



York Precision
MACHINING & HYDRAULICS

Building exceptional People-Products-Place-Partners

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NEWS

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**"I can do things you cannot, you can do things I cannot; together we can do great things." —
Mother Teresa**

This Quarter's theme:
Partners and Success



Case Study:

Why a Rotary Bear-Loc®?

By Michele Baker-Thomas, Business Manager

In 1985 we sold a rotary Bear-Loc® by York Precision Machining & Hydraulics (then known as York Industries) to a customer for use in equipment called a flying shear. The purpose of the flying shear was to cut material coming off a roll. The drive train consists of an electric motor driving the flying shear through a flexible coupling. But there was a curious additional need required in this drive train.

The flying shear needs to be rotationally disconnected from its driver. This must be done quickly and accurately and then the shafts must be quickly reconnected at the correct “clocked” position of the shafts.

This machine, approximately 35 years old was being rebuilt/reconditioned in Europe for continued use. The company using the machine approached Coupling Corporation of America (CCA), a York, PA based company, to either rebuild or supply new the complete original drive train. Fortunately, CCA had original drawings and design features of the drive train and immediately recognized the rotary Bear-Loc® and was familiar with its design and features. CCA came to York Precision knowing this was their proprietary product. They also have the knowledge and expertise to integrate with other components, in this case, the CCA Flexxor coupling.

CCA President Jim H. Anderson Jr. provided this recap of the rotary The Bear-Loc® in this application: “The Bear-Loc® provides specific features which apply perfectly for this installation. The rotary Bear-Loc® is designed to release at the instantaneous application of hydraulic pressure which allows the motor and or the shear to rotate independently from the other. This rotation is smooth, on bearings in the Bear-Loc® and without friction. When hydraulic oil pressure is released, the Bear-Loc® grabs the shaft again and torque is transmitted between the drive and the shear.

“With the hydraulic pressure still applied, if desired, the driver and driven shaft can be “timed” (put into the correct angular orientation with respect to each other) before releasing the hydraulic pressure to lock up the connection.

“The additional safety over torque feature of the Bear-Loc® is important as well. The Bear-Loc® is designed to slip at a limit torque, if for instance, the flying shear were to jam. That is, the Bear-Loc® has a designed and tested limit of torque transmission so that if torque through the drive train were to exceed the normal desired amount, the Bear-Loc® immediately slips and reduces any possible over torque consequences to the system. This feature saves other parts of the drive train from possible damage.

“One can only imagine the additional possible applications of the Bear-Loc® features, such as rolling applications (paper, metal, or fabric handling), also potentially testing, automotive, power and petro-chemical applications. There are many mechanical drive applications which for one reason or another desire a “shear pin” safety feature. Where a drive can have multiple over torque occurrences, it would be desirable to utilize a Bear-Loc® which permits multiple events rather than needing to continually replace shear pins.

“The hydraulic release and timing feature can be utilized in those drive train systems where for instance two gear type rotors need to mesh perfectly. Often these drives are designed requiring keyways to be machined on shafts after the lobed gears are rotated into position. Cutting keyways to time lobed gears is not too accurate. The Bear-Loc® can much more accurately offer this rotational “timing” feature where the two meshing gears need to be quickly and precisely “timed.”

“Cooperation between York Precision and Coupling Corporation was excellent. York Precision completed their part of the project with an excellent product, and on time. CCA will certainly look forward to additional applications of the Rotary or Axial Bear-Loc® devices in conjunction with CCA projects.”

Bear-Loc® is suited for linear and rotary locking applications in both tie rod and mill type constructions. It is custom designed and available as a locking actuator system, or lock-only unit, for new designs or retrofitting, whether in line or parallel. Bear-Loc® is available in a wide array of mounting options.



Above, NAVAIR’s Quality Assurance Engineer Gianpiero Geranio observes as YorkPMH quality team member Bill Rittenhouse reviews critical measurements of an ALRE component. Also observing are Chad Werni and Justin Elliott, Quality Assurance Specialists with Defense Contract Management Agency.

Quality Corner - NAVAIR visits YorkPMH for Inspection of ALRE CSI, Highlighting Customer Partnership of NAVAIR and DCMA

By Jeff Shellenberger, Quality Manager

The Naval Air Systems Command (NAVAIR) and York Precision have a longstanding partnership. For decades we have provided critical parts and assemblies to the Navy for their Aircraft Launch and Recovery (ALRE) program. Some parts are designated “CSI” or Critical Safety Item, requiring an onsite witness by a NAVAIR representative. Others are considered “CAI” or Critical Application Item.

