

“Our resilience in 2020 is leading to great potential for 2021.”

--Dan Baker, President, York Precision Machining & Hydraulics

VALUES HIGHLIGHT: YPMH PLACE

By Dan Baker, President

Reflecting on 2020, and looking ahead at 2021, it's a good time to highlight the ways we're evolving as a company. PLACE: one of the four Ps that comprise our values; all listed on the upper right. We value a thriving environment: a place where teamwork, celebration and empowerment are the norm. Through a year of change and adversity, I am proud of our perseverance as we fought together to take new ground each day regardless of the circumstances. There are two particular success stories that required a great deal of teamwork to pull off: we designed, manufactured and shipped large Bear-Locs to go onto a premier military system and are making great progress with an extremely challenging component for a critical Air Force application. Both of these accomplishments open the door for future opportunities, which will continue to fuel our mission, growth, and development. I believe that 2021 has great things in store for York Precision, and I am thankful for the amazing men and women who make this place so great. Here are a few other “Place” highlights:

--our capacity for very large parts now further enhanced with our Doosan live tool lathe. We can machine parts up to 200” long and 36” in diameter.

--our in-house testing capability includes hydraulic and hydrostatic testing.

--strategic growth of staff and departments. We will enhance our production and engineering departments with the hire of a CNC Programmer. Our QA team will add a Quality Lead. Read about another recent “quality” hire, p. 2

--Increased visibility and in the global marketplace, as our online “place” evolves www.yorkpmh.com

--the recent addition of the FARO Arm, a portable, highly accurate digital measurement technology has created numerous efficiencies and quality enhancements.

--5S and ISO, just two productivity/ quality disciplines that drive improvements ranging from more organized work space, to more efficient communication.

We look forward to partnering with you.



**Building exceptional
People-Products-
Place-Partners**

This Quarter's theme:
YPMH Quality Place

AROUND YPMH & KPI HIGHLIGHTS

Let's Celebrate!

**Insider's View of
Sales: How we
benchmark this KPI
--page 2**

CUSTOMER HIGHLIGHTS

**Bear-Loc® & Hydro-
Control: Game-
changing design,
performance & safety
--page 3-4**

SUPPLIER HIGHLIGHTS & QUALITY CORNER

**Shout-out to Our
Vendor of the
Quarter --page 4**

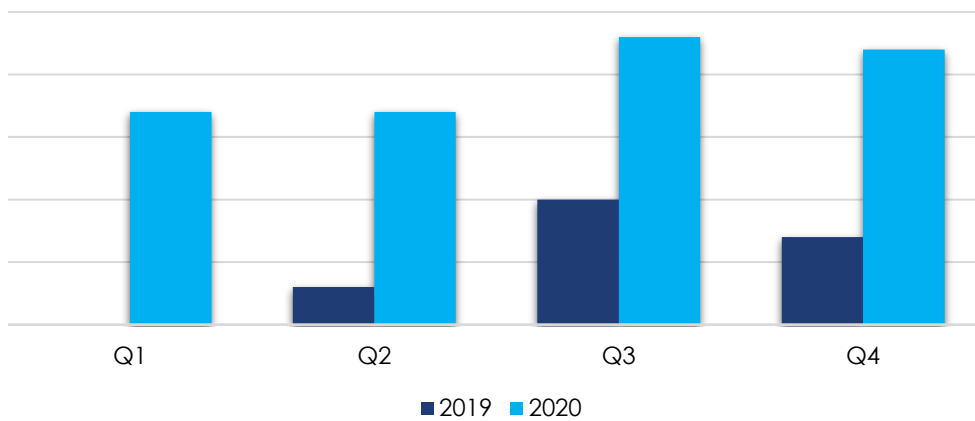
Our Paint Booth at Your Service

Did you know that here at York Precision we have paint and coating capabilities? Our 20' x 40' JDB down draft spray booth allows us to safely paint and finish everything ranging from small to large components. Our talented finishing experts use the highest-quality paint and coatings to produce beautiful finished products.

Need a quality painting or coating job? [Contact us.](#)



Qualified Leads



Insider's View on Sales: Because we do custom and relatively complex parts and assemblies, a key sales benchmark is Qualified Leads. We started tracking this current KPI in June of 2019. We have a strong and increasing flow of inquiries from designers and manufacturers who also need highly reliable hydraulics solutions, especially for large holding capacities and critical applications.

