
L & H SIGNS INC	14.4	7.8	14.3	14.4	7.8
FYNYDD LLC			14.3		
KAIER ENGINEERING INCORPORATED			14.2		
SPIRALGEN INC			14.1		
INVISIBLE SENTINEL INC		1.5	14.0		
SOLO LABORATORIES, INC.		21.4	14.0		
MSG HOLDING LLC			14.0		
ANSALDO STS USA INC	65.3		13.9	65.3	
GREENWICH TERMINALS LLC	9.5	7.4	13.8	9.5	7.4
ASSET MAP HOLDINGS INC			13.7		
NIAGARA BOTTLING LLC			13.6		
CONTAINER RESEARCH CORPORATION	33.2	27.5	13.5		
BUDGE INDUSTRIES LLC		10.2	13.5		
BECKMAN COULTER INC			13.4		
PREDICTIVE SOLUTIONS CORPORATION			13.4		
ANHOLT TECHNOLOGIES INC	27.5	12.6	13.4	27.5	12.6
THE RAILROAD ASSOCIATES CORPORATION			13.3		
LANDSTUDIES, INC.	17.1	11.3	13.2	17.1	
NIC USA INC		3.7	13.2		3.7
IRA G. STEFFY & SON, INC.			13.2		
TISSUE TOOLS LLC			13.1		
TRY TEK MACHINE WORKS INC			13.1		
FINISH TECH CORP	12.0	7.6	13.1		7.6
VERRICA PHARMACEUTICALS INC		13.2	13.0		
NEAR MISS MANAGEMENT LLC		15.0	12.9		
BORDERWISE INCORPORATED		5.2	12.9		
PHYTOGENX INC	37.2	21.5	12.8	37.2	21.5
CRIMEWATCH TECHNOLOGIES INC	10.5	6.4	12.7	10.5	6.4
L R COSTANZO CO INC			12.7		
O'NEAL INDUSTRIES INC		17.7	12.7		17.7
RJ LEE GROUP, INC.			12.7		

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	2019	2020	2021	2019	2020
SAY PLASTICS, INC.	35.5	11.7	12.6	35.5	
COLUMNTEK LLC	4.9	3.0	12.5	4.9	
CHRISTOPHER D CERA		34.9	12.5		
TUSICK & ASSOCIATES ARCHITECTS INC			12.5		
WIMER FUEL INJECTION & TURBO LLC		9.7	12.3		
H. F. LENZ CO.		13.5	12.2		13.5
PRIDE MOBILITY PRODUCTS CORPORATION	56.7	18.0	12.2	56.7	18.0
TALKMEUP INC.			12.2		
II-VI AEROSPACE & DEFENSE, INC.			12.1		
OCTECH LLC	7.2		12.1		
AMPHENOL INTERCON SYSTEMS INC	21.8	3.8	12.1	0.6	3.8
HALLER ENTERPRISES			12.1		
XPER, INC.		4.0	12.0		
WAVE LIFE SCIENCES USA INC		91.0	11.9		
PRITCHARD BIELER GRUVER & WILLISON P C			11.9		
ARTSKILLS, INC.			11.8		
SFS GROUP USA INC.	4.9	7.8	11.7	4.9	7.8
NATIONAL REFRIGERATION & AIR	5.3	6.5	11.6	5.3	6.5
AFP ADVANCED FOOD PRODUCTS LLC	24.5	9.3	11.6	24.5	9.3
NUTEC FACILITIES CORP			11.5		
BRUNNER INDUSTRIAL GROUP		3.2	11.5		
PSENERGY, LLC	18.8	24.2	11.4	18.8	8.2
SIEMENS INDUSTRY INC		32.0	11.4		32.0
CAMCO MANUFACTURING INC	45.3	76.4	11.3		
CABOT OIL & GAS CORPORATION		1,098.3	11.3		
B & D BUILDERS LLC			11.2		
PRECISION MECHANICAL SERVICES LLC			11.2		
AUDIA INTERNATIONAL, INC.	3.5	37.2	11.2		
ARROW ELECTRIC INC	19.8	13.6	11.1	19.8	
ALLEGHENY PETROLEUM PRODUCTS CO		3.7	11.0		3.7
THE BTB GROUP, LLC		48.8	11.0		
SIGNATURE DOOR INC	13.0	7.6	11.0	13.0	7.6
A L PATTERSON INC		5.2	11.0		
FINITE RESOURCES INC			11.0		
CDC SOFTWARE LLC			10.9		
NAURA AKRION INC			10.9		
RJC MANUFACTURING SERVICES LLC	12.6	5.3	10.7		
LUNCHTIME SOFTWARE LLC	9.6	6.8	10.7	9.6	6.8
BOSCH REXROTH CORPORATION	17.9		10.6	17.9	
CENERO LLC	12.0	16.5	10.6	12.0	16.5
ARCCA INCORPORATED	41.4	29.4	10.5	23.9	29.4
MANAGED CARE ADVISORS, INC			10.5		
PRIMAXX ACQUISITION CORP	2.9	2.8	10.4	0.3	2.8
PRECISION CUT INDUSTRIES INC		2.6	10.4		2.6
PHOSPHOLUTIONS LLC	2.2	4.8	10.4		4.8
INDEPENDENCE FIRE SPRINKLER COMPANY LLC			10.3		
CUSTOM PROCESSING SERVICES INC	17.0	9.0	10.3	17.0	9.0
FLEXICON INC	15.4	2.6	10.3		
SKF USA INC		5.6	10.2		5.6

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	2019	2020	2021	2019	2020
MECCO PARTNERS LLC		10.3	10.2		
GATEKEEPER INC		45.3	10.1		
I B ABEL INC		27.8	10.1		27.8
DENTECH INC			10.1		
ACOUSTICSHEEP LLC	1.0		10.0	1.0	
PROCESS APPLICATIONS LIMITED	11.0	1.2	10.0		
TRANS UNION LLC			10.0		
WRIGHT LABS LLC	8.4	12.1	10.0		
PENN AIR & HYDRAULICS CORP	10.8	3.1	10.0	10.8	3.1
WILSON LEGAL SOLUTIONS INC	7.2	4.7	10.0		
ALPINE SALES & RENTAL CORP			9.9		
PROVENTIONBIOINC			9.9		
HAVIS INC			9.9		
ADVANCED GLASS & METAL, LLC	18.4	21.2	9.9		21.2
DESIGN MANAGEMENT GROUP		31.5	9.9		
EPIPHANY ENVIRONMENTAL, LLC		10.9	9.8		
CRYSTAL INC PMC	0.7	4.8	9.7	0.7	4.8
ARMADA PARTNERS LP	8.0	5.8	9.7		
PETUUM HOLDINGS LTD	175.8	118.7	9.7		
HERSHEY ENTERTAINMENT & RESORTS COMPANY	4.8	13.5	9.6	4.8	
THE DVCC GROUP, INC		9.1	9.6		9.1
SPICES INC	11.4	9.2	9.6	5.3	
B & H INDUSTRIES INC	29.3	51.9	9.5	29.3	51.9
BIOHYBRID SOLUTIONS LLC		3.1	9.5		3.1
PRIMEPAY LLC	37.4	17.6	9.5	37.4	17.6
DOBIL LABORATORIES INC	17.9	11.7	9.5	17.9	
CARGAS SYSTEMS INC	5.2	2.5	9.4	5.2	2.5
CLIMATECH HOLDING CO.	8.2	5.5	9.4		
DELTA INFORMATION SYSTEMS INC	6.6	6.7	9.4		
IMMUNOCORE LLC	384.0	66.0	9.3		
AVANCEON LP	18.9	5.7	9.3		
AKAS TEX LLC	26.5	28.2	9.3	26.5	
AEGIS INDUSTRIAL SOFTWARE CORPORATION		4.7	9.3		
JANDM FLUIDICS INC	11.0	9.5	9.2	11.0	9.5
BENEFIT ALLOCATION SYSTEMS, LLC	8.9	6.7	9.2		
TOUCHPOINT INDUSTRIES			9.2		
BORTON LAWSON HOLDING CO INC		8.6	9.2		8.6
CONEWAGO HOLDINGS INC		4.1	9.1		
CARDIAC ASSIST INC		4.4	9.1		1.2
PHARMALYTIQ LLC			9.1		
GREENFIELD ARCHITECTS, LTD.			9.0		
ROCKET CLOUD INC		6.7	9.0		
SHO TECHNOLOGY SOLUTIONS LLC			8.9		
MCC INTERNATIONAL INC		3.0	8.9		
DATAFORMA INCORPORATED		6.3	8.8		
BOARDBOOKIT INC	6.9	6.4	8.8	6.9	6.4
MBIC HOLDINGS INC		3.8	8.8		3.8
EQUIPMENT TECHNOLOGY INC			8.8		
CRYSTAL STEEL FABRICATORS, INC.			8.7		

