

DELAWARE

ECONOMIC DEVELOPMENT OFFICE

Right Place. Right Size.

WORKFORCE DEVELOPMENT TEAM



Annual Report

Fiscal Year 2013

What we do..

The mission of the Workforce Development Team is to ensure the availability of a skilled, multi-level workforce for new and existing Delaware businesses. We do this by assisting employers in obtaining, upgrading and retaining valued workers, and by helping Delawareans gain the education and training required to get and keep quality jobs and steady employment.

The Delaware Economic Development Office's Workforce works with Delaware's industries and individual companies to determine opportunities to increase the productivity and performance of their workforce. Workforce representatives can assist companies in outlining training goals, providing valuable training information and resources, and in developing skilled training programs to meet their specific needs. The programs are all directed toward business retention and expansion through the development of a skilled workforce.

Workforce representatives are skilled toward leveraging resources and maximizing the return on investment. Several business partnerships have been formed that resulted in shared training programs, thereby leveraging state training funding along with identifying specific business retention and expansion needs for a particular industry.

Our services to our clients range from funding Blue Collar Grants for customized training needs to joining like industries together to develop educational programs that support business retention and expansion along with establishing a qualified skilled workforce. The Workforce Center of Excellence strives to stay in the forefront of the business community, ready to assist companies, large or small, meet their business needs now and in the future.

Programs that are managed by Workforce Development

- **Blue Collar Training Fund** is created by a .15% assessment on the unemployment insurance tax paid on the first \$10,500 of employee wages. DEDO receives 25% of the training receipts generated by this assessment to provide customized training to employees of Delaware businesses for skill development in conjunction with business retention and expansion.
- **Governor's Workforce Development Grant program**, created with Blue Collar funds to be administered by the Delaware Higher Education Commission, provides tuition assistance to working adults attending higher education courses on a part-time basis by contributing 65% of their tuition.
- **State Employee Training** program blue collar training funds are also used to support career ladder training programs for state employees. The program is administered by Office of Human Resource Management.



Completed Contracts in FY2013

Thirty two (32) custom training contracts totaling over \$700,000 were active and managed by the Workforce Development Center, representing partially completed contracts carried over from FY 2012 and new contracts written in FY 2013. This activity does not include the Governor's Workforce Development Grant program or the State Employees training program.

- Thirty two (32) contracts were completed totaling 786,983.98 with a match of \$5,069,635.02 contributed by the employers
- Twenty nine (29) unique companies served
- 1,169 training participants
- 11 companies were first time applicants (*first time applicant is defined as a company that has not received funding within the last 5 years.*)
 - New Castle County—8
 - Kent—1
 - Sussex—2
- 15 companies were small businesses (*less than 100 employees*)

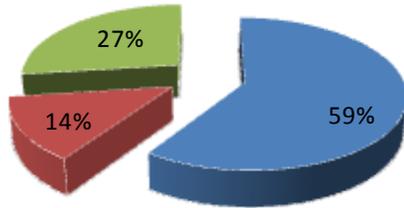
Signed Contracts in FY2013

There were 37 contracts that were signed in fiscal year 2013.

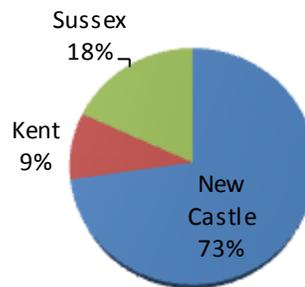
- 37 contracts were signed in FY 2013 compared to 52 contracts signed in FY 2012, representing a 29% decrease
 - 22 were in New Castle County
 - 5 were in Kent County
 - 10 were in Sussex County
- Funds awarded total over \$1.2 million
- 16 were first time applicants (within 5 years)
- 22 were small businesses (less than 100 employees)

