Schedule

Thursday, October 18, 2018

8:00 AM	**Registration/Continental Breakfast/Exhibits**				
8:30 AM	**Welcome** Jim Spichiger *Chair, ASQ Inspection Division*				
8:45 AM	**Keynote: Zach Cobb** Director of Engineering and R&D *Hexagon Manufacturing Intelligence*				
9:45 AM	**Break & Exhibits**				
	Track A	Track B	Workshop	Workshop	Tours
10:15 - 11 AM	**Session A1** *Product Tutorials*	**Session B1** *Examining the Global Growth of Accredited 17020 Inspection Bodies*	Basic Inspection Advance registration required Limit 16	Acceptance Sampling	Smith & Nephew
11:15 - 12 PM	**Session A2** *Product Tutorials*	**Session B2** *The Nine Steps of Creating Your Executable Individual Development Plan*			
Lunch & Exhibits					
1:15 -2 PM	**Session A3** *Finding Hidden Value in your Measurement System*	**Session B3** *Shifting The Paradigm On Inspection Training*			TDB
2:15 - 3 PM	**Session A4** *Risk Management in the Food Industry*	**Session B4** *Possible Inspector's Career Paths*			
Break & Exhibits					
3:30 - 4:15 PM	**Session A5** *FDA Inspection Prep and Execution*	**Session B5** *Lean Six Sigma tools*			
6 - 7:30 PM	**Networking Reception**				

Tracks A and C to be recorded and streamed live
The networking reception will feature complimentary hors d'oeuvres and a variety of complimentary beverages.

Schedule

Friday, October 19, 2018

8:00 AM	**Registration/Continental breakfast/Exhibits**				
8:30 AM	**Welcome** George Cutler *Chair-Elect, ASQ Inspection Division*				
8:45 AM	**Keynote: Eric Hayler** Master Six Sigma Black Belt *BMW*				
9:45 AM	**Exhibit Hall Extravaganza (refreshments & door prizes)**				
	Track C	Track D	Workshop	Workshop	Tours
10:15 - 11 AM	**Session C1** *Product Tutorials*	**Session D1** *Understand the Changes to ISO/IEC 17025:2017*	Core Tool	Managing Risk in Calibration	Gibson Guitar Factory
11:15 - 12 PM	**Session C2** *Product Tutorials*	**Session D2** *APQP to PPAP Strategies*			
Lunch & Exhibits					
1:15 - 2 PM	**Session C3** *Layered process Audit Programs: A Fast-Track Strategy for Cutting Quality Costs*	**Session D3** *Building Quality in Product Development*	Advance registration required Limit 20	Advance registration required Limit 16	Graceland (Home of Elvis) $45
2:15 – 3 PM	**Session C4** *The Correlation Between Audits & Inspections*	**Session D4** *Modeling and reducing variation in product development and manufacturing*			
Break & Exhibits					
3:30 - 4:15 PM	**Session C5** *Developing Key Strategic Suppliers*	**Session D5** *"Do it right the first time!" – An example of a floor line solution to replace the work harder mentality with the work smarter mentality*			

Tracks A and C to be recorded and streamed live

Keynote Presentations

Thursday, October 18, 2018
Zach Cobb
Director of Engineering and R&D
Hexagon Manufacturing Intelligence

Shaping the Future of Manufacturing
Today, manufacturers are squarely focused on re-engineering product development with single-minded purpose. From concept to reality, we are heading toward a connected world where data informs the process every step of the way. This keynote session will present a frontline view on how emerging technologies, processes and production methods are shaping the future of manufacturing. Mr. Cobb will discuss concepts of connectivity and the importance of linking systems and information together. He will address the role model-based engineering plays in the tools, connectivity, data analysis and quality in the organization. The session will also cover the changing workforce and its impact on the enterprise. Attendees looking to leverage the benefits of Smart Factory practices will find Cobb's outlook on the future both helpful and exciting.

Friday, October 19, 2018
Eric Hayler
Master Six Sigma Black Belt
BMW, Spartanburg Manufacturing Plant

Session Descriptions

Track A, Thursday

Session A1 - Product Tutorials

Session A2 - Product Tutorials

Session A3 - *Finding Hidden Value in your Measurement System*

Presenter: Eric Gasper

Plants and facilities are littered with all types of gages, devices, and measurement equipment. Most organizations understand the importance of regular calibrations to ensure their gages are measuring accurately. However, few go the extra mile to examine their measurement system as a whole using Repeatability and Reproducibility (R&R) studies. These studies can help identify sources of variation that could drastically impact their inspection of their parts and products. Without an overall picture of a measurement system it can be difficult to near impossible to accept or reject production materials.