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	2019	2020	2021	2019	2020
SOVEREIGN COMMERCIAL SERVICES INC			8.7		
MATERION BRUSH INC	7.0	2.4	8.7	7.0	
NORTHPORT DISTRIBUTION LLC	4.5	6.5	8.7	4.5	6.5
FINISH THOMPSON INC	4.9	4.9	8.7	4.9	4.9
PARKER HANNIFIN CORPORATION			8.7		
DATA MACHINE LLC			8.7		
INTEGRAL MOLECULAR INC		7.2	8.6		3.9
PERSONNEL DATA SYSTEMS INC			8.6		
PRECISION PROFILES, LLC		8.6	8.6		
D. G. YUENGLING & SON, INC.			8.5		
THRIVE COMMERCE LLC	23.9	22.4	8.5	23.9	22.4
SP ACQUISITION COMPANY, LLC	0.3	6.8	8.5		
HANOVER FOODS CORPORATION	17.5	14.3	8.5		
HOMELAND MANUFACTURING SERVICES INC	2.0	5.8	8.4	2.0	
O Z ENTERPRISES LLC		25.6	8.4		
CRRC MA CORPORATION			8.4		
CADENCE DEVICE INC			8.3		
OLIVER HEALTHCARE PACKAGING COMPANY			8.3		
AMPHENOL THEMOMETRICS, INC.	20.6	14.1	8.3	20.6	14.1
IDL WORLDWIDE INC			8.2		
VERTICAL SCREEN, INC.	8.9	3.5	8.2	8.9	
LOAD RITE CORP	3.8		8.2		
KLOVER SEPA INC			8.2		
CENTURION CONSTRUCTION GROUP LLC		10.0	8.2		10.0
TRAVELWITS LLC	4.9		8.1	4.9	
PSYCHOLOGY SOFTWARE TOOLS INC		1.8	8.1		1.8
BERRY SOLUTIONS GROUP LLC			8.1		
STARKIST CO	5.9	1.6	8.1	5.9	1.6
PROTECTIVE INDUSTRIES INC	16.9	9.2	8.0	16.9	9.2
IEI ARCHITECTS INC			8.0		
JOBBO INVESTMENTS, INC	7.9	10.6	8.0	7.9	10.6
NEXGEN AUTOMATION INC			8.0		
HX COILS			7.9		
FOOT LOCKER CORPORATE SERVICES INC	51.0	29.9	7.9		
VIIV HEALTHCARE COMPANY			7.9		
C & R DIRECTIONAL BORING LLC			7.9		
ENTASIS, INC.	4.3	6.9	7.9	4.3	6.9
ZEIGLER BROS INC		2.3	7.9		2.3
KARASCH ENTERPRISES INC			7.8		
COMBUSTION SERVICE & EQUIPMENT COMPANY	1.2		7.8	1.2	
BARRY ISETT & ASSOCIATES INC	69.0	78.2	7.7	54.6	14.5
ALLEGHENY SOFTWARE PUBLISHERS INC			7.7		
TRICE MEDICAL INC		3.9	7.7		
MEDIUS AG, LLC	8.4	4.2	7.6		
HERMANCE & STROUSE INC	6.3	3.8	7.6	6.3	3.8
SUPERIOR PLASTIC PRODUCTS INC	17.1	5.0	7.6	17.1	5.0
WFE HOLDINGS LLC			7.5		
MOLECULAR DEVICES LLC	62.2	17.7	7.5		
PENN ENGINEERING & MANUFACTURING CORP	30.9	11.3	7.5	14.0	11.3

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	2019	2020	2021	2019	2020
MARATHON STUDIOS, INC.			7.5		
DIGITAL GRAPES LLC	20.0	11.9	7.5	20.0	
COLORCON INC	17.3	30.5	7.5	17.3	30.5
KERMITOOL ACQUISITION COMPANY INC		13.5	7.4		13.5
KRAEMER TEXTILES INC	28.5	14.2	7.4	28.5	
MAINSTREAM SWIMSUITS INC		1.8	7.4		1.8
LYGENESIS INC		64.7	7.3		
EPICOR SOFTWARE CORPORATION		15.2	7.3		15.2
ECOTECH, INC.	12.2	7.5	7.3		
KRANDO METAL PRODUCTS INC	9.2	3.3	7.2	9.2	3.3
HIGHPOINT TOOL & MACHINE INC			7.2		
ALLAN MYERS, INC			7.2		
FOREST DEVICES	55.7	16.7	7.1	55.7	16.7
KS TOOLING, INC	39.5	31.9	7.1	39.5	
OLIVER SPRINKLER CO., INC			7.1		
TOWERSTAR PETS LLC		12.5	7.1		12.5
ADVANCED MANUFACTURING TECHNOLOGIES INC	2.1	6.2	7.1	2.1	6.2
BEN PEOPLES INDUSTRIES		2.5	7.1		
CMT LABORATORIES INC	91.5	38.6	7.1	91.5	38.6
MBF THERAPEUTICS INC	7.5	17.8	7.0	7.5	17.8
BLATEK INDUSTRIES INC			7.0		
HOSLER CORP		4.8	6.9		
GOEPPERT LLC			6.9		
CONTROL ANALYTICS INC	26.1	3.6	6.8	7.5	
TYBER MEDICAL LLC	347.8	26.8	6.8	347.8	26.8
SNOWDON INTERNATIONAL LIMITED	10.0	8.3	6.7	10.0	8.3
OPENFORGE LLC		12.0	6.7		
APTER INDUSTRIES INC	13.1	8.6	6.7	13.1	3.7
RIVER SALVAGE COMPANY INC			6.7		
WALSH CONSTRUCTION COMPANY II LLC		5.1	6.6		
RELX INC		5.3	6.6		
SHOEMAKER MFG SOLUTIONS INC.	8.0	11.3	6.6	8.0	
BOULDEN COMPANY INC			6.6		
K12 SYSTEMS INC	2.2	5.4	6.6	2.2	
RACESENG INC	8.8	4.4	6.6		
GLOBAL METAL POWDERS LLC	4.1	11.4	6.4		11.4
J B KINTNER & SONS INC	9.4	1.1	6.4	9.4	1.1
CHIRAL TECHNOLOGIES INC	11.2	10.2	6.4	11.2	10.2
TURNER CONSTRUCTION COMPANY			6.4		
REFLEXION INTERACTIVE TECHNOLOGIES, LLC	13.7	23.2	6.4	13.7	
PANTHER LEARNING SYSTEMS INC	3.7	5.7	6.4	3.7	5.7
IEI GROUP LTD			6.4		
PYROTECHNICS MANAGEMENT INC	17.8	20.6	6.4	17.8	20.6
TINIUS OLSEN TESTING MAC			6.4		
WHITETHORN DIGITAL, LLC		2.0	6.3		
LIVANOVA USA INC		0.7	6.3		
CONSTRUCTURAL DYNAMICS, INC.	6.8	5.1	6.3		
TRIDIUUM INC		10.8	6.3		
ABITARE DESIGN STUDIO LLC			6.3		

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	2019	2020	2021	2019	2020
PITTSBURGH PLASTICS MANUFACTURING INC	7.6	6.4	6.3	7.6	6.4
BOYD STATION LLC			6.3		
OPTIMUS TECHNOLOGIES INC	7.1		6.3	7.1	
SANDQUIST CORPORATION	8.6		6.2	8.6	
SB GLOBAL FOODS INC	5.5	3.0	6.2	5.5	3.0
HELIUS MEDICAL INC	6.2	14.5	6.2		
JEGLINSKI GROUP INC			6.2		
WAMPOLE MILLER INC	5.1		6.2	5.1	
READING PRECAST INC	8.2	11.5	6.1		11.5
CORRY MANUFACTURING COMPANY	4.5	10.0	6.1		
LIFE SUPPORT INTERNATIONAL INC	55.2		6.0		
NEAR EARTH AUTONOMY INC	1.3	2.0	6.0	1.3	2.0
KEYSTONE MACHINERY CORPORATION	15.4	13.9	5.9	12.3	13.9
ZIPCORP INC AND (QSSS)	0.9		5.9	0.9	
INRCORE LLC		5.0	5.9		
AOG, LLC D/B/A TRUFOOD MFG., LLC			5.9		
MODERN CABINET AND CONSTRUCTION INC	2.4	10.2	5.8		
SEKISUI AMERICA CORPORATION			5.8		
BALLY RIBBON MILLS INC			5.8		
ELBECO INCORPORATED			5.7		
INSTECH LABORATORIES INC.		5.0	5.7		
LIGHTWEIGHT MANUFACTURING INC	0.0	1.6	5.6	0.0	1.6
BLUESTONE COMMUNICATIONS INC		3.7	5.6		3.7
THE OFFICE OF JAMES BURNETT, INC.			5.6		
INTUIDEX INC		23.9	5.6		4.3
EDU LINK INCORPORATED	3.6	0.9	5.6	3.6	
KANE INNOVATIONS INC	20.7	11.4	5.6	8.6	10.0
SYANDUS INC	4.8	3.8	5.5	4.8	3.8
JOAO & BRADLEY CONSTRUCTION COMPANY INC			5.5		
STARN TOOL & MANUFACTURING COMPANY	38.5	14.9	5.5		
SPARKCURES LLC		2.5	5.4		
EXPRESSCELLS, INC			5.3		
REED BUSINESS INFORMATION INC			5.3		
MISCO PRODUCTS CORPORATION	0.9		5.3		
BOSCH SECURITY SYSTEMS INC			5.3		
PETER MARGITTAI ARCHITECTS LLC		6.7	5.2		6.7
HACCP ASSURANCE SERVICES INC		2.9	5.2		
NEWCASTLE CO INC	7.8	4.6	5.2	7.8	4.6
KEYSTONE COMPLIANCE LLC	9.6	7.7	5.2		7.7
NEW EQUATION LLC			5.2		
U.S. PIPELINE, INC.			5.1		
NEU DYNAMICS CORP	0.8		5.1	0.8	
T MOBILE USA INC	16.6		5.0	16.6	
STONER INCORPORATED	7.5	1.6	5.0		1.6
B & G MANUFACTURING CO INC		2.2	5.0		2.2
HANOVER IRON WORKS INC	7.9	6.5	5.0	7.9	6.5
CRC INDUSTRIES INC			5.0		
ARIN TECHNOLOGIES	8.3	5.6	5.0	8.3	5.6
ABRAXIS INC			4.9		

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
ZILLOW INC		1.0	4.9		
KMM GROUP LTD.			4.9		
PRESCIENT WEATHER LTD	3.1	4.9	4.9		
FINISAR CORPORATION	4.8		4.9		
GARDNERS CANDIES INC	5.5	1.8	4.9	5.5	1.8
HAMMEL COMPANIES INC			4.8		
PATHWAY ACCESSIBILITY SOLUTIONS, INC.			4.8		
ENERSYS ADVANCED SYSTEMS INC		4.5	4.8		
MST ASSOCIATED COS INC		3.7	4.8		
ALLVISION IO INC		8.1	4.8		
ALLOY 5 LLC			4.7		
EASTWOOD HOLDCO LLC			4.7		
FORNEY LP	15.2	16.0	4.7	15.2	
ARIECA INC		8.9	4.7		
CONSEGNA PHARMA INC			4.7		
TOASTERPARTY		1.5	4.7		1.5
JONES PERFORMANCE PRODUCTS INC			4.6		
OPTAMO LLC			4.6		
YAZOO MILLS INCORPORATED		4.4	4.6		
VISNETA LLC	7.6	10.2	4.5		
TRS CERAMICS INC			4.5		
STELLER INNOVATIONS			4.5		
HOLBROOK TOOL & MOLDING INC		54.9	4.4		54.9
BRACALENTES MANUFACTURING CO INC	2.5	3.3	4.4	2.5	
QLIKTECH INC			4.4		
STRAIGHT ARROW PRODUCTS, INC.	4.2	9.8	4.4		
LORNE G. SEIFERT, LLC	5.2	5.1	4.4		
BASELINE CONTRACTING INC			4.3		
HAROLD BECK & SONS INC	12.4	11.5	4.3	12.4	0.5
SPECTRAGENETICS INC	8.3		4.3	1.4	
ARMOUR TECHNOLOGIES INC.		3.8	4.2		
ALL FILL CORP	1.1	5.5	4.2		
DIGITAL COLOR GRAPHICS, INC			4.2		
FLINCHBAUGH COMPANY INC		12.0	4.2		12.0
DIEHL CO LLC			4.2		
CUSTOM LAMINATING CORPORATION		1.8	4.2		1.8
GUY CHEMICAL COMPANY, INC.			4.2		
ROCON INC		6.5	4.1		6.5
METER READINGS HOLDING I CORP		2.7	4.1		2.7
FORTRESS POWER, LLC		7.1	4.1		
TIW TECHNOLOGY INC	2.5	1.8	4.1	0.3	1.8
DYNAMET INCORPORATED	5.1	3.4	4.1	5.1	
NEW PRODUCT TECHNOLOGIES, INC			4.1		
THE LACKNER GROUP, INC.	2.6	5.1	4.1	2.6	5.1
SCHOOL GATE GUARDIAN INC	0.6	3.7	4.0	0.6	3.7
PDQ INDUSTRIES INC	5.4	4.3	4.0	5.4	4.3
NEW HEIGHTS LLC		31.0	4.0		31.0
K & H TECHNOLOGIES INC			3.9		
PVE LLC			3.9		