Projects by County

■ New Castle ■ Kent ■ Sussex

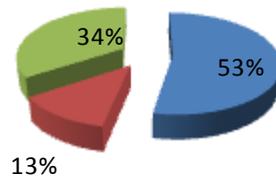


First time applicants by County

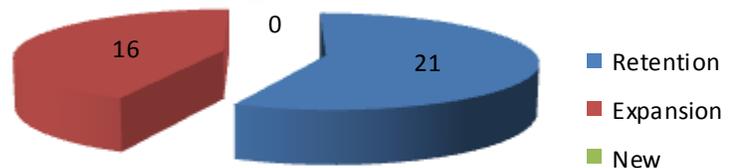


Companies by size FY 13

■ Large companies (100+ employees)
 ■ Mid (51-99 employees)
 ■ Small (1-50 employees)



Status of Companies served signed in FY 13



Summary of Workforce Development Projects FY 2013

Applicant's Name	Program	Participants	Amount Paid	Company Match	County
Advanced Materials Technology	Lean Manufacturing	15	\$ 51,097.50	\$ 73,161.40	New Castle
Aearo Technologies, LLC a 3M Company	OJT	14	\$ 42,000.00	\$ 65,472.17	New Castle
Analytical Biological Services, Inc.	ISO 9001:2008 Training	12	\$ 36,295.00	\$ 66,133.00	New Castle
Anton Associates-APEX Employer Training	Employer Education Training	200	\$ 14,500.00		Sussex
Arlon Inc.	Six Sigma	2	\$ 1,777.50	\$ 5,104.00	New Castle
Astra Zeneca Pharmaceutical	Lean & Operational Excellence	32	\$ 36,544.00	\$ 227,239.45	New Castle
Coastal Brewing Co.	Welding Training	4	\$ 6,316.00	\$ 6,486.00	Kent
Creative Micro Designs, Inc.	ISO 9001:2008 Training	22	\$ 45,463.86	\$ 57,651.40	New Castle
Delmaco Manufacturing, Inc.	Lean Manufacturing Training	13	\$ 33,080.00	\$ 85,766.00	Sussex
Dentsply Caulk	Multi-Crafted Production Mechanic/ Service & VSM	32	\$ 32,341.77	\$ 83,615.00	Sussex
Flow Smart, Inc.	ISO 14644 Part 1-9 Clean Room Training	15	\$ 14,874.80	\$ 3,173,235.72	Sussex
FMC BioPolymer	Lean Manufacturing & TPM	20	\$ 22,500.00	\$ 89,254.00	New Castle
FMC BioPolymer	Six Sigma	1	\$ 1,599.75	\$ 2,016.00	New Castle
Foxfire Printing & Packaging	Various Printer Press Trainings	30	\$ 27,834.00	\$ 100,471.00	New Castle
Fujifilm Imaging Colorants, Inc.	Green Belt & Various Lean Manufacturing Skills Training	55	\$ 57,042.00	\$ 102,854.00	New Castle
Growth Inc.	Value Stream Mapping	6	\$ 7,710.00	\$ 18,076.62	New Castle
Handy Tube Corporation	World Class Safety Training, Soft Skills	6	\$ 12,247.67	\$ 16,017.70	Kent

Summary of Workforce Development Projects FY 2013

Applicant's Name	Program	Partici- pants	Amount Paid	Company Match	County
Healthcare Facility Solutions, Inc.	Six Sigma	1	\$ 1,777.50	\$ 2,100.00	New Castle
Hirsh Industries Inc.	Machine & Welding Training	13	\$ 15,136.10	\$ 33,023.92	Kent
ILC Dover	Principles of Lean	52	\$ 14,328.00	\$ 29,146.54	Kent
Industraplate	ISO Certification	10	\$ 32,981.50	\$ 47,103.00	New Castle
PATS Aircraft	BBJ General Fam. & APICS Mgmt	57	\$ 89,632.43	\$ 442,192.65	Sussex
Playtex Manufacturing	Enhancing Organizational Effectiveness Training	373	\$ 67,692.37	\$ 117,241.63	Kent
Rexam	Six Sigma	1	\$ 1,777.50	\$ 2,380.00	New Castle
Sepax Technologies, Inc.	ISO 9001 Overview & Internal Audit	4	\$ 4,365.00	\$ 5,154.32	New Castle
SevOne, Inc.	MySQL Training	33	\$ 41,250.00	\$ 46,631.09	New Castle
Siemens Healthcare Diagnostics	Six Sigma	1	\$ 1,777.50	\$ 2,492.00	New Castle
Summit Aviation, Inc.	Airframe & Power-plant Prep Test Course	8	\$ 12,000.00	\$ 45,980.00	New Castle
Summit Aviation, Inc.	Finance for non Financial Managers	20	\$ 3,200.00	\$ 3,725.00	New Castle
Valassis	Team Bldg, Conflict Resolution & Personal Accountability	166	\$ 30,864.73	\$ 59,560.00	New Castle
Zenith Products	Six Sigma	2	\$ 1,777.50	\$ 8,582.21	New Castle
Zenith Products	Six Sigma Greenbelt Training	20	\$ 25,200.00	\$ 51,769.20	New Castle
TOTAL		314	\$ 786,983.98	\$5,069,635.02	

