



OCTOBER 2019

Welcome to CMTC's *News for Manufacturers* eNewsletter!

In the News

HELPING SMALLER COMPANIES WITH CYBER DEFENSE

Advanced Manufacturing.com article, October 2019, author: James Watson, MEP National Network representative and CEO of California Manufacturing Technology Consulting (CMTC)



Cybercriminals are increasingly setting their sights on today's digitized manufacturing industry as an entry point into government and commercial supply chains.

At the [MEP \(Manufacturing Extension Partnership\) National Network](#), we see time and again that many small and medium-sized manufacturers do not have the knowledge or resources to upgrade their information systems. The need to address cybersecurity is made all-the-more urgent by the Department of Defense (DoD) cybersecurity requirements. All DoD contractors and subcontractors that process, store or transmit covered defense information (CDI) must meet the defense federal acquisition regulation supplement (DFARS) minimum security requirements or risk losing their contracts.

...

Whether you are a manufacturer implementing a cybersecurity program or a DoD supplier looking to achieve compliance, local representatives of the MEP National Network are available to support your business. The state-by-state list can be found at www.tinyurl.com/MEP-Centers.

Read more...

[Read More](#)

THE 5 MOST COMMON CYBERSECURITY THREATS TO MANUFACTURERS

NIST article, reprinted from *Industryweek*, author: Elliot Forsyth, Vice President of Business Operations at the Michigan Manufacturing Technology Center (The Center), part of the MEP National Network™.



Manufacturers are increasingly under threat from cyberattacks. This is a real concern not just because of the typical business vulnerabilities (e.g., stolen intellectual property, ransomware) but because in today's increasingly connected world, a successful infiltration from a cybercriminal could shut down a plant's operations or start making equipment produce faulty products without the knowledge of managers, among other things.

Additionally, most manufacturers are small businesses that do not have established IT security practices to combat or cope with a cyber incident. This lack of preparedness not only makes it easier for cybercriminals to attack, it also increases the likelihood that impacted companies will experience longer periods of downtime as they scramble to restore operations following a cybersecurity issue.

While some manufacturers may still be a ways off from creating a mature cybersecurity practice, every manufacturer should be aware of the five main cybersecurity threats to their company. Familiarizing yourself and your employees with them is the first step in reducing the risks they pose.

[Read More](#)

Upcoming Events

[Check out Our Events Page at www.cmtc.com](http://www.cmtc.com)

October

The CESMII WRMC Smart Manufacturing Platform™ Demonstration Day



Thursday, October 17

El Camino College Business Training Center

Torrance, CA

Last Chance - Seating is Limited

It will be great opportunity to network with CESMII members like Honeywell, SYSPRO, Atollogy, JPL, Aerospace, ThinkIQ, UCLA, UCI, Ectron and many others... In addition, we have reached out to our network of large, medium and small manufactures in joining us at this event as well. This will allow a good mix of members and non-members to attend for networking. Ticketed Event.

<https://www.eventbrite.com/e/demo-days-2019-cesmiis-smart-manufacturing-platformtm-member-version-tickets-75052695633>

November

SMART Manufacturing Lunch & Learn

Thursday, November 7

11:30 am - 1:30 pm

CMTC

690 Knox st., Torrance, CA 90502

Guest Speaker: Sanjay Ejantkar of Syspro USA

<https://www.eventbrite.com/e/cmctc-smart-manufacturing-lunch-n-learn-tickets-77163448953>



BRINGING INDUSTRY 4.0 TO CALIFORNIA MANUFACTURERS

Industry 4.0 offers you the opportunity to optimize your operations quickly and efficiently by knowing what needs attention. It uses data management that may enable you to build your customer base and increase profitability.