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
ASTLEY PRECISION MACHINE COMPANY INC			3.9		
ALLEGHENY PERFORMANCE PLASTICS LLC	6.3	3.1	3.9	6.3	3.1
EAGLE METALS INC	0.4	0.8	3.9	0.4	0.8
SUPERIOR TIRE & RUBBER CORP	4.1	2.3	3.8	4.1	2.3
AMERICAN PRECISION INDUSTRIES INC			3.8		
NURSE NAVIGATOR SOLUTIONS LLC	8.2	5.4	3.8		
SINTERFIRE INC			3.8		
SUNNY DELL FOODS	4.0	0.4	3.7	4.0	0.4
MCS INDUSTRIES INC	1.7	3.0	3.6	1.7	3.0
IHEARTCOMMUNICATIONS INC		2.0	3.6		
AMERICAN MANUFACTURING & ENGINEERING CO		2.9	3.6		
MICHAEL F RONCA & SONS INC	16.0	14.1	3.6	16.0	14.1
TARGET PRECISION, LLC			3.6		
PREMIER CUSTOM BUILT INC		4.0	3.5		
RADIUS HOLDINGS LLC			3.5		
TROY GROUP INC			3.4		
EKTO VR INC		4.5	3.3		4.5
PROUD DEVELOPMENT		2.5	3.3		
LAGOS INC		9.7	3.3		
NEVILLE CHEMICAL COMPANY		1.1	3.3		
EDON COMPOSITES			3.3		
MAKERPLACE INC		10.2	3.2		10.2
SHUMAKER INDUSTRIES INC	46.9	2.3	3.2	29.0	
GREINER INDUSTRIES INC	6.0	1.4	3.2	6.0	
AMERICAN TURNED PRODUCTS INC	13.1	4.7	3.2	13.1	
EADS GROUP INC			3.1		
TIMBERLANE INC	2.9	0.7	3.1	2.9	0.7
CARRIER CLASS GREEN INFRASTRUCTURE LLC	19.4	5.3	3.1	19.4	
VIDEO DIRECTIVES LLC	2.3	5.9	3.1		
TUDI HOLDINGS, INC.		1.0	3.0		
LIFE CYCLE ENGINEERING INC			2.9		
IMPACT PROTEOMICS, LLC			2.9		
EAST PENN MANUFACTURING CO	131.4	115.9	2.9	85.4	115.9
HERKULES USA CORPORATION	2.7	0.8	2.9	2.7	0.8
PHB INC		2.3	2.9		2.3
REGUPOL AMERICA LLC			2.9		
QMAC-QUALITY MACHINING INC		11.2	2.9		
GREAT COASTERS INTERNATIONAL INC	2.6	1.2	2.8	2.6	
ROYSE GREEN TECHNOLOGIES INC		2.3	2.8		
POLARIS SALES INC			2.8		
R A WALTON & CO INC	10.2		2.8	10.2	
GO2POWER LLC	35.1	27.9	2.8	35.1	
FLUITRON INC	5.2	2.8	2.7	5.2	2.8
HUNTER MECHANICAL INC	10.1	4.4	2.7	10.1	
ACME CORRUGATED BOX CO	0.2	1.0	2.7		1.0
SIGNODE INDUSTRIAL GROUP US INC			2.7		
PEQUEA MACHINE INC	4.5	2.7	2.7	4.5	
CAREL USA LLC	6.7	4.5	2.7	6.7	4.5
SK TOOL AND DIE INC		1.6	2.6		

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
REED MANUFACTURING COMPANY		0.1	2.6		0.1
SYNATEK, LP			2.6		
OHIO RIVER SALVAGE INC			2.6		
COME READY FOODS LLC	10.9		2.5		
PORT ERIE PLASTICS INC	7.1	2.6	2.5	7.1	2.6
ALPHA TECHNOLOGIES SERVICES INC			2.5		
COLORFIN, LLC	5.4	3.5	2.5		
KINGSBURY INC			2.5		
NORTHEAST INDUSTRIAL MANUFACTURING INC	0.5	1.8	2.4	0.5	
THE CERAMIC SHOP, LLC			2.4		
INCLINATOR COMPANY OF AMERICA		1.6	2.4		
PINMED INC			2.4		
BOOSE AT CORNWALL INC	2.9		2.4	2.9	
EXH INC.	8.4	8.4	2.4		
RKI APPS INC	14.9	9.9	2.4	14.9	
EHMKE MANUFACTURING CO INC			2.4		
GARTNER BURDICK BAUER NILSEN INC	4.0		2.4		
MITSUBISHI ELECTRIC US, INC			2.4		
J BAUR MACHINING INC	12.1	6.1	2.3	12.1	6.1
M3 MEDIA GROUP INC.		1.2	2.3		
GODSHALLS QUALITY MEATS INC	13.5	5.2	2.3	13.5	5.2
METROPOLITAN ACOUSTICS LLC		18.9	2.3		18.9
STORMLOOP TECHNOLOGIES LLC			2.3		
LANCONNECT INC	40.9	8.4	2.3	40.9	8.4
NATL GLASS METAL CO INC			2.3		
DYER QUARRY INC		2.0	2.2		2.0
FOOD MANAGEMENT SERVICES INC			2.2		
SPECIALTY FABRICATION & POWDER COATING	0.1		2.2	0.1	
RGS PRODUCTS INC			2.2		
J.A.C.K. WOOD PRODUCTS LLC	2.3	0.7	2.2		0.7
DIVERSIFIED MACHINE INC			2.2		
NOVOTECH CONSTRUCTION INC			2.2		
GOLDEN BROTHERS INC	3.3	4.4	2.2		4.4
PREMIER DENTAL PRODUCTS COMPANY	13.8	13.1	2.2	13.8	
GET WIRELESS, INC.	2.1		2.2		
LEE INDUSTRIES INC	3.5	1.6	2.2	3.5	1.6
SOLAR TECHNOLOGY INC	5.9	1.2	2.1		
JDAVIS ARCHITECTS, PLLC		2.7	2.1		
SCISWIFT LLC	6.4	10.0	2.1		
MGS INC	5.5	2.2	2.0		2.2
SHERIDAN DOSE INVESTMENT COMPANY, LLC			2.0		
CIMA TECHNOLOGY INC		1.1	2.0		
GARMAN BUILDERS INC	1.8	1.2	1.9		1.2
S J A CONSTRUCTION INC	4.0	2.6	1.8		2.6
MODERN INDUSTRIES INC		3.1	1.8		3.1
PLASTIKOS, INC.	6.8	6.3	1.8	6.8	6.3
PYROTEK INCORPORATED	7.5	1.9	1.8	7.5	1.9
BURNS ENGINEERING INC	91.0		1.8	91.0	
LOWE ENGINEERING COMPANY, INC.	5.7	2.8	1.8		

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
PROCONEX ACQUISITION, INC.			1.8		
STATE OF THE ART INC	1.4	1.6	1.8	1.4	1.6
DIVERSIFIED COATINGS INC		0.6	1.8		0.6
MILA INTERNATIONAL			1.8		
CERTES NETWORKS INC	0.5		1.7		
HORIZON SIGNAL TECHNOLOGIES INC			1.7		
WOLF TECHNOLOGIES LLC	2.7	2.9	1.7		
PROMINENT FLUID CONTROLS INC	9.6	17.0	1.7	9.6	17.0
VSI OF DELAWARE INC	7.5	4.7	1.7	7.5	4.7
STARGAZER CAST IRON LLC			1.7		
JBS SCIENCE INC			1.6		
SNAKE CREEK LASERS LLC	8.9	4.0	1.6	8.9	
MCADOO & ALLEN INC	1.6		1.6	1.6	
BULK CHEMICALS INC			1.6		
CIVIC MAPPER, LLC	2.6		1.5	2.6	
WEAVER COMPANIES INC	5.0	1.9	1.5		
INDUSTRIAL VISION SYSTEMS, INC.	3.0		1.5		
DUTCHLAND INC			1.5		
SETRA SYSTEMS INC			1.4		
IHEARTMEDIA ENTERTAINMENT, INC.			1.4		
PMC ORGANOMETALLIX, INC.	1.3	0.8	1.4	1.3	0.8
PEACOCK LABORATORIES			1.4		
KALINOWSKI MACHINE LLC		2.6	1.4		2.6
BIRDBRAIN TECHNOLOGIES LLC	13.4	18.0	1.4	5.8	17.7
ARVOS SCHMIDTSCHESCHACK LLC			1.4		
NEWMAN & COMPANY INC	7.7	0.4	1.4		
YUASA BATTERY INC			1.4		
GGG INFORMATION SERVICES INC	2.5	1.7	1.4		1.7
AMERICAN BEVERAGE CORPORATION			1.4		
AMETEK INC	14.3		1.4	14.3	
DAMIN PRINTING COMPANY LLC			1.3		
CIRCADIANCE LLC	0.5		1.2		
S & S PROCESSING INC			1.2		
DURA BOND INDUSTRIES INC			1.2		
MERSEN USA GS CORP			1.1		
SIMPLE ORIGIN	4.2	6.3	1.1		
KEYSTONE MANUFACTURING INC	1.5	0.5	1.1	1.5	0.5
MISSION CRITICAL PARTNERS INC		5.9	1.1		
FIRST ADVANTAGE BACKGROUND SERVICES INC			1.0		
HENDRICK MANUFACTURING COMPANY		12.7	1.0		12.7
PENN COLOR INC	5.6	6.3	1.0	5.6	6.3
HR PHARMACEUTICALS INC			1.0		
CKJK, LLC	3.6	0.9	1.0	3.6	0.9
JETNET CORPORATION	4.3	1.7	1.0	4.3	1.7
BIGBEE STEEL & TANK CO.	6.1	2.8	1.0		
WORLD ELECTRONICS SALES & SERVICE INC		1.2	1.0		1.2
BEAVER STEEL SERVICES INCORPORATED	3.8	1.9	0.9	3.8	
WILSON ENGINEERING SERVICES PC		2.4	0.9		
ARGOLYTICS, LLC		1.5	0.9		