TRAINING PROVIDERS

- ◇ Construx Software
- ◇ DEMEP
- ◇ Sussex Tech
- ◇ Coverdale North America
- ◇ Polytech Adult Education
- ◇ Anton Associates
- ◇ Percona, Inc.
- ◇ Levers Group
- ◇ James Snyder
- ◇ John Micek
- ◇ The Norwil Group
- ◇ Manroland Inc.
- ◇ Press Solutions, LLC,
- ◇ Dainpon Screen
- ◇ Mulliken Best Practices World
- ◇ KDR Associates
- ◇ MEA



PROFILE OF PARTICIPANTS

JULY 1, 2012 - JUNE 30, 2013

The following demographic information is supplied by participants of the Blue Collar custom training program. Participation is on a voluntary basis. In some cases, participants chose not to complete the survey; in others, they did not complete the entire questionnaire. The results below reflect information gleaned from 94% of the program participants this year.

SEX		AGE		RACE/ETHNIC GROUP	
Female:	40.1%	16-20:	1.2%	American Indian:	0.6%
Male:	41.4%	21-30:	16.3%	Asian/Pacific Islander	4.1%
No Response:	19.5%	31-55:	63.7%	Black:	12.3%
		56-65+:	18.1%	Hispanic:	12.9%
		No Response:	0.7%	White:	56.7%
				No Response:	3.4%
DISABILITY		VETERAN		MARITAL STATUS	
Yes:	2.23%	Yes:	13.03%	Married:	55.28%
No:	94.95%	No:	82.98%	Single:	34.51%
No Response:	2.82%	No Response:	3.99%	Single Parent:	5.05%
				Other:	3.75%
				No Response:	1.41%
RESIDENCE		LIMITED ENGLISH		RECIPIENT OF PUBLIC ASSISTANCE WITHIN LAST 90 DAYS	
DE:	87.5%	Yes:	18.2%	Unemployment Ins.:	1.2%
MD:	5.2%	No:	77.1%	SSI	.9%
PA:	4.3%	No Response:	4.7%	TANF:	.2%
NJ:	.6%			Food Stamps:	1.6%
Other:	1.1%			No Response:	96.1%
No Response:	1.3%				
EMPLOYMENT STATUS 90 DAYS PRIOR TO TRAINING PROGRAM				AVERAGE SALARY OF TOTAL PARTICIPANTS	
Unemployed:	1.6%			\$28.95hour	
Employed Part Time:	1.1%				
Employed by This Employer:	88.1%				
Employed by Other Employer	2.3%				
No Response:	6.9%				
EDUCATION LEVEL					
Did Not Complete High School:	7.1%			2-Year College Degree:	6.7%
High School or Equivalent:	33.6%			4-Year College Degree:	15.5%
Post-High School/Training Program:	7.5%			Additional Degrees:	3.6%
No Response:	3.2%			Some College:	22.8%

Satisfaction Survey

Satisfaction Survey Results- The following data is based on surveys received from 27 companies during the time period of July 1, 2012 – June 30, 2013. This survey replaces the letter of satisfaction that was previously requested of all companies at the completion of their training.

The Course:

The customized curriculum was on target with my stated goals, objectives and desired outcome.