Recently we welcomed a NAVAIR inspector newly assigned to us, Gianpiero “Gian”Geranio. Along with Quality Assurance Specialists from the Defense Contract Management Agency (DCMA), Gian witnessed our inspection of a CSI component. DCMA, on behalf of the U.S. Department of Defense, is a more local presence, monitoring the entire production process, from contract award to delivery.

For the inspection, YorkPMH’s quality team used a portable coordinate measuring machine (CMM) called the Faro Arm, to digitally take the highly precise measurements, demonstrating that these machined parts meet the drawing’s specifications.

What’s an ALRE component, and what determines whether it is CAI or CSI?

This equipment makes it possible for aircraft to safely take off and land on Navy aircraft carriers. (Think Top Gun!) ALRE serve all aircraft including fixed and rotary wing aircraft. If a CSI component does not function properly, it can mean loss of lives, materials, and mission. We also produce a considerable amount of parts and assemblies designated as CAI, meaning, they are essential to system performance, operation or the preservation of life or safety of operating personnel.

YorkPMH Quality Manager Jeff Shellenberger observes, “A highlight of the visit is our commitment to transparency, with both people and processes. It’s a collaborative relationship with our customer, a partnership. They meet our people and see our entire process. We are glad for the opportunity to work with the end user: Gian actually has had first-hand experience with using the system. Our leveraging of technology such as Faro Arm, enables us to perform a highly efficient and accurate inspection, streamlining the inspection and the visit. This also enhances pricing and the speed of delivery of flight ready products.”

The Top Guns serving our country are grateful for our commitment to producing components that assure their safety, so that they can protect us.



Work Culture at York PMH

We believe in finding exceptional employees with integrity, initiative and a commitment to excellence.

Great parts design and custom engineering service start with a great team. Being a unified team that gives our best every day is part of our mission at York Precision. All our team members are instilled with the understanding that when we work together with a shared commitment to excellence, we can produce and deliver high-quality parts on time and according to your specifications. We know that you would expect nothing less from a top-notch custom precision manufacturing and engineering company.

"YorkPMH has one of the best cultures I have had the pleasure of working in during my career in Project Management. The support, team camaraderie and positivity are unlike anything I have experienced in my 30+ years of employment", says one of our Project Managers.

"I am fortunate to have direct communication with our customers about their expectations. Incorporating our customers' needs into how we approach our work in these early years of York Precision leaves me with a great sense of creating our future", says a member of our Quality Team.



Our Newest Team Member

Welcome to YPMH! Please welcome our newest Project Manager, Denette! She has been with us for five months. As a Project Manager, she considers herself a “jack of all trades”. Not only does she purchase high quality materials for projects, she also gets to enjoy the full turn of making, preparing, and shipping product to our customers, all while tracking everything to ensure on time delivery. Her favorite part of working at YPMH is the ability to make a difference in a team-oriented atmosphere where hard work is appreciated and celebrated. Denette notes she would tell anyone searching for a work life home that YPMH is a place to grow and build your career all while being a part of a fantastic organization. Outside of work, Denette enjoys spending time with her husband of 21 years, her 6 children and her 14 grandchildren. She has a Yorkie named Mr. Mosey that is only 5 lbs. She also enjoys traveling and going to the mountains. She loves animals but hates spiders and green food (except green M&Ms). We’re thankful to have you on our team, Denette!

Employee Activities and Outreach

We Value the People in Our Workplace!

Our mission emphasizes trust and respect. We are also a work hard play hard culture, and we value partnerships!



Thankful but not Thanksgiving In October, we had our "Thankful but not Thanksgiving Feast"! This was a mashup of a Halloween/Thanksgiving celebration, including a feast catered from Cracker Barrel, a spiderweb wall of what we're thankful for written on paper turkeys, candy bar giveaways, a pie bake-off, and a costume contest!

YorkPMH Attends *Bringing the World to PA*

For the past four years (and counting), YorkPMH has had the pleasure of working with the World Trade Center Harrisburg. Executive Director, Tina Weyant, and her staff are always helpful and bring a wealth of information regarding international trade. Bringing the World to PA was a great event! A big thank you to the WTC team for hosting this in person meet-and-greet with our trade reps around the world! Pictured (left to right) are YorkPMH Business Manager, Michele Baker Thomas, with WTC Harrisburg Executive Director, Tina Weyant.





US and PA Manufacturing Week

In celebration of PA Manufacturing Week and in partnership with MANTEC, we were pleased to host PA representatives for a tour and discussion of ways small yet growing entrepreneurial manufacturers like us can remain competitive in the US and globally. We are grateful for PA programs that help develop, retain and train a qualified workforce, offer export expertise, and provide research and development grant support.