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
T & M ASSOCIATES INC	8.7	5.8	0.9	8.7	5.8
JERSEY SHORE STEEL CO	2.9	2.1	0.9	2.9	2.1
HIGHLAND TANK & MFG. CO.	1.4	0.9	0.8		
RUSSELL STANDARD CORPORATION		5.9	0.8		5.9
LTL WHOLESALE INC	0.2		0.8		
FRONT STREET REFRIGERATED SERVICES LLC	3.6	3.5	0.8	3.6	3.5
MILTON STEEL COMPANY		1.7	0.8		1.4
ARIEL PRECISION MEDICINE, INC	26.7	10.9	0.8	26.7	
ROSENBERGER USA CORP. & SUBSIDIARIES	5.5		0.8	5.5	
DRUMMOND SCIENTIFIC COMPANY	22.4	2.8	0.7	22.4	2.8
REAXIS INC			0.7		
KIBOW BIOTECH INC			0.7		
MCCOURT LABEL CABINET COMPANY	0.4	0.4	0.7	0.4	
IHEARTMEDIA MANAGEMENT SERVICES, INC.		1.0	0.7		
POLYMER MOLDING INC	3.1	1.1	0.7		1.1
BLEND PRO INC		2.1	0.7		2.1
GAI TRONCIS CORPORATION	11.6	20.6	0.7	11.6	
NORMA PENNSYLVANIA INC		1.6	0.7		
WEPCO INC.		1.5	0.7		1.5
MAJESTIC FIRE APPAREL INC			0.7		
PENN STATE MECHANICAL CONTRACTORS INC		3.1	0.7		3.1
C U E INC		0.6	0.7		
CANTO TOOL CORPORATION	0.4	0.7	0.7	0.4	
YCG, INC			0.6		
HENWIL CORPORATION			0.6		
ONEUP APP LLC			0.6		
APPLIED NUTRITIONALS LLC			0.5		
NEW STANDARD CORPORATION	2.2	1.1	0.5	2.2	1.1
C & J INDUSTRIES INC			0.5		
SMARTRR SOLUTIONS, LLC			0.5		
HYMED GROUP CORPORATION			0.5		
LOZIER CORPORATION	0.5	0.8	0.4		
CASUAL LIVING UNLIMITED LLC	10.9		0.4		
PSI PACKAGING SERVICES INC			0.4		
ELITE ALLOY CONCEPTS, LLC		0.2	0.4		
SPRING CITY ELECTRICAL MANUFACTURING	0.2	2.3	0.4	0.2	2.3
HILLSIDE ACQUISITION GROUP LLC	3.1	0.3	0.4	3.1	0.3
TURNKEY TAXES INC			0.4		
LANG'S CHOCOLATES, LLC			0.3		
D & E MACHINING LTD		1.7	0.3		1.7
DAVID WEBER CO. INC.		5.0	0.3		
ACME MACHINE & WELDING CO LLC		1.1	0.3		
ROBERT MAZZA INC		0.3	0.2		0.3
DEASEY MACHINE TOOL & DIE WORKS INC	3.5	0.4	0.2		0.4
PSI CONTAINER INC			0.2		
SPOTLESS MATERIALS INC		8.3	0.2		
RICHARDSAPEX INC	1.9	0.6	0.2	1.9	0.6
OPTIXTAL, INC.			0.1		
ALWARD TOOL		0.7	0.1		

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
STOLTZ MFG LLC		0.1	0.1		0.1
FAIRMOUNT FOUNDRY INC	6.4	32.1	0.1		32.1
TRIGON PLASTICS LLC			0.1		
POLYMER PRODUCTS COMPANY INC			0.0		
WELD TOOLING CORPORATION		1.5	0.0		1.5
KLEINSCHMIDT ASSOCIATES INC	12.9			12.9	
MRO CORPORATION		20.2			20.2
RICHARDS ENERGY GROUP INC	11.9			11.9	
NCA TECHNOLOGIES INC		0.3			0.3
KOLLMORGEN CORPORATION	2.9			2.9	
PTC INC		64.6			64.6
OLIVER M DEAN INC	2.6			2.6	
TRI-M GROUP, LLC		3.0			
TURN 5 INC.	18.4	8.8		18.4	
GLOBUS MEDICAL INC	143.5	16.5		143.5	3.6
SPECTRUM MICROWAVE INC	3.0	1.0			
CVS PHARMACY INC		25.9			25.9
HIGHWOOD USA LLC	4.4	0.5		4.4	0.5
TRC COMPANIES, INC.		15.7			
NATIONAL MAGNETICS GROUP INC	7.7	0.8		7.7	0.8
R & D COATINGS, INC.	22.8			22.8	
SAMUEL, SON & CO USA INC		7.2			
RED HAT INC	38.9			38.9	
INFIANA USA INC	19.3			19.3	
COVESTRO LLC	188.7	62.6		94.4	
S & S X RAY PRODUCTS INC	0.5				
MANLEY HOLDINGS INC	53.2	32.5		53.2	32.5
THOMPSONS CANDLE CO	22.2			22.2	
UNION CARBIDE CORPORATION	50.3			50.3	
RADIUS CORPORATION	3.4	0.6		3.4	0.6
YORK INTERNATIONAL CORPORATION		91.5			91.5
MINTEQ INTERNATIONAL INC	3.4			3.4	
COGNITION THERAPEUTICS INC	97.3			97.3	
ANDRITZ INC	15.7	13.2		15.7	13.2
THE DOYLE GROUP, INC.	1.3	1.1			1.1
ERDMAN ANTHONY ASSOCIATES INC	7.6	6.8		7.6	6.8
REDLAND QUARRIES NY INC	1.6			1.6	
LOGISTICS PLUS INC.		19.2			
SOMERSET PLANNING & ENGINEERING SERVICES		4.0			
JACOB A WEAVER COMPANY		2.8			
COMPREHENSIVE FIRE TECHNOLOGIES	34.9			34.9	
MATRIX OPERATIONS COMPANY LLC	0.8				
TEKRESULTS LTD	2.3			2.3	
SWAIN AUSTRALIAN TOURS (2003), INC.		3.4			
MAVERICK DENTAL SOLUTIONS	14.8	16.4			
ARDEX LP	6.1	1.0		6.1	1.0
EFS NETWORKS INC	2.0			2.0	
TURN 14 DISTRIBUTION INC	20.2	11.3		20.2	
INFRASCAN INC	38.7	52.5		38.7	

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	2019	2020	2021	2019	2020
SUBURBAN PRECISION MOLD CO INC		8.9			8.9
YELP INC	68.5	5.9		68.5	
FORMCRAFT INTERIORS, INC.		50.4			
SIGMAPHARM LABORATORIES LLC	85.6				
SHERPA SOFTWARE LLC		6.0			
SHORTS TOOL & MFG INC		31.3			31.3
LIFESTYLE FOODS INC	5.4			5.4	
TECH TUBE, INC.	3.9	5.6			
MATERIALS CONSERVATION COLLABRATIVE		6.4			
HOLTEC INTERNATIONAL POWER DIVISION, INC	211.5			19.7	
GRUDI ASSOCIATES INC	8.3	1.6		8.3	1.6
CROMPCO, LLC	2.4				
VOODOO BREWING COMPANY INC.		22.3			22.3
KROFF INC		0.7			
CALIBER THERAPEUTICS INC	31.6				
VASCULARSTRATEGIES, LLC	9.5	6.2			
VPI ACQUISITION LLC		0.8			
ECOPAX LLC		3.5			
LYCERA CORP	23.1				
TRAFFICCAST INTERNATIONAL INC	20.9				
PROTECS LLC	18.0	7.8		18.0	
KEYSTONE SPORTING ARMS LLC	4.1	1.8			
OLIVER TOLAS HEALTHCARE PACKAGING INC	0.3	5.9		0.3	
SOLENOID SOLUTIONS, INC.		6.4			
DOMTAR CORPORATION	29.9			29.9	
SEAKEEPER INC	267.3			2.6	
WEBPAGEFX INC	166.1	169.3		166.1	169.3
ACTUATED MEDICAL INC	0.7				
VOCI TECHNOLOGIES INCORPORATED	14.4	22.1			
NELSON	2.5			2.5	
QUADGEN WIRELESS SOLUTIONS INC	12.5			12.5	
KADCO CERAMICS LLC		6.6			
MERCK SHARP & DOHME CORP	773.8	1,759.3			
SMOOTH ON INC		13.3			13.3
EMEH INC		22.3			
FOLLETT CORPORATION	22.0	18.5		22.0	18.5
HUGHES ENTERPRISES OF NEW JERSEY INC		4.8			4.8
NURSERY SUPPLIES INC	3.4			3.4	
SUSSEX WIRE INC	3.3			3.3	
ULTRA POLY CORPORATION		2.2			2.2
LAMTEC CORPORATION	3.4	2.9		3.4	2.9
FEDERAL CARBIDE COMPANY	2.9	0.6			
VASTEX INTERNATIONAL INC	10.4	4.9			
HERAEUS INCORPORATED	80.9			0.2	
I I-VI OPTOELECTRONIC DEVICES INC	23.7			1.7	
GEMINI MACHINING COMPANY INC		16.0			8.1
APPLIED EDUCATIONAL SYSTEMS INC		25.9			25.9
REYNOLDS & REYNOLDS ELECTRONICS INC	27.0	10.3		27.0	10.3
METAPHASE TECHNOLOGIES INC	10.8			10.8	