Strongly Disagree 0 Disagree 0 Agree 8 Strongly Agree 19

The employees have a clear vision of what is expected of them resulting from this training.

Strongly Disagree 0 Disagree 0 Agree 10 Strongly Agree 17

Communication:

The Trainer maintained good communication with the Project Manager during the course of the training.

Strongly Disagree 0 Disagree 0 Agree 6 Strongly Agree 19

All materials related to the training (participants surveys, test score, assessment, etc.) were given to the Project Manager upon completion of the training.

Strongly Disagree 0 Disagree 1 Agree 7 Strongly Agree 17

The Instructor:

The Instructor presented the material clearly and at an appropriate level (spoke clearly, was knowledgeable of subject matter, etc.) while promoting participant discussion and involvement.

Strongly Disagree 0 Disagree 0 Agree 2 Strongly Agree 25

The Instructor kept discussions and activities on track.

Strongly Disagree 0 Disagree 0 Agree 4 Strongly Agree 23

Grant Process:

The grant process was understandable and user friendly.

Strongly Disagree 0 Disagree 1 Agree 13 Strongly Agree 12

The Workforce Development Center representative was accessible and maintained good follow through to ensure that our needs were met in a timely and efficient manner during the complete grant process.

Strongly Disagree 0 Disagree 0 Agree 5 Strongly Agree 22

We would use this grant again in the future and would recommend it to our colleagues or contacts within our industry.

Strongly Disagree 0 Disagree 0 Agree 4 Strongly Agree 23

The Delaware Economic Development Office (DEDO) website was helpful and easy to navigate and understand.

Strongly Disagree 0 Disagree 0 Agree 13 Strongly Agree 12

Governor's Education Grants

DEDO has provided up to \$100,000 per grant program of Blue Collar funding for the Governor's Education Grant Program. Delaware Higher Education Commission (DHEC) administers the programs that awards grant of up to \$2,000 per participants per year. Grant recipients are required to attend an approved Delaware educational institution and agree to release grades and academic progress to DHEC.

The Governor's Education Grant for Working Adults is designed to assist working adult students who meet the enrollment, employment, and income eligibility requirements below. To qualify, applicant must be:

- 18 or older
- A high school graduate or GED recipient
- A resident of Delaware and a U.S. citizen or eligible non-citizen

The Governor's Education Grant for Unemployed Workers is designed to assist those individuals who have lost their jobs due to the current economic climate and have been unsuccessful in obtaining employment within their current career field/occupation. It helps qualified individuals with training costs associated with learning a new skill or upgrading their current one. In order to qualify, applicant must be:

- 18 or older
- A high school graduate or GED recipient
- A resident of Delaware and a U.S. citizen or eligible non-citizen
- Registered with the Department of Labor –Division of Employment and Training (DET)
- Recommended by a DET Career Counselor
- Ineligible for Department of Labor's Dislocated Worker Training Program
- A high school graduate or GED recipient

Educational institutions participating in the grant program are:

- Delaware College of Art and Design
- Delaware State University
- Delaware Technical and Community College (all campuses)
- Goldey-Beacom College
- New Castle County Adult Education
- Polytech Adult Education
- Sussex Tech Adult Education
- University of Delaware-Professional and Continuing Studies (non credit certificates only)
- Wilmington College (all campuses)

Governor's Grant FY 2013

Fiscal Year 2013 Highlights:

