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WHAT'S  
SO COOL ABOUT  
MANUFACTURING?™



Spring 2017

# WHAT'S SO COOL ABOUT MANUFACTURING?

Manufacturing has a bad rap. Lingering from the days of yesteryear is the perception that manufacturing is dirty, dark, dreary and dangerous. Those days are gone. Take a walk through a plant today and you'll find sophistication we couldn't imagine just a decade ago. Machines are numerically controlled with computers that interface with systems in the front office as well as the facilities of customers and suppliers. Automation has taken over repetitive work and the job of machine operator has changed from handling parts to programming, activating and monitoring systems. The advent of 3-D printing is taking lead times from weeks to minutes.

Most people are unaware of how technology has created a seismic shift in the way manufacturing is done. Just as it has changed our everyday lives, technology has impacted the nature of jobs and greatly increased productivity.

That's where teams of middle school students come in. Armed with Go Pro cameras, students have been invited into area manufacturing companies to witness the production process first hand and film what they see as "What's So Cool About Manufacturing?" The teams compete for the outstanding videography, editing and most cool. In addition, online voting determined the Viewer's Choice Award. The prizes were announced during the Awards Ceremony on February 23.

Our program has two objectives:

- Begin to correct the long-standing negative perception of manufacturing.
- Take a step toward generating interest in careers in manufacturing among the next generation of workers.

The skills shortage is not new but it is a very real problem and it is becoming more acute. As older workers retire we risk forever losing their talent and experience. As I meet with manufacturers throughout South Central Pennsylvania, this is the #1 concern I hear. Companies face the risk that customer orders will be missed due to the lack of qualified workers to meet demand, thus inhibiting business growth. Manufacturing remains the region's leading economic sector; to keep it that way we must find innovative ways to attract new talent.

Plans are already underway for the 2018 contest of "What's So Cool About Manufacturing?" We plan to make it bigger, better and more exciting by enlisting more sponsors, more schools, more students and more manufacturers. When the time comes, please consider throwing your support behind this effort to correct the misperceptions of manufacturing and to work toward building our future workforce.



John W. Lloyd  
President & CEO



**"This program seeks to correct the misperceptions of manufacturing and to work toward building our future workforce."**



## 2017 INAUGURAL CONTEST

### VIDEOS

[www.dreamitdoitpa.com/contests/2017-south-central](http://www.dreamitdoitpa.com/contests/2017-south-central)

- Central York showcasing American Hydro
- Dover Area showcasing Martins Potato Chips
- Eastern York showcasing SWF Industrial
- Northeastern showcasing Three M Tool
- Southeastern showcasing Etube and Wire
- South Western showcasing R.H. Sheppard
- Spring Grove Area showcasing Glatfelter
- West York showcasing Weldon Solutions

### JUDGES

- PK Dennis- die-tech
- Rick Holberg- Holberg Design
- Jefrey Woodall- York College of Pennsylvania

This program was made possible by:



**hayman studio**  
commercial photography + video



### GET INVOLVED!

Contact Leigh Ann Wilson for 2017-2018  
717-843-5054 x223 or [wilsonla@mantec.org](mailto:wilsonla@mantec.org)

### Outstanding Videography



South Western School District

### Outstanding Editing



Eastern York School District

### Outstanding Cool



Central York School District

### Viewer's Choice



Eastern York School District

# Cybersecurity Framework Steps for Manufacturers

## Why Cybersecurity Matters

Small manufacturers are a vital part of our nation's economic and cyber infrastructure. There are over 289,000<sup>1</sup> small manufacturers in the U.S. In 2015, the average cost of a data breach for small companies was \$38,000<sup>2</sup>. It has been estimated that more than half of the companies go out of business within six months of a cyber attack<sup>3</sup>.

For most small manufacturers, the security of your information, systems, and networks is not the highest priority given everything else you're faced with. But an information security or cybersecurity incident can be detrimental to the business, your customers, partners, or suppliers. It's important that manufacturers understand and manage the risk and establish a cybersecurity protocol to protect your most critical assets.

## Five Steps to Reduce Cyber Risks

This resource is for small manufacturers to quickly and cost effectively address cybersecurity threats. These simple, low cost steps are based on the official NIST guidance from the Cybersecurity Framework and have been tailored to meet the needs of small companies so they can identify, assess and manage cybersecurity risks.

### 5 RECOVER

Make full backups of important business data and information

Continue to schedule incremental backups

Consider cyber insurance

Make improvements to processes/ procedures/ technologies

### 4 RESPOND

Develop a plan for disasters and information security incidents

### 1 IDENTIFY

Identify and control who has access to your business information

Conduct background checks

Require individual user accounts for each employee

Create policies and procedures for cybersecurity



### 2 PROTECT

Limit employee access to data and information

Install Surge Protectors and Uninterruptible Power Supplies (UPS)

Patch your operating systems and applications routinely

Install and activate software and hardware firewalls on all your business networks

Secure your wireless access point and networks

Set up web and email filters

Use encryption for sensitive business information

Dispose of old computers and media safely

Train your employees

### 3 DETECT

Install and update anti-virus, anti-spyware, and other anti-malware programs

Maintain and monitor logs

<sup>1</sup> 2014 County Business Patterns, United States Census Bureau

<sup>2</sup> 2015 Global IT Security Risks Survey, Kaspersky Lab

<sup>3</sup> Small Business, Big Threat: Protecting Small Businesses from Cyber Attacks, United States House of Representatives Committee on Small Business Cong. (April 22, 2015) (testimony of Dr. Jane LeClair)



# “YOU AND ME” COLLABORATIVE ROBOT IN YORK

For most people, when they hear the word “robot,” they immediately picture something in their mind. In many cases, it is a complex picture of expensive equipment surrounded by fencing/guards, safety devices, control panels and lots of wires.

