Keeping Pace with the PetroChemical Industry

by Bob Zaruta, President/CEO, NWIRC

Watch out Gulf Coast! The Northeastern United States, including NW PA’s Appalachian Region, is a sleeping giant ready to awaken. For the next several years, the focus on the petrochemical industry is going to drastically change the business landscape of Northwest PA, most assuredly in manufacturing. For the last 6 decades, the Gulf Coast region has been the center of the U.S. petrochemical industry. However, the recent investment in the tri-state (PA-OH-WV) region will change the focus of this industry to our corner of the Appalachian region. There is the $6 billion Shell cracker plant currently being built in Monaca (Beaver County) PA, an estimated ~$10 billion PTT Global plant being considered in Belmont County OH, as well as a $10 billion Natural Gas Storage & Trading Hub in WV. The American Chemistry Council (ACC) notes there is enough supply of raw materials to feed at least five world scale ethylene plants in the Appalachian region. To realize the full potential of these natural gas resources, the Governors from PA, OH and WV have jointly entered into an agreement to market the tri-state region to attract new business within the petrochemical industry. Therefore, by sheer location, our northwest PA region has a competitive edge. Just as Edwin Drake changed the region in the 1800s drilling the initial oil well, there is no doubt this will change the course of our future.

Two of the by-products produced from the petrochemical industry cracker plants are ethylene and propylene. Since 2011, the ACC has been developing a series of reports analyzing the growing industry specific to manufacturing. They looked at the effects of renewed competitiveness and the supply chain among 8 key manufacturing industries: paper, chemicals, plastic and rubber products, glass, iron and steel, aluminum, foundries, and fabricated metal products. They analyzed the economic impact of shale-advantaged resin production on the plastics industry. (Plastic products are expected to grow by nearly 3% per year over the next five years.) For our region, the final end products that result from ethylene means growing opportunities for manufacturers in food packaging, toys, window frames, automotive anti-freeze, bottles, film, insulation, tires, sealants, carpet backing and more. And final products from propylene mean growing opportunities for manufacturers in furniture parts, boats, foam, coatings, paints, solvents, adhesives, detergents, rain coats, sweaters, lenses, light fixtures and the list goes on.

Business owners should examine their core competencies and supply chain customers while considering these questions: “How will this be an opportunity to expand my business?; What new markets can I enter?; What new customers can I serve?; How can I lower my risk to entry; and How can I expand my workforce and skills of my employees?”

To find out more, the Northwest PA Oil & Gas Hub is hosting a Manufacturing Summit at Cross Creek Resort in Titusville on Tuesday, Sept 11th. Representatives will be providing information and discussion on the growing Petrochemical Industry, how it is going to change the NW PA business landscape, gaining entry into the supply chain, assistance available for companies, information on the Plastics Industry Partnership’s (PIP) new apprenticeship program, and more. Several presentations will conclude with an open Q&A session. For more information, go to www.nwpaoilandgashub.com.

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unreachable. Your employees can be the key to a successful strategy.

When employees are attempting to solve problems in different ways, there is less efficiency, lost production, dissatisfied employees, and potentially a negative impact to the bottom line. Improvement Kata can engage and equip employees with a life-long skill that makes continuous improvement a habit. Learning this skill:

- engages all employees in deliberate and daily practice of continuous improvement;
- enables teams to navigate together towards the same goals, address obstacles, and develop solutions;
- creates a pattern that becomes habit or second nature;
- promotes measuring and evaluating the impact of any improvement efforts

“We first heard about Kata during a tour of a world-class company that we benchmark against, but had no idea how to pursue this new (to us) problem-solving method. NWIRC’s Tom Weible coached us through our first Kata challenge with amazing results that are proving to be long lasting. We now use Kata as the basis for all our improvement efforts,” said Dan Ignasiak, President, SEPCO.

Improvement and Coaching Kata training is scheduled for August 21-22 in St Marys. As an added bonus, the participant receives a two-hour post-workshop onsite coaching session to work on an actual improvement at their company using kata skills.

Generational Diversity as a Competitive Edge

by Susan Hileman, NWIRC Strategic Business Advisor

We frequently hear manufacturers discuss the inadequacy of the newest generation in our workforce. Something along the lines of: “They don’t have the work ethic we had. They don’t want to come to work. They don’t know how to solve problems. All they want to do is look at their phones.” Have you considered… ‘they’ are us? Working together as a cohesive team means not separating workforce by ‘they’ versus ‘us’. Companies that have learned to think outside the box and implement strategies, not only to attract and retain this newest generation but also to utilize the best skills they can bring to the table, are going to be the winners in the war for qualified people. Those are the manufacturers who are using generational diversity as a competitive edge. They take advantage of this generation’s abilities with technology and incorporate it into their business operations and communicate in a way that allows each employee to feel respected for the unique abilities they bring.

According to the Social Security Administration, the 76 million baby boomers are currently in a mass exodus for retirement—nationally exiting the workforce at around 10,000 per day. The Gen Xers who follow are around 50 million in size, obviously not enough to fill the vacancies. Millennials are currently ‘all in’ at around 80 million. Forbes Magazine noted that by 2030, Millennials will be 75% of the active workforce—that’s only 12 years away. Generation Z, still being formed, just began entering the workforce in 2018. But wait, we haven’t figured out how to work with millennials yet!