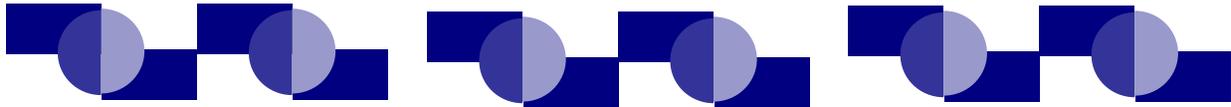
- In the Fiscal Year 2013 the Delaware Higher Education Office had 135 Governor's Grants that were used at the participating Institutions for a total of \$174,898.55.
- 68 Grants were awarded and used by Unemployed Delaware residents totaling \$90,096.40.
- 67 Grants were awarded and used by Employed Delaware Residents totaling \$84,802.15.
- 91.9% of the students were seeking a certificate, 8.1% of the students were seeking a degree.
- 60% of all of the students successfully completed the courses/programs that they were enrolled in. 32.6% of the students were still enrolled in the courses/programs. 3.7% of the students did not complete all of their courses/program. 3.7% of the students exited the programs.
- 45.6% (31) of the Unemployed students completed the courses/programs that they enrolled in successfully or were still enrolled and on schedule to complete their program, 42.6% (29) were still enrolled in the courses/programs, 5.9% (4) of the students had dropped of the program for a variety of reasons, and the last 5.9% (4) did not pass all of the classes that they were enrolled in.
- 74.6% (50) of the Employed students completed the courses/programs that they enrolled in successfully, 22.4% (15) were still enrolled in the courses/programs, 1.5% (1) of the students had dropped out of the program for a variety of reasons, and the last 1.5% (1) did not pass all of the classes that they were enrolled in.

Fiscal Year 2013 enrollment breakdown by Institution and grant

Participating Institution	Unemployed		Employed		Total	
	# of Students	Amount Spent	# of Students	Amount Spent	# of Students	Amount Spent
DEL TECH STANTON WILMINGTON CAMPUS	8	\$10,863.60	6	\$5,816.00	14	\$ 16,679.60
DEL TECH OWENS CAMPUS	30	\$33,582.40	4	\$3,368.95	34	\$ 36,951.35
DEL TECH TERRY CAMPUS	1	\$1,360.00	3	\$2,539.55	4	\$ 3,899.55
POLYTECH ADULT EDUCATION	7	\$12,790.40	27	\$36,922.05	34	\$ 49,712.45
SUSSEX TECH ADULT DIVISION	20	\$27,588.00	22	\$27,979.35	42	\$ 55,567.35
UNIVERSITY OF DELAWARE	2	\$3,912.00	4	\$6,935.40	6	\$ 10,847.40
WILMINGTON UNIVERSITY	0	\$0.00	1	\$1,240.85	1	\$ 1,240.85
TOTAL	68	\$90,096.40	67	\$84,802.15	135	\$ 174,898.55

Enrollment by participating Institution

Participating Institution	# of Students	% of Students
DEL TECH STANTON WILMINGTON CAMPUS	14	10.4%
DEL TECH OWENS CAMPUS	34	25.2%
DEL TECH TERRY CAMPUS	4	3.0%
POLYTECH ADULT EDUCATION	34	25.2%
SUSSEX TECH ADULT DIVISION	42	31.1%
UNIVERSITY OF DELAWARE	6	4.4%
WILMINGTON UNIVERSITY	1	.7%
Total	135	100.0%



Enrollment by level of education sought

Participating Institution	Certificate	Degree	Total
DEL TECH STANTON WILMINGTON CAMPUS	9	5	14
DEL TECH OWENS CAMPUS	31	3	34
DEL TECH TERRY CAMPUS	2	2	4
POLYTECH ADULT EDUCATION	34	0	34
SUSSEX TECH ADULT DIVISION	42	0	42
UNIVERSITY OF DELAWARE	6	0	6
WILMINGTON UNIVERSITY	0	1	1
Total	124	11	135

Summary of State Employee Training FY2013

Certificate	# of Employees Trained	Amount Funded
Basic Principles of Leadership	67	\$4,020.00
Providing Constructive Feedback	58	\$3,480.00
Developing Others	59	\$3,540.00
Correcting Performance Problems	52	\$3,120.00
Human Side of Management	40	\$2,000.00
Principles of Quality	14	\$700.00
Put it in Writing	52	\$5,200.00
	342	\$ 22,060.00

Agencies that participated in training:

- Agriculture
- Auditor of Accounts
- Corrections
- DHSS
- DNREC
- DOL
- DOT
- DSCYF
- DTI
- Finance
- Fire Prevention Commission
- Insurance
- Judicial
- OMB
- Safety and Homeland Security
- State
- State Police
- Superior Court



Zenith Products Corporation is a division of Masco Corporation located in New Castle. They are a major employer with over 700,000 square feet of U.S. manufacturing and warehousing space that includes state-of-the-art manufacturing equipment for wood, metal and plastic products.