Key components of an Industry 4.0 solution can include:

- Identification of growth opportunities
- Optimization of logistics and supply chains
- Implementation of affordable and flexible automated production through robotics and machine vision technologies
- Connection of production equipment through the Internet of Things and the cloud

See the link below for your opportunity to register for a no cost personalized Industry 4.0 Manufacturing Assessment. Please don't hesitate to contact me if you have any questions or to set up a time to meet. You can also visit our webpage at: <https://www.cmtc.com/smart>

[Start Your Assessment](#)

Sincerely,
Shekhar Chandrashekhar
SMART Manufacturing Practice Lead - CMTC
Tel: 310.984.9117
schandrashekhar@cmtc.com

October's Treats and Tricks

HALLOWEEN TREATS? THANK A MANUFACTURER



Typically Halloween is celebrated with more treats than tricks; we have candy manufacturers to thank for ushering in new delights each season to tempt us. The standard-bearer of chocolate never

fails to please in all its varieties. Chocolate simply would not be so widely available as a Halloween treat were it not for manufacturing. Check out these links below to learn more about the chocolate manufacturing process:

<https://www.ecolechocolat.com/en/how-chocolate-is-made.html>

<http://www.thenibble.com/REVIEWS/MAIN/CHOCOLATE/from-pod2.asp>

<http://www.madehow.com/Volume-1/Chocolate.html>

<https://foodmaven.io/thechocolatelife/stories/yt-video-review-making-chocolate-cacao-tree-to-chocolate-bar-yrfvzz9vz0SP6SvkNNYXgg/>

THERE'S A SCARY NEW REASON NOT TO BORROW A STRANGER'S IPHONE CABLE



Fast Company article October 8, 2019 by Michael Grothaus

Bad news: A hacker has created a rogue Lightning cable that lets bad guys take over your computer. Worse news: Now it's being mass-produced.

Apple's Lightning cable is one of the most ubiquitous accessories on the planet. First introduced in 2012 with the release of the iPhone 5, it's since been included with every iPhone, iPod Touch, and iPad (with the exception of 2018's iPad Pros). It's shipped on billions of devices.

But even though every Apple gadget that requires a Lightning cable comes with one, many of us lose them, replace them, or buy extras. Many times we also forget our cables at home, leading us to ask a friend—or even a stranger—if we can borrow one to revive a dead phone. This is never more evident than at an airport or a major conference. You're sure to run into someone asking if they have a spare Lightning cable they can use for a moment.

But from now on, asking a stranger to borrow a Lightning cable, or accepting an offer by a stranger to give you one, is the last thing you'll want to do if you're scrupulous about protecting your data.

That's because a hacker has created the first Lightning cable that, when plugged into your Mac or PC, will allow someone to remotely take over your computer. Worse, this hacked Lightning cable, called the O.MG Cable, isn't a bespoke one-off. It's being mass-produced in factories so anyone can buy and use them to target your data.

...

This is why Apple runs the MFi Program. The program, which stands for "Made for iPhone/iPad/iPod" certifies that third-party accessories, including Lightning cables, pass Apple's engineering standards and are safe to use and won't damage a user's product or data.

When you buy a Lightning cable, it's important to make sure the MFi logo is on the package. However, be aware that unscrupulous accessory makers will sometimes simply stamp the MFi logo on their packaging without actually submitting their product to be certified. (Apple offers advice on how to spot counterfeit or uncertified Lightning cables.)

Buying a Lightning cable directly from Apple is the safest thing to do. However, buying a MFi-certified cable from a reputable accessory maker such as Anker, Belkin, or Amazon's AmazonBasics brand should not present any risks.

But making sure you buy a certified Lightning cable is only half the battle, now that malicious cables like the O.MG could be in the wild. Just like candy, you shouldn't accept a Lightning cable from a stranger. Without taking it apart, there's no way for you to know if that cable is actually a gateway for the stranger to access your computer. Likewise, if you see a Lightning cable laying on the ground or left out in the open, seemingly abandoned, don't think you just got lucky.

[Read More](#)

Manufacturing Month



MURRIETA HOSTS HIGH SCHOOL STUDENTS FOR MANUFACTURING DAY

Valley News article, October 9, 2019

Murrieta high school students spend the morning at two manufacturing facilities and hear a panel

discussion about local manufacturing jobs at Murrieta’s business incubator for the city’s Manufacturing Day event Friday, Oct. 5.