Session A4 - *Risk Management in the Food Industry*

Presenter: Tom Schoenfeldt

The FDA has developed the 7 Pillar Rules of the Food Safety Modernization Act and risk management is included in these rules. This presentation will give an overview of the risks in the food chain and how they might be managed. The differences between risks in food management and manufacturing industries will be discussed. The current risk tool, HACCP Analysis, will be compared to the HARPC Analysis for managing these risks.

The attendees will gain an understanding of some of the risks that exist in the food chain and see some of the actions that are being taken to maintain Safe Food.

Session A5 - *FDA Inspection Prep and Execution*

Presenter: Joe Wesling

The US Food and Drug Administration is responsible for protecting and promoting public health through the control and supervision of food safety, tobacco products, dietary supplements, prescription and over-the-counter pharmaceutical drugs (medications), vaccines, biopharmaceuticals, blood transfusions, medical devices, electromagnetic radiation emitting devices (ERED), cosmetics, animal foods & feed and veterinary products

The FDA conducts careful inspections of regulated facilities to determine a firm's compliance with regulations and the Food, Drug and Cosmetic Act. Inspections are one of many ways FDA protects the public health. Quality Management Representatives for organizations falling within the scope of FDA's regulations need to know how to prepare to receive FDA inspectors.

The attendees will learn how to prepare and efficiently host an FDA inspection.

Track B, Thursday

Session B1 - *Examining the Global Growth of Accredited 17020 Inspection Bodies*

Presenter: David Feist

Since the publication of the 2012 version of ISO/IEC 17020, there has been a steady global growth throughout specific industry segments seeking Accreditation to the Standard. This discussion will center on certain aspects such as the flexibility of the Standard, that have promoted this growth. We will also discuss specific industry segments that have seen the most growth, what growth patterns are expected over the next five years, and the response from Accreditation Bodies to this growth.

Session B2 - *The Nine Steps of Creating Your Executable Individual Development Plan*

Presenter: Jasmin Nuhic

Abraham Lincoln, the sixteenth President of the United States of America, said, *"The best way to predict [your] future is to create it."* With 86% of professionals not knowing how create and execute their professional individual development plans, combined with the fact that the second most frequent reason for professionals leaving the organization is more than enough to tell you that your professional future is very much unpredictable. On top of that, 78% professionals are not clear whose responsibility is to develop them, which ultimately creates implicit conflict and frustration between the managers and employees.

To address these issues, to be able to predict your professional future, you have to create and execute your executable individual development plan. In another word, you have to take responsibility for your development, learn how to go about doing it, and surround yourself with the appropriate support network. You also have to know what are the major obstacles to your progress and what to do about each of them.

The nine steps process of creating your executable individual development plan provides you with a roadmap that starts and ends with individual development plan. It is a process that guides you step by step towards your plan – towards reaching your full potential and achieving career objectives.

Session B3 - *Shifting The Paradigm On Inspection Training*

Presenter: Wes Shelton

Traditional training processes for dimensional inspectors, calibration technicians and other metrology roles in general have many times relied on On-The-Job training methods. Candidates moved to inspection roles through the manufacturing and tool room ranks and were trained in inspection tools and techniques as necessary. This not only leaves a void to backfill in manufacturing, but may limit the effectiveness of the training the inspector receives. With the increased need for skilled inspectors in the manufacturing environment, formal quality inspection training is now being developed and offered by technical colleges and universities to provide skilled inspection personnel directly to industry, without a company having to move individuals to one area and creating voids in other areas.

Learn how Vincennes University (VU) has pioneered a program of study for dimensional inspectors and how VU has worked with the American Society for Quality to link ASQ certifications to the program. See how the results of this and other similar programs are providing skilled inspection workers to industry and are creating a sustainable career path for individual students. Learn about the challenges the programs face in breaking the cycle of OJT for inspection training and how such programs are continuously improving to meet the needs of industry. See how companies can benefit by being able to employee job ready workers in the quality and inspection roles and how such a program could benefit your organization.

Session B4 - *Possible Inspector's Career Paths*

Presenter: John Jennings

The Bureau of Labor Statistics indicates that a person entering the workforce today at the age of 21 will have four jobs by the age of 32 and ten jobs by the age of 40. This presentation will outline several career paths that a beginning professional can take within the field of quality. In addition to college courses, continuing education, on-the-job training, e-learning, and mentoring, various aids are also available through ASQ in order to assist someone launch their career. Professional growth and job prospects are enhanced by ASQ certification, third-party certification, college degrees, and job experience.

Attendees will learn how having these credentials can help you land your next job interview!