Zenith received a \$25,200 Blue Collar grant to for Six Sigma Greenbelt training. Nineteen employees successfully completed the training that took place from September 2012 through January 2013. This training was needed for necessary professional development of key leaders within the organization from each functional area. The training helped prepare junior leaders for larger roles with the organization

They have realized production cost savings as a result of the training and feel that the training will help them with efficiencies in the future.

Zenith Products Corp.

Located in New Castle County

- ◆ **Over 66 years in business**
- ◆ **391 employees**
- ◆ **Number trained: 19**
- ◆ **Date initiated September 17, 2012**
- ◆ **Date completed January 10, 2013**

ANALYTICAL BIOLOGICAL SERVICES, INC. (ABS)

ABS Inc. is a leader in supplying human tissue, custom biological reagents, and cell culture services for biomedical and drug discovery research located in Wilmington.

In March 2012 the company began a ISO 9001:2008 Certification training program. This training was needed to improve workflow process that will result in improvements in the quality of products and services. Training was needed to reduce errors and consequently costs.

At the six month follow up ABS had retained all of the employees that had received training. They also have seen increases in sales and profits as a result of the training. They are developing metrics to further quantify their gains. They also noted that their business processes are now better standardized and monitored. They are in a better position to serve their clients more quickly and effectively.

Analytical Biological Svcs.

Located in New Castle County

- ◆ **Over 22 years in business**
- ◆ **20 employees**
- ◆ **Number trained: 12**
- ◆ **Date initiated March 26, 2012**
- ◆ **Date completed December 3, 2012**



FlowSmart is a high purity polymer products company. They have a complete line of sanitary seals, and their knowledge to produce custom components that solve processing issues on a daily basis. Their products use their Pedigree of materials , assuring the finest performance in the Food, Biotech and Pharmaceutical industries.

Flow Smart received a \$14,874.80 Blue Collar grant for ISO 14644 parts 1-9 Clean Room training. The training program was conducted by DEMEP in March of 2012. Seventeen employees successfully completed training; two more than originally planned. Flow Smart purchased a new site and equipment to manufacture tubing & braiding hose; however, they did not have a staff person that had the necessary knowledge related to cleanroom ISO requirements. Their customers require that the tubing and hose products be manufactured in accordance with ISO 14644. Construction and training will be on going to bring the facility into alignment with ISO standards.

The training they received from DEMEP helped put them on the right path and helped them with their planning which in turn helped them avoid costly mistakes.

Flow Smart, Inc.

Located in Sussex County

- ◆ **Over 8 years in business**
- ◆ **24 employees**
- ◆ **Number trained: 17**
- ◆ **Date initiated March 2, 2012**
- ◆ **Date completed March 16, 2012**



HandyTube employees worked on the 4,000-pound press that stretches steel tubing in steel coils used by oil companies and others back in March 2012 in the Camden factory. FILE PHOTO

HandyTube expands Camden facility

By Sarah Barban
sarah.Barban@doverpost.com

HandyTube is in the process of expanding its Camden facility. The company has added 10,000 square feet of office space to the front of its existing building, and the group has rearranged the layout of the facility to make it more efficient. The majority of the office spaces are complete but the second phase of the building process is still underway, company officials said.

"We have needed this for quite some time," said Lindsay Wallace, product owner for HandyTube. "We couldn't continue to produce at the level we needed to in order to stay competitive."

The company manufactures seamless, stainless steel coil tubing, which is used for chemical process and instrumentation, aerospace and defense, health care and life sciences, chromatography and shipbuilding purposes, though 70 percent of the

company's business relates to energy, according to a company press release.

"I think we bring a local feel to the oil and gas market," she said. "We provide a lot of local jobs."

The expansion will be good for both HandyTube and the local job market.

"The expansion will increase jobs and overall demand," Wallace said. "Now we can get more orders in and more orders out."