A generation is typically formed over a period of around 20 years. Each generation thinks the one that came before lacks something and then goes about correcting it. In the 1950s, people often held onto jobs with a single employer for a lifetime. The Bureau of Labor Statistics (BLS) notes only 30% of all workers, both men and women, now are at the same jobs over 10 years, with the average tenure across all ages being 4.2 years. Specifically, baby boomers job tenure is now 7 years, versus 5 years for Gen Xers and 3 years for millennials.

It’s a changing world. Are you changing with it? Do your policies offer flexibility? Do you ask for input on what employees want? Millennials grew up over-scheduled and over-managed. Perhaps they tend not to be good problem-solvers because someone else always did it for them. Coaching and mentoring is typically well received. Good with technology, this generation has never known life without it and wants an employer who invests in technology for their business, as well as the freedom to shape and give input to what they do. It’s no longer about work-life balance because the two are integrated: work is part of our lives. Sometimes not the most important part—just a part. Millennials seek happiness and personal fulfillment within their job and believe it’s okay to change jobs to try new things, to figure out what they want to do. Ideal employers are those that can offer a career path showing how to try new things, gain new skills, and reward increases in
competency with wages. So, consider offering a career pathway within your company or a mentoring program. Just like customers come to you because you offer a competitive edge or value in some way, there are great opportunities to attract and retain young talent—if you’re willing to look at the way your company operates and be open to change.

### Lean Together™ 2.0 Underway

Lean Together™ 2.0 sessions started a couple weeks ago. This is a follow-on group to Lean Together™ 1.0 that introduces manufacturing companies to concepts from the book *2 Second Lean* by Paul Akers. With a focus on growing people, Lean Together 2.0 is for the advancement of continuous improvement, specifically geared to support the 2 second improvements that companies have implemented or new improvements to be identified or developed.

The first session, facilitated by NWIRC’s Susan Hileman, addressed company culture and generational diversity. Sustaining a culture of continuous improvement can be challenging. “We all have common- as well as unique-communication styles, attitudes and behaviors which influence company culture,” Hileman said. “When working with individuals who cross generational lines- baby boomers, millennials, and other generations- we also have learning styles which can affect how information is presented, received, and processed. Understanding and addressing generational traits will help a company achieve the best outcomes.”

Each month for Lean Together™ 2.0, a different subject matter expert will build upon the company’s efforts for developing a culture of continuous improvement by providing information that will contribute to their success.

### WiM PA Chapter Meets at LORD Corporation

A Women in Manufacturing (WiM) Pennsylvania Chapter meeting was held on June 28th at LORD Corporation in Erie. Hosts and presenters for the meeting were Ashley Reith, Senior Manufacturing Engineer and Jackie Masek, Production Specialist. In addition to providing a tour of the 1.1 million square foot facility, they shared their experiences with the Women in Business employee initiative at LORD’s Erie facility. The group was pleased to have a member from WiM Ohio out of Cleveland join the meeting.

The next WiM PA Chapter meeting is scheduled for Thursday, September 13 from 10am to Noon at Franklin Industries, 600 Atlantic Avenue, Franklin (Venango County), PA. Lunch is included and will follow the tour at the award-winning Bella Cucina’s Restaurant. Registration will be coming soon.

Also, mark your calendar for the WiM PA Chapter holiday event on Thursday, November 29th.

### Building Your WEDnet Training Plan

WEDnet (Workforce & Economic Development Network of Pennsylvania) supports Pennsylvania companies by investing in the training needed to upgrade the skills, knowledge and effectiveness of current employees. WEDnet was recently awarded an increase in grant funding and is now accepting applications for the 2018-19 program year and they are looking for companies to submit their application and training plans soon. Companies that qualify for WEDnet funding can receive up to $450 per employee for Essential Skills Training and up to $850 per employee for Advanced Technology Training.

If you are building your WEDnet training plan, NWIRC offers numerous courses that qualify for reimbursement. Our schedule is ever-evolving with more topics and classes soon being added for Fall and Winter. Courses can be customized or added based on our regional manufacturers’ requests. Contact our Event Coordinator, Molly Reichard (814-217-6067) to discuss your specific employee training needs.
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If you have questions, or would like to speak with someone from NWIRC about services, please contact your Strategic Business Advisor (SBA):

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UPCOMING EVENTS

Toyota Kata for Continuous Improvement
August 21, 22
Location: St Marys
This in-depth 2-day training will focus on Improvement and Coaching Kata- a pattern of scientific thinking used to achieve goals and challenges turning employees into problem-solvers. Participants also receive a 2-hour post-workshop coaching session at their facility.

Measurement Systems Analysis
Sept 20
Location: St Marys
Another tool for your quality management system. Participants will learn the concept for assessing, measuring, and improving the reliability of the measurement system. You will review different sources of measurement variation and techniques to identify, isolate, and reduce measurement variation.

ISO 9001:2015 Internal Auditor
Sept 11, 12, 13
Locations: Hermitage and St Marys
A 3-day course provides a detailed review of ISO 9001:2015 quality standard, including the most recent changes. Participants will learn how to conduct an audit, write the audit report, take corrective actions, and more.

IATF 16949:2016 Internal Auditor
Sept 18, 19, 20
Location: St Marys and Meadville
Training of this automotive standard will provide understanding of quality management principles in context with ISO 9001:2015 and the IATF 16949:2016, along with techniques of process-based auditing.

For more information or to register for training, visit www.nwirc.org