About 100 students from Murrieta Valley High School toured Cryoquip – which produces cryogenic vaporizers and industrial gas equipment – as well as Waterstone Faucets, both of which operate in the industrial district in southwest Murrieta.

While touring both manufacturing facilities, students split up into smaller groups and saw how workers at all points of the production process were doing their jobs.

At the panel, professionals with local manufacturers stressed that the industry has changed over the last 20 years – for one, there are more industrial jobs in the Temecula Valley.

“We feel it is important to expose you to what is happening,” Michael Vargas with California Manufacturing Technology Consulting said. “We all have parents who work in Orange County or in San Diego County, and we see the difficulty with the traffic situation and we thought it was relevant to introduce you to some companies that are here locally.”

<https://www.myvalleynews.com/murrieta-hosts-high-school-students-for-manufacturing-day/>



MANUFACTURING MONTH-CA 2019 CONTINUES

October saw Manufacturing Month-CA/MFG Day 19 off to a great start this year, with 278 events connecting Manufacturers and students all over California. Events included site-visits to tour manufacturing plants and manufacturing “expos” bringing multiple manufacturers together with high school college students. And there is still time to participate:

L.A. Trade Tech 3rd annual MFG DAY Expo

Los Angeles Trade Tech College has a long and successful history in partnering with businesses

and the community. Now, in conjunction with CMTC, they are generously hosting an on-campus event for high school students to learn about today's manufacturing processes and the opportunities that they present. The event will also give small and medium-sized manufacturers access to future skilled workers who are learning about the different careers available to them.

[Please contact Steve Brand](#) A.S.A.P. if you would like to exhibit at the LATT Expo on October 24.

Raise Awareness about the Many Great Careers Available

MFG Day has those in the industry excited for the future. "We need to get kids excited about manufacturing," says Gary Johnson, Vice President of Ace Clearwater Enterprises, headquartered in Torrance, California. "That's really what National Manufacturing Day is all about, to fertilize their curiosity."

<http://industrytoday.com/resources/whats-a-manufacturers-wish-workers/>

Stay Connected

Look for Manufacturing Day hashtags on social media channels and feel free to post your own photos and selfies.

#MFGMonth-CA #myMFGDAY #CreatorsWanted

Regulatory Updates

SB 1343 Harassment Avoidance Training Requirement

To ensure a workplace free of sexual harassment, **employers must satisfy the harassment avoidance training requirement** under Section 12950.1.



CMTC offers web-based events, facilitated by a Harassment Avoidance trainer, to satisfy this legal requirement. This comprehensive course is designed specifically for the small- and medium-sized manufacturer.

WHAT ARE MAKERSPACES AND HOW DO THEY BENEFIT MANUFACTURERS?

If you remember the woodworking, metalworking, and auto shop classes that used to be taught in high school, you already have an idea of what a makerspace is. Makerspaces, sometimes called Maker Labs, are defined as “a place in which people with shared interests can gather to work on projects while sharing ideas, equipment, and knowledge.” Of course, today, there is usually a lot more technology involved, as makerspaces put more focus on STEM (science, technology, engineering, and mathematics) concepts.

[Read More](#)

READY? [EBOOK]

The Fourth Industrial Revolution is still in its early stages, but it has already begun to change the way we live and work. Its impact on society is going to be enormous, with experts predicting the industry to reach \$370 billion over the next four years.

[Read More](#)

[Click Here to View All of Our Blogs](#)

REQUEST A CONSULTATION

[Read More](#)

VIEW ARCHIVED NEWSLETTERS

[Click Here](#)

Questions or Comments?

Please contact our newsletter editor Steven Brand at comm@cmtc.com.

Visit our website for additional information and resources: www.cmtc.com.

TYPES OF METAL ADDITIVE MANUFACTURING PROCESSES

Download Now! 