The project was funded through state grant money as well as from their own funds. The company has not publically released the amount of the grant or the amount they supplied.

It is anticipated that the increase in manpower will give the company the ability to continue to meet the needs of current customers as well as reach out to new buyers. HandyTube will also begin to offer express delivery.

"As the demand for our products continues to grow, HandyTube's multi-year,

customer-focused investment plan will significantly increase our output," said John Coates, the company's president and CEO, in a press release.

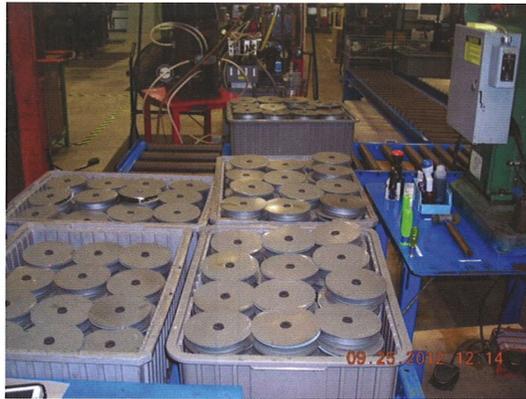
The company will also be adding an additional vacuum furnace, which is used in the production of the pipe, in order to keep up with demand. It is set to be in place in July.

"These capital improvements will help HandyTube position itself to meet the rising demands of a global marketplace, particularly those of the oil and gas sector," Wallace said.

Now that HandyTube has 10,000 extra square feet of office space to fill and an anticipated increase in production they are looking to add to their employee base.

"We are continually interviewing people and hiring the appropriate candidates," Wallace said. "It's difficult to say the exact number of people we will eventually hire."

DEMEP Profile



Delmaco repositions equipment on the way to improved efficiency

BY EILEEN SMITH DALLABRIDA

DELMACO MANUFACTURING INC. makes industrial-strength reels, essentially coiled spring steel lengths housed inside a round cup with a cable wrapped around it, much like a fishing line and reel.

Commercial applications include static discharge grounding reels used to bond aircraft with support fueling equipment. Specialized reels also ground defense missiles during the manufacturing process and keep elevator doors closed between floors, among other uses.

Located in Georgetown, Delmaco is a privately held corporation, founded in 1983. Delmaco is an affiliate of John Evans' Sons of Lansdale, Pa., established in 1850, the oldest spring maker in the United States.

In Delaware, Delmaco had been housed in the same building for 25 years without rethinking the space.

"Every time we added a new piece of equipment or a new line, we just sort of fit it in," says Mike Bender, facilities manager.

That changed in 2010 when a howling blizzard took the building down to the ground. For 10 months, the company operated out of temporary quarters before moving into a reconstructed plant with a warehouse annex.

Starting fresh gave Delmaco an opportunity to reposition equipment in a new, more efficient layout.

"We wanted to take our organization to the next level," Bender says. "So when we moved in we made a deliberate and planned effort to set up a configuration that was logical and effective."

Both management and workers were impressed with the positive impact. To keep the momentum going, Bender attended a workshop on the principles of lean manufacturing presented by the Delaware Manufacturing Extension Partnership.

DEMEP, as part of Delaware Technical Community College, is devoted to helping Delaware's manufacturers and small businesses. While DEMEP is housed at the Stanton Campus, services are available on a state-wide basis. DEMEP is accredited by the National Institute for Standards and Technology.

"I was inspired and excited by the opportunity to be even more efficient," he recalls. "We had made improvements but there was still a lot more to learn."

Like many businesses, Delmaco has been challenged by a protracted soft economy. Frank Davey, co-owner of Delmaco, says working with DEMEP is an investment in the future.

"When the economy does improve, we have the capability to ramp up 50-75 percent in a week or two because of all the new efficiencies we have put in place," he says.

One significant improvement is in the production of static discharge reels. Instead of producing reels in batches, work now flows in a continuous line, a process that has reduced production time by 25 percent.

"We were picking up the parts 10 times as we put them together," Davey says. "The number of times we handle a part has now been cut in half."