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	2019	2020	2021	2019	2020
SOLVAY USA, INC.	7.4	29.1			
ONCOURSE SYSTEMS FOR EDUCATION LLC	11.3	24.8		11.3	
ARMSTRONG WORLD INDUSTRIES INC	100.2	91.0		100.2	91.0
G O CARLSON INC	9.7			9.7	
DIETZ & WATSON INC	36.4	6.4		36.4	6.4
HOUGHTON INTERNATIONAL INC	8.8	6.2		8.8	6.2
INTERNATIONAL CHEMICAL COMPANY	17.9	6.0		1.4	1.3
KUNZLER & COMPANY INC	1.4			1.4	
LEHIGH CEMENT COMPANY LLC	138.4	18.3		138.4	
LITTLESTOWN FOUNDRY INC	2.5	1.5		2.5	1.5
ARKEMA INC	57.0	2.2		57.0	2.2
GLAXOSMITHKLINE LLC		3,388.9			
SPS TECHNOLOGIES LLC		18.6			18.6
J J WHITE INC	11.5				
TB WOODS INCORPORATED		6.9			6.9
RESCO PRODUCTS INC		3.2			3.2
MICHELS BAKERY INC	0.7	1.7			
REXMET CORPORATION	12.4	7.0			
D F STAUFFER BISCUIT CO INC	8.1	1.9		8.1	1.9
WESTLAKE PLASTICS COMPANY		14.5			
DUANE MORRIS LLP	6.6			6.6	
HENRY H OTTENS MANUFACTURING CO INC	10.7				
R S MOWERY SONS INC		4.2			
VISTACOM INC		7.3			7.3
NEWAGE INDUSTRIES INC	3.0			3.0	
CRESCENT INDUSTRIES INC	16.5			16.5	
ATEECO INC	6.6			6.6	
UNIVERSAL MACHINE CO OF POTTSTOWN INC	49.3	15.3			
OGONTZ CORPORATION	5.9	4.4		5.9	4.4
WEAVER INDUSTRIES INC	3.5	4.6		3.5	4.6
WHITE OAK MILLS INC	10.2	2.2		10.2	2.2
PENN WOOD PRODUCTS INC	0.8	1.9		0.8	1.9
HENRY MOLDED PRODUCTS INC	24.4	1.5		24.4	
LAMINATORS INCORPORATED	13.3	8.9		13.3	8.9
ALCOM PRINTING GROUP, INC.	3.6	2.1			
M & S CENTERLESS GRINDING INC	39.4	21.3		39.4	
NORTHWAY INDUSTRIES INC	6.3	1.1		6.3	1.1
A & H SPORTSWEAR CO INC	1.2			1.2	
V. T. GRAPHICS, INC.	31.5	11.9		31.5	
SHANKS EXTRACTS INC	1.6	3.4		1.6	
GENERAL TRANSERVICE INC	0.6	2.8		0.6	0.1
AMPLIFIER RESEARCH CORP	9.1			0.3	
RALPH S ALBERTS CO INC	6.0	8.3		6.0	8.3
AUTOMATED FINANCIAL SYSTEMS, INC	31.6			31.6	
VULCAN SPRING & MFG CO	1.5				
COZEN OCONNOR		5.6			5.6
ELECTRON ENERGY CORP	4.6	2.1		4.6	2.1
TRACEY MECHANICAL INC	12.0	10.2		12.0	10.2
MEDICAL PRODUCTS LABORATORIES, INC.	9.3	8.6		9.3	

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
S & W RACE CARS & COMPONENTS INC	10.8	2.9		4.7	2.9
CONTROLS SERVICE & ENGINEERING COMPANY	46.2			46.2	
VALLEY INSTRUMENT CO INC	2.7	4.1		2.7	4.1
DOUBLE H PLASTICS INC	11.9				
GRAYBILLS TOOL & DIE INC	31.2			3.2	
WAYNE AUTOMATION CORPORATION	9.3			9.3	
HYDAC TECHNOLOGY CORPORATION	19.0	3.7		19.0	3.7
STOLTZFUS STRUCTURES LLC	11.7				
THE MILNES CO., INC.		0.2			
ELECTRO-TECH SYSTEMS INC	27.7	6.4		27.7	6.4
CHANT ENGINEERING CO INC	2.0			2.0	
RADIAN GUARANTY INC	44.8				
COMMONWEALTH FIRE PROTECTION CO	3.8	1.0		3.8	
PAUL B ZIMMERMAN INC		1.1			1.1
OROURKE & SONS INC		0.9			0.9
FRES CO SYSTEM USA INC	5.7			5.7	
RICHTER PRECISION INC		1.3			1.3
VERTEX INC	27.4	8.6		27.4	
HARRY J LAWALL & SON INC	10.8	5.7		10.8	5.7
R M PALMER COMPANY	20.0			20.0	
E K L MACHINE INC	8.8	10.8		8.8	
J M HUNT ASSOCIATES INC		22.8			11.0
COMPETITION TIRE EAST INC	4.0	2.2			
KEMPER EQUIPMENT INC	10.9	6.2		10.9	6.2
B J TERRONI CO INC	3.9	5.1			
JAMES J ANDERSON CONSTRUCTION COMPANY	0.7			0.7	
INOLEX CHEMICAL COMPANY	5.2			5.2	
TYNDALE ENTERPRISES INC	10.5	14.3		10.5	14.3
AMERICAN MANUFACTURING CORPORATION		5.2			5.2
WAGMAN, INC & SUBSIDIARIES	55.2	17.7		6.0	1.5
C W E INC	2.0			2.0	
SOFTERWARE INC	23.4			23.4	
MILFORD ENTERPRISES INC		2.4			2.4
ADVANCED COMPOSITE PRODUCTS INC	3.8				
CARLISLE FLUID TECHNOLOGIES INC	231.2	131.7		231.2	131.7
GSM INDUSTRIAL INC	29.9			29.9	
DATA CAP SYSTEMS INC	49.5	8.7		49.5	8.7
BACKFLIPS INC	1.3	1.5			
PDC MACHINES INC		17.2			
THERM OMEGA TECH INC	10.9	2.6		10.9	
GETTLE INCORPORATED	19.9	17.0		19.9	17.0
CRABTREE, ROHRBAUGH & ASSOCIATES, INC.	2.8	13.3			
EASTHILL GROUP INC	1.1				
KIERAN TIMBERLAKE	5.1	0.7		5.1	
SEALSTRIP CORPORATION		5.3			
ATKIN OLSHIN SCHADE ARCHITECTS INC.	11.1	6.8			
TUBE METHODS, INC.	33.0	17.3		33.0	
PHOTONIS DEFENSE, INC.	5.5			5.5	
SCHEERER BEARING CORPORATION	4.0	3.8		4.0	3.8

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
GLEN ROAD SYSTEMS INC		13.4			
BIO MED SCIENCES INCORPORATED	17.1			17.1	
SICOM SYSTEMS, INC.		31.5			8.7
SUPERIOR TECH, INC.	8.7				
MYERS DRUGSTORE INC		14.2			14.2
MACRON DYNAMICS INC	7.0			7.0	
MISKO INC	6.9				
CERTAINTED CORPORATION	46.1	3.9		46.1	3.9
INNOVATIVE CONTROL SYSTEMS INC	7.7			6.7	
SILA HEATING & AIR CONDITIONING, INC		2.9			
PACKAGING PROGRESSIONS INC	6.0			6.0	
CONTEC SYSTEMS INDUSTRIAL CORPORATION	4.9			4.9	
DYCO INC		2.9			2.9
RIVERSIDE MATERIALS INC	1.4	0.7		1.4	0.7
YORK STEEL RULE DIES, INC		17.0			
SIGNATURE CUSTOM CABINETS INC		4.7			
KRAMER-MARKS, PC	48.7	52.6		48.7	
PULSE TECHNOLOGIES, INC.	19.3	0.5		19.3	
SNYDER DISTRIBUTORS INC	0.7	0.6		0.7	0.6
TRIGON INCORPORATED	16.2	8.1			
K'NEX BRANDS LP		8.0			8.0
ROAD-CON, INC.		2.4			
PENDU MANUFACTURING INC	28.1			28.1	
RLC ELECTRONIC SYSTEMS INC	7.2	3.5			
ATOMIC DESIGN INC	45.5			45.5	
LBN INC		1.4			1.4
SPECIALTY COATED PRODUCTS INC	2.7				
GRIFF & ASSOCIATES LP	2.4	2.3			
JAVAN ENGINEERING INC	58.3				
PRECISION MACHINERY SYSTEMS, INC		11.2			
TEKGARD INC	1.5	3.6		1.5	3.6
DFT INC	1.9	5.1		1.9	5.1
SUSQUEHANNA INTERNATIONAL GROUP LLP		130.9			
STRONG INDUSTRIES, INC.	73.8				
DELSERRO ENGINEERING SOLUTIONS INC	1.4			1.4	
WARFEL CONSTRUCTION COMPANY	10.8				
HEFNER MACHINE & TOOL, INC.	84.8	0.1			
3FX INC	9.3			9.3	
AE DESIGN INC	19.2	8.1		19.2	8.1
SHEA & LATONE INC	4.4				
INTERNET PIPELINE INC		26.2			26.2
IMS TECHNOLOGY SERVICES INC	18.5	6.2		18.5	
BIOSPECTRA INC	23.7			23.7	
C.J. ROBINSON COMPANY	1.8			1.8	
REX MEDICAL, LP		14.0			
KEYSTONE ABRASIVES CO	0.4			0.4	
GLOBAL PACKAGING INC		7.4			7.4
ASH TEC INC		2.2			2.2
CHELSEA BUILDING PRODUCTS INC	8.8			8.8	