Session B5 - *Lean Six Sigma tools*

Presenter: Miguel Dino

Customers expect on time delivery, quality, and fair prices for products and service so in today's global economy, cost reduction and efficiency are now more important than ever for organizations wanting to remain competitive. Creating a lean organization improves efficiency and a reduction in process variation which subsequently minimizes defects. Lean and reduction of variation are synergistic so jointly they provide exponential cost savings.

Use of the Lean Six Sigma methodology and its associated tools provide organizations with both a Voice of the Process (VOP) and a Voice of the Customer (VOC). Organizations can leverage various Lean Six Sigma tools in order to make their processes more robust, more efficient, and less likely to have defects thus providing they cost reductions and efficiencies they seek.

Attendees will be enlightened to how some quality tools that are commonly used to help organizations utilize VOP and VOC in order to become lean and help them reduce process variation. In addition, the presentation will show how these tools related to ASQ's various Six Sigma certifications and its Certified Quality Technician certification.

Track C, Friday

Session C1 - Product Tutorials

Session C2 - Product Tutorials

Session C3 - *Layered process Audit Programs: A Fast-Track Strategy for Cutting Quality Costs*

Presenter: Eric Stoop

Layered Process Audits (LPAs) brings quality right down to the plant floor, and when executed correctly they allow manufacturers to achieve their quality goals faster, helping reduce quality costs in a matter of months. Eric Stoop will discuss what LPAs are, the types of results companies have achieved with them, and the importance of what he calls “plant floor quality”.

Session C4 - *The Correlation Between Audits & Inspections*

Presenter: John Mascaro

Effective Quality Assurance systems are the foundation for successful businesses, especially manufacturers. Beyond brand name, price, and market share, poor product quality can sink customer demand for a company’s goods. Increased off-shore manufacturing, company mergers of products and information systems, quicker on-shelf finished goods timetables, and skyrocketing transportation costs have all added to the complexity and costs of quality assurance. As a result, a comprehensive Quality Control system is absolutely and intricate part of a manufacturer’s success.

A complete Quality Assurance system utilizes ***audits*** as a key management tool to improve processes and overall organizational performance. A comprehensive Quality Control system utilizes ***inspections*** to validate and verify customer specified requirements. Confusion continues to exist about the purpose of ***audits*** versus ***inspections***, and every so often the terms are used interchangeably without realizing they each are very different things. It’s crucial to understand the difference between them to facilitate communication and understanding between different operations and functions.

This presentation will clarify the correlation between an ***audit*** and ***inspection,*** and to provide a more comprehensive understanding of the differences between the two.

Session C5 - *Developing Key Strategic Suppliers*

Presenter: George Cutler

Key Strategic Suppliers are critical to most organizations. These business relationship should be developed and assessed to achieve mutual benefit. This presentation outlines a supplier protocol which focuses on process development methods of strategic suppliers to ensure long term source of supplier while lowering risk, reducing time to market and assuring product conformance in the most economical method possible.

The attendees will gain an understanding of a systematic approach towards developing a long term mutually beneficial relationship integrating technology, quality cost and logistics considerations.

Track D, Friday

Session D1 - *Understand the Changes to ISO/IEC 17025:2017*

Presenter: Beth Carbonella

ISO/IEC 17025-General requirements for the competence of testing and calibration laboratories was recently updated and a new version released in November 2017. This presentation will be an overview of the changes made to the standard and what is required with the new changes. We will discuss where updates need to be made in quality management systems to meet the new requirements and the objective evidence required.

The attendees will gain an understanding of the new requirements, be aware of what updates need to be made and how the requirements will be assessed.

Session D2 - *APQP to PPAP Strategies*

Presenter: Steve Leggett

APQP (Advanced Product Quality Planning) and PPAP (Production Part Approval Process) are methods used in the automotive, aerospace and other industries. Their purpose is to ensure that the supplier understands the customer's (OEM) requirements and is capable of providing the required quality and quantity of production. APQP sets out a clear path for planning, implementing and verifying a process. The APQP process has five phases, and the use of checklists that provide a guide published by AIAG (Automotive Industry Action Group). PPAP is the confirmation and evidence that the supplier understands the customer's requirements. It involves gathering all the data and information that was generated throughout the APQP Phases and methods used to meet the customer's requirements to review and approve.

Session D3 - *Building Quality in Product Development*

Presenter: Linda Otieno

Building Quality in Product Development is a fundamental principle to having a conforming product. Quality should be built in the product from concept through design to manufacturing to ensure product reliability and ultimately customer satisfaction. This presentation outlines some key tools and methodologies that are normally used during different life cycle of product development.

The attendees will gain an understanding of using systematic approaches during product development life cycle to build in quality and in turn improve customer satisfaction.