Delmaco obtained a grant from the Delaware Economic Development Office to train all 12 employees in the plant in 5-S techniques.

Originally developed in Japan, 5-S focuses on effective organization and standardized procedures to simplify the work environment, reduce waste and activities that don't add value to the bottom line, while increasing quality efficiency and safety. The 5-S principles translate to: Sort, Set in Order, Shine, Standardize, and Sustain.

DEMEP field agents meticulously mapped steps taken by workers during the manufacturing process to identify opportunities to squeeze wasted movement out of the value stream. They also looked for ways to make the workflow more intuitive by translating the information stored in individual workers' brains into standardized work, visual controls, and signage everyone could understand.

"Workers were operating on tribal knowledge," says Jim Jones, field agent. "There were no visuals to tell people how to do something or where to place something."

Visual guides are helpful, but they need not be expensive or complicated. Now, there are stripes on the floor delineating safe walkways. Directional arrows take the guesswork out of which way to turn. Shipping lanes are marked to show workers where finished products should go.

Arbors—the parts at the center of spring reels—are separated by size and stored in clearly labeled bins.

"That has virtually eliminated those rare times in which someone would use the wrong arbor," Bender says.

Hand tools are stowed on pegboards at each individual work station, with the shape of each tool clearly outlined. No more wasted time trying to figure out where to find the pliers.

"At the end of the day, you can clearly see if the pliers aren't put back on the board," Jones says.

To more efficiently manage inventory, stock is arranged to make the biggest sellers the most accessible, saving steps when merchandise is pulled for shipping. Under the new system, infrequently ordered products are stored in the annex and the most-requested products are in the main building, cutting the time needed to retrieve them by 50 percent.

"Slow-moving items were taking up quality space," Jones recalls. "You want your fastest-moving items to have that prime real estate."

Additional space for racking was created by selling off a bulky punch press machine that was only used four or five times a year.

"We put what we had learned about innovation into practice. We could use another machine to do those jobs, so the equipment was unnecessary," Bender says.

In the past, cutting stainless steel cable and attaching a crimp-end fitting was a two-person job. Now, one person seamlessly performs both tasks, eliminating the time involved in moving the piece and handing it off to another worker. The result is a 30-percent savings in labor.

Bender points to other marked improvements in productivity. For example, Delmaco fulfilled a 960-piece elevator reel job in May that required 39.34 hours in labor.

"After DEMEP training, we ran the exact same job in July and the labor hours were 29.76," Bender says. "This shows a significant improvement in our efficiency."

The bottom line: a 24-percent reduction in labor.

The second job was for 1,152 pieces for an elevator reel order in April, with a total of 57.12 hours in labor. Delmaco ran the order again in August and the total hours were 44.63. The savings in labor: 22 percent.

DEMEP also brought a fresh set of eyes in evaluating items that were

gobbling up space without adding to the bottom line. More than 100 heavy-gauge cardboard drums were at the ready to provide storage in the warehouse. But in practice, only about 20 were ever in use at any given time. Getting rid of 80-odd drums translated to an increase in floor space of about 80 percent in that area of the plant.

Although Delmaco has reduced the time needed to complete jobs, that has not yet translated to increased sales due to difficult market conditions.

But the company has found innovative ways to put that captured time to good use. Employees are continuing to organize, taking on such tasks as managing cables, maintaining airlines and making the plant a bright and pleasant place to work. Morale is flourishing.

"It's a great atmosphere, clean, organized and highly functional," Bender says. "Employees have taken on a sense of ownership for their work spaces."

Delmaco also inaugurated a fast-paced close-of-day procedure in which every worker enters the number of completed pieces into the computer and straightens up his or her workspace.

Initially, a five-minute window was designated for the task. But that wasn't enough time to get the job done. Ten minutes would be too much.

"So we settled on eight minutes," Bender says. "That turns out to be just right."

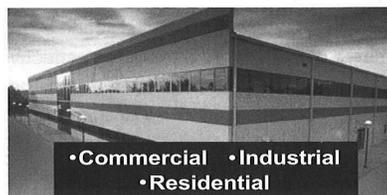
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