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
BOSTOCK COMPANY INC	3.8	1.5		3.8	1.5
J R PETERS INC	14.9			14.9	
SENTINEL HOLDING INC	3.2			3.2	
BORE TECH INC	11.3	7.9		11.3	7.9
MILLENNIUM MANUFACTURING INC	8.6				
D T DAVIS ENTERPRISES LTD	10.9				
ACCESS SECURITY CORP	2.5			2.5	
B & B DESIGNED SYSTEMS, INC.		48.1			
416 JOHNSON PROPERTIES, LTD	5.4	6.6			
BIG B MANUFACTURING INC	14.2			14.2	
INNOVATIVE SINTERED METALS, INC.	21.7	1.4		21.7	
ACCUDYN PRODUCTS, INC.	40.7	4.8		40.7	
ADVANCED SIMULATION TECHNOLOGY INC	25.5	26.7		25.5	26.7
SJ CONSULTING GROUP INC	43.6	22.6		43.6	22.6
BEILER HYDRAULICS INC	1.7			1.7	
PHILLY SHIPYARD INC	61.9			61.9	
QORTEK INC	140.4	161.7		139.2	161.7
TRILION QUALITY SYSTEMS LLC		11.0			
MEGAPHASE LLC	8.5				
COATING & CONVERTING TECHNOLOGIES	32.5				
EXELON CORPORATION	179.7	122.8		106.3	122.8
D.L. HOWELL & ASSOCIATES, INC.		27.9			
QUANTUM SOFTWARE SOLUTIONS INC	0.6				
ABERDEEN ROAD COMPANY	5.3	1.6		5.3	1.6
MICRO COAX INC		5.2			
NUTRISYSTEM INC	22.1	12.7		22.1	12.7
LISTRAK INC	88.7	36.8		88.7	36.8
JOHNSRUD & ASSOCIATES ARCHITECTS, LLC	51.1	87.5			
REUTHER & BOWEN PC		32.6			32.6
ARCHITECTURAL POLYMERS INC		22.2			
NESSCO ENTERPRISES LLC	0.5				
VIDEORAY LLC	1.7				
ENCLARA PHARMACIA	10.8	7.3		10.8	7.3
TALEN ENERGY SUPPLY LLC	39.1				
DURAWOOD PRODUCTS INC	0.6	3.4			
SKILL SURVEY INC	3.7			3.7	
RUSHABH INSTRUMENTS LLC		1.7			
ADVANCED TECHNOLOGY SERVICES GROUP LLC	102.4			67.0	
CRAZY AARON ENTERPRISES INC	15.3				
SRC SOLUTIONS INC	83.2			83.2	
GRIFFITH CONSULTING LLC	46.6				
RAJANT CORPORATION		18.6			18.6
HINDLE POWER INC	11.7	2.7		11.7	
STRASBURG RAILROAD COMPANY	0.3				
AESYNT INCORPORATED	189.7				
JUST BORN, INC.	8.5			8.5	
UNITED GILSONITE LAB		2.0			2.0
MEDICO INDUSTRIES INC	0.4	0.2			
PENNSYLVANIA PAPER & SUPPLY CO		1.2			1.2

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
ANDRITZ ASKO INC	2.2	6.6		2.2	
BLAIR STRIP STEEL COMPANY	3.9	2.0		0.7	
CHANNELLOCK INC	37.2				
JEANNETTE SHADE AND NOVELTY COMPANY DBA	74.3			74.3	
MATTHEWS INTERNATIONAL CORPORATION		30.2			
EQT PRODUCTION COMPANY	1,487.1	178.6		1,487.1	178.6
PBM, INC	49.3			49.3	
SLOAN BROTHERS CO		8.6			8.6
GREENLEAF CORPORATION		1.4			
SMS GROUP INC	43.9	39.9		43.9	39.9
MALLET & COMPANY INC	10.3			10.3	
PARKER WHITE METAL COMPANY		14.9			14.9
SHAW INDUSTRIES INC	8.7	3.5		8.7	
NICHOLSON CONSTRUCTION COMPANY	18.9			18.9	
AGR INTERNATIONAL INC		0.6			0.6
ARMSTRONG UTILITIES INC		3.5			3.5
SKC INC		11.3			11.3
MILLER WELDING & MACHINE CO	6.4			6.4	
HUSTON INC	0.5			0.5	
FREW MILL DIE CRAFTS INC		1.7			1.7
GLENN O HAWBAKER INC	0.3			0.3	
SMITH PROVISION CO INC		0.1			0.1
IMPERIAL CARBIDE INC	2.6			2.6	
WHIRLEY INDUSTRIES INC	6.0	2.9		6.0	
TALBAR INC	3.4			3.4	
INNOVATIVE SYSTEMS INC	77.5	55.5		61.0	
SPECTRUM CONTROL INC	5.3	9.3		5.3	9.3
VISTA METALS INC	3.5				
TRI R SALES INC	106.6	107.8			
ALLEGHENY PAPER SHREDDERS CORPORATION	192.4	85.3		192.4	
SOMERSET WELDING & STEEL INC	2.7	2.3		0.6	
II VI INCORPORATED	55.3	17.4			
PLASTEK INDUSTRIES INC	129.0			129.0	
PENNLAKE CORPORATION	2.8	1.0		2.8	
CLASSIC INDUSTRIES INC		120.4			120.4
NUVISION ENGINEERING INC		3.7			3.7
ARCO ENTERPRISES, INC.		13.3			
LINCOLN CONTRACTING & EQUIPMENT CO INC	9.1	1.8		9.1	
STARLITE DIVERSIFIED INC	5.6			5.6	
GASBARRE PRODUCTS INC	61.2	8.9		61.2	
BLAIR COMPANIES	0.8			0.8	
T M INDUSTRIAL SUPPLY INC	0.1			0.0	
BURKHARDT SHEET METAL COMPANY INC	35.5			35.5	
HUCKESTEIN MECHANICAL SERVICES, INC.		11.2			
PENN METAL STAMPING INC	29.5				
MASTER MACHINE CO INC		18.6			18.6
BASIC CARBIDE CORPORATION		1.8			
ST MARYS TOOL & DIE CO INC	58.6	31.2			12.5
BRA-VOR TOOL & DIE CO INC		20.2			3.6

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
VIKING TOOL & GAGE INCORPORATED	1.3	0.4		1.3	
AQUATECH INTERNATIONAL LLC	25.2				
METCO INDUSTRIES INC	2.7	3.5		2.7	3.5
KENSON PLASTICS, INC.		5.6			
VEKA INC		6.6			
ACTCO TOOL & MFG CO		20.1			
LIGHTHOUSE ELECTRIC COMPANY INC	19.3				
NUTEC TOOLING SYSTEMS INC	22.4				
REARICK TOOLING INC	4.3	2.7		4.3	
FORMS & SURFACES INC		2.9		1.8	1.0
COLUMBIA NORTHWEST INC		0.0			0.0
CENTROID CORPORATION		9.3			
LIBERTY ELECTRONICS INC	13.4			3.2	
WELLINGTON POWER CORPORATION	12.9	5.8		12.3	
ENSINGER INC	19.1			19.1	
BASHLIN INDUSTRIES, INC.	0.9	1.2		0.9	
PERFIDO, WEISKOPF, WAGSTAFF & GOETTEL	2.1	20.0			
AUTO SOFT INC	80.5			80.5	
ERIE AVIATION INC	41.3			31.8	
KOPPERS INC	12.2			12.2	
CHICK WORKHOLDING SOLUTIONS INC		3.3			
LEECH INDUSTRIES INC	4.0			4.0	
LSC DESIGN INC	24.0	1.9		24.0	1.9
SENSE TECHNOLOGY, INC		8.0			
HANNA TRANSFER COMPANY NORTH	10.9	1.5		10.9	1.5
REDDOG INDUSTRIES INC	7.6			7.6	
BLUE MOUNTAIN QUALITY RESOURCES INC	59.0	9.0		59.0	
SUBURBAN TOOL & DIE CO INC	36.3	55.5		36.3	40.2
J & A TOOL COMPANY INC	4.0	0.7		4.0	0.7
GUARDIAN PROTECTION SERVICES INC		4.4			4.4
CONFLUENCE TECHNOLOGIES INC	51.5	9.7		25.7	9.7
PAVONE MARKETING GROUP, INC.		9.8			
F & S TOOL INC	5.4	3.7		5.4	3.7
LARSON TEXTS INC	53.2			53.2	
VENTANA USA	3.7	4.2			
UNIVERSAL PROTECTIVE PACKAGING INC	2.0			2.0	
SITE DESIGN CONCEPTS INC	8.9	10.9		8.9	10.9
UNIVERSAL STAINLESS & ALLOY PRODUCTS INC		34.2			
CREEHAN & COMPANY CORPORATION	28.8			28.8	
DAGOSTINO ELECTRONIC SERVICES INC		2.8			2.8
HRANEC SHEET METAL INC	3.6	1.3		3.6	1.3
VENANGO STEEL INC	20.2	3.0		20.2	3.0
CENTRAL HYDRAULICS INC	0.5				
GFS HOLDING CORP. & SUBSIDIARIES	15.8				
AUGUSTINE DIE & MOLD INC	110.7				
CONTROLLED MOLDING INC		18.6			18.6
MASCARO CONSTRUCTION COMPANY L P	15.7	23.2			
SPECIALTY TIRES OF AMERICA(PENNSYLVANIA)	15.4	2.4		15.4	
BCL MANUFACTURING INC	11.1	11.8		11.1	11.8

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	2019	2020	2021	2019	2020
X CELL TOOL & MOLD INC	12.2			12.2	
CORLE BUILDING SYSTEMS INC	23.8	2.1		23.8	2.1
LESLEH PRECISION INC	8.6			8.6	
TOUCHTOWN INC	15.7			15.7	
ATLANTIS TECHNOLOGIES LLC	45.7	4.9		45.7	
CASTLE MOLD & TOOL INC	5.4	2.7		5.4	2.7
SIGNAL TECHNOLOGIES INC	2.7				
RAPID REACTION INC	0.2			0.2	
GRIFFITH BROTHERS WHITETAIL RIDGE, INC	1.4				
INTEGRATED FABRICATION & MACHINE INC	0.3	2.7		0.3	
IPEG INC	2.2	2.6		2.2	2.6
PORTER CONSULTING ENGINEERS, PC		2.0			
ADVANCED POWDER PRODUCTS INC	36.0	24.0		36.0	24.0
ADVANCED CARBIDE GRINDING INC		21.8			21.8
CORRY MICRONICS INC	5.4	18.1		5.4	18.1
AMERICAN MADE LLC	10.2			10.2	
DESMONE & ASSOCIATES INC	10.9	6.4		10.9	
CORAZON INC	21.3	16.8			
PLASTECH CONTAINER SYSTEMS INC	0.7	0.3			
LABELPACK AUTOMATION INC	1.1	2.1		1.1	
REACTION BIOLOGY CORPORATION	75.2	3.4		75.2	3.4
CJL ENGINEERING INC	128.7	116.6		128.7	116.6
ARRAY ARCHITECTS, INC.	20.5	7.0			
SOFT GENETICS LLC		6.0			
PRECISION CUSTOM COMPONENTS, LLC		4.3			
MORGAN STANLEY SERVICES GROUP INC		27.8			
TRANSDUCERWORKS LLC	9.5	32.7		9.5	32.7
FEDEGARI TECHNOLOGIES INC	1.2			1.2	
X CARD HOLDINGS LLC	9.9	40.9		9.9	40.9
TRACK 5 MEDIA LLC	12.0			12.0	
BIMAX OF PA INC	6.8			6.8	
VIRONIKA LLC	4.5			4.5	
CLEARLY CLEAN PRODUCTS LLC		10.0			
RECRO PHARMA INC	43.7				
MORTGAGE CONNECT LP		31.0			
MEEKER HOLDING COMPANY INC	11.3			11.3	
LEVIS BUILDING COMPONENTS LLC	3.1			3.1	
WEB TALENT LLC	7.4			7.4	
EMINENCE ENTERTAINMENT ENTERPRISES LLC	9.1				
ITRCO LP	10.8			10.8	
SPECIALTY SEAL GROUP, INC.	3.3	2.3			
CMW HOLDCO INC.	64.7	47.9			4.0
SS INDUSTRIES LLC	10.2	5.4		10.2	5.4
AVERY DENNISON RETAIL INFORMATION	41.1	1.1		41.1	1.1
CERNOSTICS INC	26.0			26.0	
FOX CHASE CHEMICAL DIVERSITY CENTER INC	26.8			26.8	
CARMELL THERAPEUTICS CORPORATION		17.2			17.2
DEIBLER MACHINING LLC		15.4			15.4
CLINICAL RESEARCH ASSOCIATES OF CENTRAL	19.7	5.5		19.7	