Session D4 - *Modeling and reducing variation in product development and manufacturing*

Presenter: Bryan Dodson

Engineers are taught to create designs that meet customer specifications. When creating these designs the focus is usually on the nominal values rather than variation. We need designs that are insensitive to variability in the inputs. For example, an engineer choosing nominal values for the resistors in a voltage divider that minimize the variation of the output voltage. Much of the literature on robustness is dedicated to experimental techniques, particularly Taguchi techniques.

Taguchi techniques advocate using experiments with replications to estimate variation. The goal is to optimize the signal to noise ratio where the signal is the nominal output and the noise is the variation of the output. Mathematical formulas based on derivatives to determine system variation based on input variation and knowledge of the engineering function will be presented along with animations to allow for a user-friendly presentation. If the function is unknown, experimental techniques may be used to empirically estimate a function. These techniques work equally well for designing manufacturing processes.

Session D5 - *"Do it right the first time!" – An example of a floor line solution to replace the work harder mentality with the work smarter mentality*

Presenter: Victor Cosentini

Ask yourself the following question: When was the last time a failed part inspection resulted in less work for the operators? Even in today's fast pace high end manufacturing world, our knee jerk "long term" corrective action is often "update the operators standard work and train them"…….then blame operator and inspectors for any reoccurrence, because, once trained the correct way always trained the correct way right?

This presentation will take the attendees to the front lines of an actual manufacturing deficiency uncovered by an inspector and guide the listeners on the data analysis used to uncover the full effect of the deficiencies, examination of the current process from an operator perspective, development and management of a cross functional team and how our goal of a "net gain of zero standard work task" was achieved.

The attendees will gain critical information and experience in solving a complex multifactored problem from the angle of making it easier and sustainable for front line operators.

Workshop Descriptions

Thursday 10:15 a.m. – 4:30 p.m.

Acceptance Sampling

Presenter: John Vandenbemden

Sampling is one of the most fundamental activities an organization conducts to validate and verify a product is in conformity or a process is operating as it was designed to do. Sampling has a significant impact on resources, time to sample, time to perform an inspection or test, time to document results, and time to take required action as needed.

This workshop will start with a brief introduction of the basics and fundamentals of sampling. This will create the foundation to move into acceptance sampling. Both attribute and variable sampling plans will be presented. The workshop will include hands-on application of the tables associated with acceptance sampling plans; ANSI standards Z1.4 and Z1.9.

Basic Inspection: Beginning Level

Advance registration is required – limit 16 people

Presenter: Gregory Gay

The focus of this workshop is to get precision tools into the hands of the attendees and to review the proper procedures to achieve precise measurements. Parts will be provided to the class in order to practice precision measurement. Attendees will be using micrometers, calipers, pin gages, gage blocks, dial indicators, depth gages, height stands with surface plates, and additional hand precision measuring tools. This workshop will also cover use of go/no-go gages, functional gages, and how to determine correct gage pin sizes. Not only will each attendee conduct measurements but there will also be some group measurements with analysis of the results. The workshop includes a discussion of calibration and the need to check gages prior to use.

Friday 10:15 a.m. – 4:30 p.m.

Core Tools

Advance registration is required – limit 20 people

Presenter: JD Marhevko

This is an interactive session on how to use Core Tools such as Advanced Product Quality Planning (APQP), Dynamic Control Plans (DCP) (a blend of the Process Failure Mode Effects Analysis (PFMEA) and Control Plan (CP)), Production Part Approval Process (PPAP), Measurement Systems Analysis (MSA) and Statistical Process Control (SPC). Attendees will actively participate in the development of ***each*** these tools across the session and understand their key functions in an organization. Several successful examples across various business types will be shared. Attendees will walk away with various samples that they can use in their own organizations.

Managing Risk in Calibration

Advance registration is required – limit 16 people

Presenter: Dilip Shah

The new ISO/IEC 17025:2017 and the current ISO 9001:2015 standards have requirements for consideration of risk in the organization's quality management system. This hands-on interactive workshop engages the attendees on the understanding of risk as it applies to its calibration and inspection activities. After understanding the concepts of risk, the attendees will conduct an estimation of measurement uncertainty budget for inspection tools such as calipers and micrometers. They will then assess the risk on the inspection of parts that they will measure. Upon completion of this interactive workshop, the attendees will have the following learning outcome:

1. Understanding of measurement related terminology including risk.
2. Understanding and application of measurement uncertainty estimation and how it impacts Metrological Traceability, calibration and inspection activities.
3. Confidence in making compliance decisions (pass/fail, go/no-go) on inspection of parts while minimizing risk.
4. Specifying calibration services to minimize risk.