Today, technology along with product exists where that “robot” can work alongside of a human being eliminating all that complexity and cost to assist a production associate to meet their operational objectives.

PennAir is honored to introduce the first, truly collaborative, dual arm robot that works alongside of you and me...YuMi. Introduced globally in 2015 at the Hanover Fair - Trade Show, YuMi is now in Central PA. PennAir has a functional YuMi in its new state-of-the-art, 116,000 square foot facility located in East York (580 Davies Drive). In addition another YuMi will reside in MANTEC’s LEAN Showcase training area by the end of March.

“Based on our long history of working with the MANTEC team, we are excited to house YuMi at MANTEC” states Bob Rhein, President of PennAir. “MANTEC works with manufacturers to help in a variety of ways.

The mission statements of the two organizations aligns which is “we are in the business of helping people.” “Today, there is an endless list of opportunities to apply this dual arm, collaborative robot. Just seeing YuMi move will help paint a picture for people who are looking at continuous improvement within their manufacturing and assembly operations.”

“We have invested in our facility and our team of associates to support manufacturing in the mid-Atlantic region. As a MANTEC Qualified Solutions Provider, we look forward to working with manufacturers who are serious about the future of their business. PennAir feels strongly that YuMi and MANTEC will play an active role in helping manufacturers in the years ahead.”

For more, please visit [www.pennair.com](http://www.pennair.com)



*“ABB has developed a collaborative, dual arm, small parts assembly robot solution that includes flexible hands, parts feeding systems, camera-based part location and state-of-the-art robot control. YuMi is a vision of the future. YuMi will change the way we think about assembly automation. YuMi is “you and me”, working together to create endless possibilities.”*

## VISIT YuMi

YuMi, a collaborative robot, is on display to give you hands on access to learn more about the capabilities and ease of use in a supportive learning environment.

- MANTEC’s Business Growth Conference - March 30, 2017 75 Champ Blvd. Manheim, PA 17545
- MANTEC LEAN Showcase- 600 North Hartley Street, Suite 100 York, PA 17404
- PennAir- 580 Davies Drive York, PA 17402



1- LEAN Certification Graduates

2- Excellence in Manufacturing Award Winners:

- Continuous Improvement- Tooling Dynamics, LLC
- Innovation- Elsner Engineering Works
- International Trade- The Beistle Company
- Supplier Development- Polymar
- Sustainability- Nursery Supplies, Inc.
- Technology- Crescent Industries, Inc.
- Workforce- Turkey Hill Dairy

3- Six Sigma Green Belt Graduates

4- MANTEC receives the Spirit of York County Award

5- Rick Loesch of Wire Mesh (center) is inducted into the MANTEC Hall of Fame for completing LEAN Certification, LEAN Champion and Six Sigma Green and Black Belt

6- Kathy Manderino, Secretary of Labor and Industry (center) tours Ecore International





## Upcoming Training:

**Six Sigma Green Belt** Starts March 9, 2017

**Total Productive Maintenance** April 4 - 6, 2017

**Six Sigma Black Belt** Starts April 11, 2017

**LEAN for Business Processes** April 18, 2017

**Daily Performance Management/A3** May 11 and 12, 2017

**Pull/Kanban Systems** May 23 and 24, 2017

**Effective Team Leadership** June 6 - 8, 2017

Registration and Details at:  
[mantec.org/quality2017](http://mantec.org/quality2017)

## WHAT YOU NEED TO KNOW- ISO 9001:2015

### Key changes:

- Use of Annex SL structure - First ISO Standard released based upon Annex SL - 10 Clauses Vs 8
- Organizational context considered
- Determining Internal and External Interested Parties and monitoring their requirements
- Risk-based Thinking approach
- Greater Leadership focus - Elimination of the Management Representative Position
- New Terminology - Documented information & Retained Documented Information
- Capturing Organizational Knowledge
- Consider Post-Delivery activities

### What you can do now:

- Learn more about the new version
- Conduct a gap analysis
- Attend training
- Update organization QMS
- Plan to Upgrade Internal Auditor Competencies
- Transition to the new system by September 2018. In reality, registrars are looking at conducting upgrade audits by June 2018 to allow 90 days to close-out any nonconformities

**Need a resource to complete your transition by September 2018?  
Contact MANTEC at 717-843-5054.**



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Your Resource Driving Manufacturing Innovation

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# 5<sup>th</sup> Business Growth Conference

**March 30, 2017**

7:30 - 3:30

Spooky Nook Sports- Manheim, PA

[mantec.org/bgc17](http://mantec.org/bgc17)

Register 3 or more people to save 25%



The 5th annual conference is Manufacturing Driven with a robust program of 12 sessions and 2 keynotes. In addition,

**Penn College**

will provide industrial workshops on:  
**Industrial Arc Flash Safety**  
**Programmable Logic Control**

Sponsored by:



**VISTAGE**



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