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	2019	2020	2021	2019	2020
CLIMECO CORPORATION		3.5			
FRAMKAT LP	5.0	1.9			
UNITY TECHNOLOGIES SF		10.9			
BLUE AVIONICS INC	12.0	46.0		12.0	46.0
CDG ENVIRONMENTAL LLC	9.6	3.5		9.6	
SYNERGETIC SOUNDS INC	31.6	10.1			
MASON JARS COMPANY	12.9	15.7		12.9	15.7
BUCKLEY FUTURES LLC		47.3			18.9
SEAT ENGINE TICKETING LLC		9.0			
BROOKVILLE GLOBAL HOLDINGS INC		8.4			
QINTEL, LLC		270.6			
DMLOGIC, LLC	38.3	5.7			
PARA COAT TECHNOLOGIES INC	13.3	11.0		3.2	
MAGNATECH INTERNATIONAL INC		2.9			2.9
TORCHLIGHT TECHNOLOGY GROUP LLC	36.3	50.3		36.3	
HEALTH UNION		59.5			
YARDS BREWING COMPANY LLC	5.2			5.2	
EDTELL LLC		19.5			19.5
3GTMS, INC.	2.8				
CUSTOMERS BANCORP INC		23.0			
RUNABOUT MEDIA GROUP LLC	0.1			0.1	
VAXFORM LLC		0.3			
ALUMISOURCE CORPORATION		21.9			
KNOPP BIOSCIENCES LLC	50.5	32.0		50.5	
RUE ENVIRONMENTAL LLC	2.1			2.1	
OPTOFLUIDICS INC	11.6			11.6	
BELLEFIELD SYSTEMS, LLC	17.5				
THUBRIKAR AORTIC VALVE, INC		5.7			
SECURITY RISK ADVISORS INC	4.6			4.6	
QRONO INC	0.3	0.1		0.3	
ERP ESSENTIALS LLC	0.6	0.6			
WIZEHIVE INC		60.1			60.1
EVOLUTION MOLDING SOLUTIONS INC		0.8			0.8
GROVARA, LLC	3.0				
ATRIN PHARMACEUTICALS	7.9	1.2		7.9	
GRANUM AI LLC	63.7	1.7		15.0	
SIGNATURE VACUUM SYSTEMS INC	7.9			7.9	
BMH LLC		60.8			60.8
ADVANCED ALLOY PROCESSING CORPORATION	1.9			1.9	
PCA CORRUGATED AND DISPLAY LLC		3.9			3.9
ERNST CONSERVATION SEEDS INC	1.9	1.3		1.9	
LEARNING SCIENCES INTERNATIONAL LLC	26.8	15.9			6.9
KELLER GROUP, INC.	20.7	26.6			
HYDRO PAC INC	9.7			9.7	
FEDEX GROUND PACKAGE SYSTEM INC	5.2			5.2	
CUMMINS ALLISON CORP	15.1			15.1	
CALUMET SPECIALTY PRODUCTS PARTNERS LP		6.7			
SOLUTION TREE INC		2.2			
CREATIVE MULTIMEDIA SOLUTIONS LLC	11.9	13.2		11.9	

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
SOPHIA 1, INC	35.2			35.2	
TENEX TECHNOLOGIES, LLC	20.4	1.2			
NALCO COMPANY LLC	34.7	13.1		34.7	12.8
CLEVELAND PRICE INC	30.2	1.3		30.2	1.3
WHITING CORPORATION	8.8				
PACKAGING CORPORATION OF AMERICA	8.1	2.1		8.1	2.1
FPOLISOLUTIONS, LLC		22.8			
A T & T MOBILITY SERVICES LLC	16.4			16.4	
WALSH GRANITE JV	0.9	4.6			
DOW CHEMICAL COMPANY	206.7				
WALL CO INC	7.7				
HOLCIM US INC	18.3			18.3	
HARMAN DEUTSCH CORP		5.7			5.7
KIMBERLY CLARK CORPORATION		217.9			217.9
MANITOWOC COMPANY INC	330.2			330.2	
MENASHA CORPORATION	38.2	16.3		38.2	16.3
KOMATSU MINING CORP. FKA JOY GLOBAL INC	23.7			23.7	
METSO MINERALS INDUSTRIES INC		71.4			71.4
GREAT LAKES AUTOMATION SERVICES INC	2.6			2.6	
ROMARK LOGISTICS OF PA INC	9.4				
KONGSBERG PROTECH SYSTEMS USA CORP	4.0			4.0	
NEWLINK GENETICS CORPORATION	48.0				
PB HEAT LLC	0.6	6.7			
SOLUTIA INC	12.2			12.2	
KIEWIT ENGINEERING GROUP INC.	1.5			1.5	
PSI PUMPING SOLUTIONS, INC	55.7			55.7	
J & R ACQUISITION CORP	5.3			5.3	
MAXX ORTHOPEDICS INC	4.4			4.4	
TX3 SERVICES, LLC		22.8			
PARAGON HOLDING CORP	10.1	3.7		10.1	
JETSPRING LLC	21.8	24.5			
HIREKU INC		3.8			0.6
K2 KINETICS LLC		4.6			
COMMERCIAL MANAGEMENT SYSTEMS, LLC		15.0			
GREYSIGNAL INC	6.6	8.6			8.6
ARCWEB TECHNOLOGIES LLC	8.0				
TIRED HANDS BREWING COMPANY	11.9			11.9	
TRI-STATE TECHNOLOGY PROFESSIONALS INC	43.1			43.1	
UBER TECHNOLOGIES INC	3,486.8	4,788.9			
I2R NANOWAVE INC	21.9				
METHOD AUTOMATION SERVICES INC		17.1			
VISTAR MEDIA INC	45.8			1.4	
LANCASTER SWINE HEALTH SERVICES, PC		6.9			
HPT PHARMA LLC		51.4			51.4
CLEAVERSOFIT		61.4			
SOCIAL STATION LLC	18.9				
MICHELMAN STEEL ENTERPRISES LLC	42.0	3.7		42.0	
NXGN MANAGEMENT LLC	194.3	60.9			
PIANO SOFTWARE INC	11.4				

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
REMEDY SIMULATION GROUP, INC.	4.9				
INFINITE INVENTION, INC		0.9			
ELLUCIAN COMPANY LP		46.8			
WILD MEADOW FARMS LLC	3.6	3.4			
LEVANTE BREWING INC		47.3			
CANARY COMPLIANCE	7.3	6.1			
SOLID STATE CERAMICS INC	41.4	44.2		38.9	
WIEGEL MACHINE INC		2.6			
COCALICO DISTRIBUTION LLC	0.8				
JWF HOLDINGS INC		20.6			
BRIGHTBYTES, INC.	2.5			2.5	
BPI HOLDING GROUP, LLC	81.7				
MADAME RX, LLC		81.5			
OPTIMIZED MARKETS INC	3.4			3.4	
PECA LABS INC	1.7				
TREATSPACE INC	1.2				
LUXTECH LLC		2.0			
PRETZEL PETE INC	1.0				
AP THERMOFORMING LLC		2.1			
COMPOSITE PANELS INNOVATIONS, LLC	4.5	1.9		4.5	
INTACT VASCULAR INC	41.9				
WOLFGANG OPERATIONS LLC		6.3			
PRIMBIO RESEARCH INSTITUTE LLC	23.1	10.5		23.1	10.5
BIOMEME INC	137.3	35.1		11.6	35.1
FIBER-LINE INVESTMENT LLC	13.8				
ORTHOS ENTERPRISES INC	23.5	6.9		23.5	6.9
ZOOMI, INC.		5.5			5.5
THE EXONE COMPANY		14.6			14.6
G-P PANEL PRODUCTS LLC	22.8				
ASSET MAP LLC	15.3			15.3	
CORIELL LIFE SCIENCES, INC.	41.7	38.9		41.7	
MCM ELEMENTS LLC	3.8				
SEA PHARMACEUTICALS, LLC	3.1				
SPARK THERAPEUTICS, LLC		1,687.3			
IMPULSE TECHNOLOGY	8.7			8.7	
LEGAL SIFTER, INC.	70.9	10.8		70.9	10.8
NORTH AMERICAN TICKET ORGANIZATION		2.7			
US SPECIALTY FORMULATIONS LLC	17.8	38.4			11.8
VICTORY NUTRITION INTERNATIONAL INC		6.5			5.9
OCUGEN INC	28.5	23.4			
SERVICELINK HOLDINGS, LLC		55.6			
VILIMIA, INC		9.1			
LCR EMBEDDED SYSTEMS, INC	4.6	4.7		4.6	
ZOLL MANUFACTURING CORP	154.8	111.3		154.8	111.3
FLOWMETRIC DIAGNOSTICS, INC.	41.4	42.7		41.4	
H QUEST VANGUARD INC		10.7			10.7
PHL COLLECTIVE LLC	37.0			10.7	
PETERSON CARTRIDGE CO.	5.9				
CARNEGIE SPEECH	4.2				