PA EITC Program

As part of Pennsylvania's Educational Improvement Tax Credit Program (EITC), YorkPMH was able to support the worthwhile non-profit organization, Young Thinkers of York Inc. Young Thinkers vision is to become the leader of turning underserved York students into future engineers, scientists, innovators, and leaders. Ray Ames is the founder and has served since 2017 as the Executive Director of Young Thinkers. This nonprofit organization is dedicated to bringing robotics and engineering along with other youth STEM programs into the City of York. Pictured is Ray Ames, founder and Executive Director, and Michele Baker Thomas, Business Manager of York PMH.



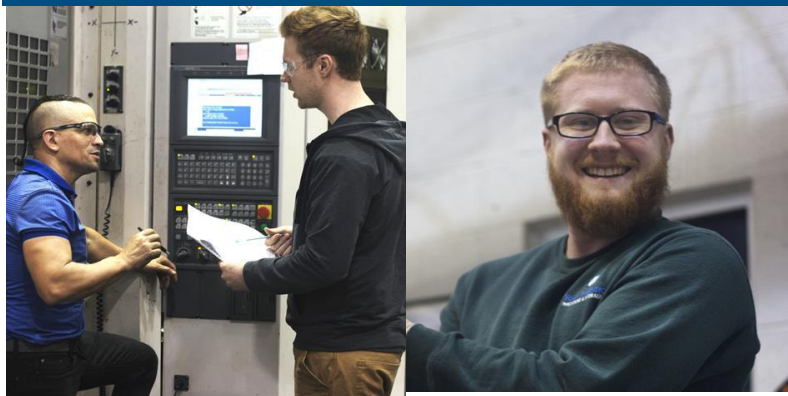
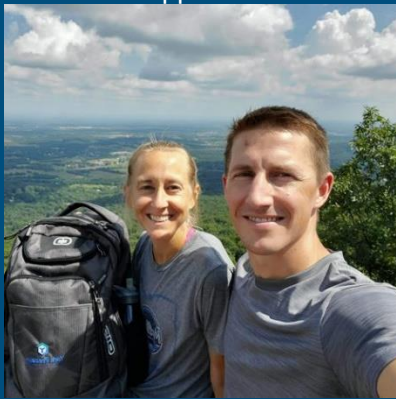


YPMH Attends Manufacturer's Expo

Jeff Shellenberger, left, and Lauren Fisher of YorkPMH had a great time at the Manufacturers' Expo held at Spooky Nook Sports in Lancaster, PA! Great job to The Manufacturers' Association for putting on an awesome event filled with networking and learning.

YPMH Backpacks and Apparel

Our branded YPMH logo-wear is very popular amongst our team, and employees love to bring their YPMH backpacks on trips with them! Our owner and president, Dan Baker, recently used his backpack while on a hike with his wife on the Appalachian Trail! What a beautiful view!





York Precision's Bear-Loc®

Our Bear-Loc® is ideal whenever a customer needs a failsafe solution. Bear-Loc® features high system stiffness, zero backlash and infinite position locking. We are pleased to offer these state-of-the-art hydraulic locking actuators. We have the in-house design, engineering expertise and machining and manufacturing capabilities to produce a hydraulic locking device that meets customers' exact specifications. It's also built to last; expect decades of reliable service from the Bear-Loc®.

Scan the QR code below to learn more!





Supplier Highlight

This quarter we highlight a supplier who went above and beyond requirements to provide excellent service! Thank you! We value your partnership!



Founded in 1992, Quality Support, LLC provides lumber and packaging services that meet ASTM, NQA-1, and MIL-SPEC standards.

By Lauren Fisher, Administrative Support Specialist

Our highlighted supplier this quarter is Quality Support, LLC, serving Pittsburgh, Pennsylvania, and surrounding areas. Quality Support, LLC manufactures wood shipping crates for all industries (ASTM), including Nuclear (NQA-1) and Military (MIL-SPEC). Their crates are built and stamped to meet the ISPM-15 International requirements. Crates are designed to meet the particular needs specified, or they are built to the specifications or drawings of the customer. Quality Support also does custom hard cases as well as custom foam.

YorkPMH utilizes Quality Support's MIL-SPEC packaging as they take out all the guess work for manufacturers and provide quality service at a low cost. The other week our Quality Manager needed something done the very next day, and Quality Support, LLC was able to complete the request overnight at no extra cost to us. Talk about great customer service! Additionally, the packaging always looks exceptional.

Quality Support, LLC is NIST SP 800-171 compliant. Give them a call at 724-571-5692 or visit <https://www.qualitysupport.biz/> to learn more!

Wishing you and yours a very merry holiday season and a happy, prosperous New Year!

- The York PMH Team



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