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
COATINGTECH, LLC	0.3			0.3	
CLOUDSHADOW, LLC	5.8				
EVOL SCIENCE LLC	7.0				
CAGENT VASCULAR LLC		2.7			
PRACTICEMATCH CORPORATION	1.7			1.7	
KIEWIT POWER CONSTRUCTORS CO		13.6			
ALLEVI INC.		34.3			34.3
DISCOVERY ROBOTICS CORPORATION	23.0	6.0		23.0	6.0
AIRVIZ INC	36.8	21.9			
LOST TAVERN BREWING, LLC	0.5				
INNOVU LLC	122.1	41.3		122.1	41.3
RINOVUM WOMEN'S HEALTH, LLC	4.0				
1DA CORPORATION	5.6	2.9			
PANDO INTERNATIONAL LLC		1.3			
FIVE ELEVEN PHARMA INC		14.3			14.3
PRIMETALS TECHNOLOGIES USA LLC	115.7			115.7	
ADIAON LLC	3.7				
BLAIR TOOL AND PLASTICS COMPANY LLC	1.6				
NABRIVA THERAPEUTICS US, INC.	81.0	37.7		81.0	
SEASONS EVOO HOLDINGS LLC		4.8			4.8
ELMAGIN CAPITAL, LLC	49.6	66.4			
CAPSEN ROBOTICS INC	16.8	2.9		16.8	2.9
HOUWZER LLC	61.2	74.1		61.2	74.1
ROAR FOR GOOD, LLC		11.8			
EXYN TECHNOLOGIES INC		8.2			
AES ASSET ACQUISITION CORPORATION	1.5			0.1	
SEEGRID OPERATING CORPORATION	65.3	38.7			1.2
EXCEL HEALTH LLC	58.4	108.8			
JAKULIE LLC		2.4			
VELICEPT THERAPEUTICS INC	233.2	149.5		233.2	149.5
SKINJECT, INC.	4.8	28.7		4.8	28.7
PERSONALIZED GENETICS		9.3			
TRADEMARK VISION USA LLC	86.6				
MINE VISION SYSTEMS INC	10.7	23.2		10.7	23.2
ARCHITECTURAL PRECAST INNOVATIONS INC	3.5	4.1			
PROJECT VIVE LLC	2.5			2.5	
TIGHT ROCK SOLUTIONS, LLC	34.5				
GRUE & BLEEN LLC		0.5			
FINPAY HOLDINGS, LLC	6.2	41.1			
ADRIK, LLC	7.4			7.4	
DESTINATION KNOWN	1.1				
INSTITUTE ON HEALTHCARE DIRECTIVES	1.0				
RED QUEEN GAMING LLC	8.5				
IVIEW THERAPEUTICS, INC.	5.6	31.8		5.6	31.8
SRVD INC	6.5	2.5		6.5	
WISE TELEMETRY LLC	1.6			1.6	
DEPIRO ENTERTAINMENT LLC		1.3			
VELOCITY ROBOTICS, INC	4.4			4.4	
VERSUM MATERIALS INC		16.5			16.5

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NAME	AWARDS (\$K)			UTILIZATIONS (\$K)	
	2019	2020	2021	2019	2020
LIQUID BIOTECH USA INC		1.4			
NOVATECH, LLC	2.2				
HOWDEN NORTH AMERICA INC.	11.8	7.9		11.8	
APPLIED CONTROL ENGINEERING, INC	51.0	26.1			
ACS INTERNATIONAL RESOURCES INC	5.3	6.3			
KARINS ENGINEERING, INC. & SUBSIDIARY		1.1			
DASSAULT SYSTEMES AMERICAS CORP	2.8	65.6		2.8	65.6
ARRIS GLOBAL SERVICES, INC		172.0			74.0
CMC ENERGY SERVICES INC	11.3			11.3	
VEEDER ROOT COMPANY	138.5	126.6			111.7
W.L SNOOK & ASSOCIATES, INC		2.2			
CGI TECHNOLOGIES & SOLUTIONS INC		94.5			94.5
CADENCE INC	28.5	5.2			
XYNTEK INCORPORATED	2.1	3.0			
UNIVERSAL INDUSTRIAL GASES INC	7.3	0.7		7.3	
PROGENY SYSTEMS CORPORATION	17.6				
INTERSTATE HOLDING INC	50.5	36.8		50.5	36.8
RUCKUS WIRELESS INC		1.9			1.9
CHEMIMAGE CORPORATION	44.8	30.4			16.3
PRINTFLY CORPORATION	74.2	38.6		74.2	38.6
SAS INSTITUTE INC	7.0			7.0	
INSTEEL WIRE PRODUCTS COMPANY	5.2			5.2	
GENERAL DYNAMICS SATCOM TECHNOLOGIES INC	7.2			7.2	
JORDAN ACQUISITION GROUP LLC	2.1			1.7	
INDUSTRY WEAPON INC	1.6	2.5		1.6	2.5
DIAMOND MT INC	7.3				
HYDRO EXTRUSION USA LLC		74.0			74.0
ROCKLAND, INC.	12.3	5.1			
CUHACI & PETERSON ARCHITECTS INC		2.2			0.9
COMPLEXA INCORPORATED	69.5	45.5		69.5	
EASTMAN CHEMICAL COMPANY	4.7	23.2			5.9
EASTMAN CHEMICAL RESINS INC	89.3	151.5		89.3	121.1
B & C TRANSIT, INC.		7.5			
EARTH SHAPERS LLC	1.2			1.2	
LAKE TOOL INC		20.8			20.8
HAMILTON PRECISION METALS INC		1.7			1.7
SPECTRUM CONTROL TECHNOLOGY INC	0.7	2.6			
A T & T SERVICES INC	18.7			18.7	
PERFICIENT INC	6.6			6.6	
RACKSPACE US INC		3.1			
SIEMENS PRODUCT LIFECYCLE MANAGEMENT	30.3	17.8		30.3	17.8
ADOBE INC.	55.9	25.7		55.9	
EBAY INC		7.9			7.9
INTEL AMERICAS INC	945.6	324.6		417.7	324.6
INFINERA CORPORATION	122.3				
JAREX ENTERPRISES, LLC	15.0	11.1			
IMMUNOME INC	91.0				
ONCOCEUTICS INC	21.4			21.4	
GSI HEALTH, LLC	7.7				

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	2019	2020	2021	2019	2020
RS ENERGY GROUP, INC.	47.6	42.7		14.3	21.1
INTERVALA, LLC	23.4	11.8		23.4	
STRONGBRIDGE U.S. INC		36.1			4.4
CURAVI, INC.	22.2				
PHILADELPHIA MEDICAL MANAGEMENT COMPANY		17.7			
BAINBRIDGE HEALTH INC	34.1	31.9		34.1	31.9
ADVANSIX INC	18.0	11.8		18.0	11.8
INNAMED, INC		2.1			
LOCOMATION		25.7			
ARRAY ANALYTICS INCORPORATED	4.8	3.1			
BLASTPOINT INC	6.6	11.0			
NIVO1, LLC	23.5				
PERSEA NATURALS, LLC		8.3			
CHOITEK, LLC		0.7			
SPCR ACQUISITION, INC.		10.9			
COMPOSER, LLC	9.7			9.7	
LOANSTAR TECHNOLOGIES LLC		14.3			
SIG MEDICAL CORP	9.6				
NOVASEPAMERICASINC	2.0				
EHR COMMAND CENTER LLC		2.2			
AURORA INNOVATION INC	151.6	159.4			
THE MID-STATE SOLUTIONS GROUP, LLC		0.5			
CHONDRIAL THERAPEUTICS INC	170.2	23.9		170.2	23.9
ATOPTIX, INC.	10.0	1.8			
CITIZENDEVELOPER COM LLC	37.9	46.8		37.9	46.8
CIVI BIOPHARMA INC	34.5				
WBQ INTERMEDIATE LLC	7.7				
DIGIN TECHNOLOGIES LLC		7.4			
R N D SERVICES INC		12.0			12.0
UPCONTENT LLC		0.6			
GLOBIN SOLUTIONS INC	34.5			34.5	
XACT METAL, INC.	12.2	30.7		12.2	30.7
LEANFM TECHNOLOGIES, INC.	11.2				
HAMPTON HOURLY ADMINISTRATION		1.0			
RENERVA	5.9				
YNOT DISTRIBUTING LLC	1.1				
BEHAVIOR LLC	2.5				
MUSIC EVERYWHERE, INC	3.6				
MYOTA, INC		39.5			39.5
DASH SOLUTIONS INC		11.0			11.0
ARDOR & FORGE		0.3			
PROACTIVE SENSING, INC		10.9			
MODULE DESIGN INC		1.5			
KOGNITION, LLC		2.9			
ECOREMEDY, LLC		15.1			
LIBERTY CC HOLDINGS LLC		26.0			
AMERICAN ADDITIVE MANUFACTURING, LLC		0.6			
FARM JENNY LLC		8.8			8.8
PEARL STREET TECHNOLOGIES, LLC		11.7			

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	2019	2020	2021	2019	2020
PROGENYHEALTH HOLDINGS, LLC		5.8			
MB CASTINGS LLC		5.5			
LANCASTERERC HOLDINGS LLC		1.5			
MD ALLY, INC		1.6			
NIMBUS ROBOTICS INC		23.0			
PXO HOLDINGS III CORP	8.3				
SPOTLESS MATERIALS LLC		6.4			
BOXPLOT ANALYTICS		2.7			
ADRICH INC		12.3			12.3
GRAPHIC PACKAGING INTERNATIONAL INC	3.4				
ESAB GROUP INC	26.4			26.4	
HABITAT LOGISTICS INC.		10.1			
MEBIAS DISCOVERY INCORPORATED	44.4	80.2		44.4	80.2
PHONETICS INC. (DBA SENSAPHONE)	52.9	10.7		38.0	
FIBROCELL SCIENCE INC	59.3				
SHOWCLIX INC	7.8				
PROJECT EXECUTION NETWORK	11.7	1.6		11.7	
IOP HOLDINGS LLC	10.1				
JOHN BEAN TECHNOLOGIES CORP	115.9	54.7		9.0	
JELD WEN INC		9.6			
INTEL CORPORATION	143.0	2.2			
AUTODESK INC		34.7			34.7
GILEAD SCIENCES INC		212.3			212.3
AVERY DENNISON CORPORATION	53.7	47.6			47.6
ARAMARK SERVICES INC	73.8	356.7			
LEIDOS, INC.	38.7	24.1		38.7	24.1
KEYSTONE BIOANALYTICAL, INC	34.2	3.0		34.2	
TELEDYNE INSTRUMENTS INC		9.1			9.1
AEVI GENOMIC MEDICINE, INC.	25.5				
ZENTIS BETEILIGUNGSVERWALTUNGS GMBH & CO	5.5				
21ST CENTURY SOFTWARE TECHNOLOGIES INC		16.9			2.4
TOTAL	55,000.0	55,000.0	55,000.0	35,257.5	25,912.2