Key Dates coming up:

Starting in January 2021, YPMH is initiating a monthly employee activity and monthly safety theme. YPMH Employees will have the opportunity to participate in drawings, challenges, games, contests, etc. and earn prizes.

JAN

Happy New Year!

Jan. 26th Monthly Employee Activity Kick-off

Safety Theme: Preventing Slips, Trips, Falls

MAR

Mar 16th March Employee Challenge

Safety Theme: Preventing Accidents

FEB

Feb 15th ypmh closed for President's Day

Feb 23rd February Employee Challenge

Safety Theme: Fork Lift Safety

APR

Apr 13th April Employee Challenge

Safety Theme: Be Aware of Your Surroundings

QUALITY CORNER



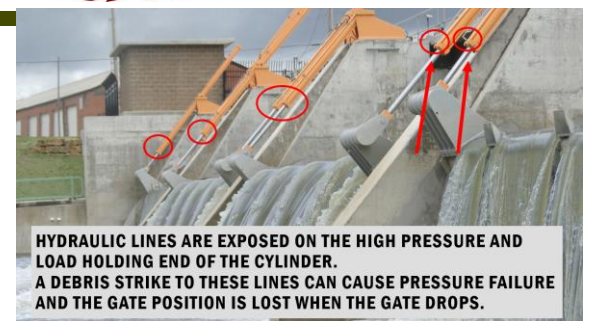
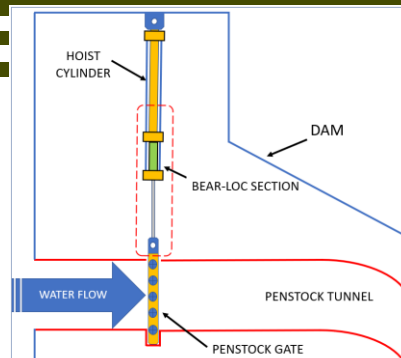
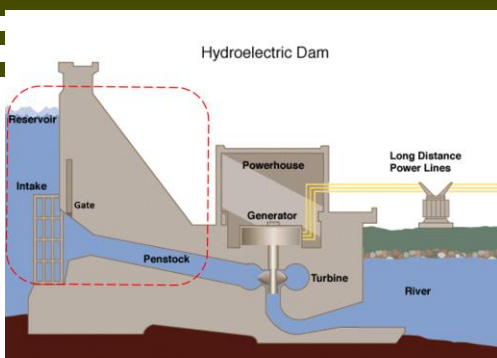
Meet **Grason Mullendore**, the newest member of our Quality Team. As you can see, he's a very enGAGEing guy! Grason is a Penn State and York Tech alumn. Grason is a mechanical engineer and NOCTI certified in drafting. He is a firearms enthusiast and loves to camp and travel in his free time.

CUSTOMER HIGHLIGHTS

Game-Changing Hydro-Control Design: Discover New Levels of Safety, Performance

Many dams and hydro-control systems have reached an age that is making replacement or refurbishment a necessity. These systems were built with older technologies that can be replaced with newer technologies and designs that can provide higher safety and performance. [Hydraulic system failure](#) in a water control system has the potential to cause injury and catastrophic damage to human lives, entire communities, infrastructure and equipment.

The [Bear-Loc®](#) positive hydraulic lock is a solution civil and architectural design engineers can rely on to provide locking safety and enhanced locking performance that is superior to other hydraulic locking devices. Bear-Loc® is a safe, efficient and dependable rod locking device consisting of liners encased in a sleeve that is mounted on a cylinder rod. The sleeve creates an interference fit with the hydraulic cylinder rod. The interference generates a positive mechanical connection which enables Bear-Loc® to lock the rod in place. When hydraulic pressure is removed, intentionally or not, the sleeve contracts and the Bear-Loc® instantly engages to stop motion and hold the rod firmly in place. When hydraulic pressure is present, elastic expansion of the sleeve metal removes the interference allowing the rod to move freely. This design has proven itself through decades of use in harsh sub-sea and above-sea environments such as oil-rig and US NAVY applications.



Bear-Loc® can benefit hydro energy generation in a dam by its infinite position locking. Dams with hydroelectric turbines contain automated control systems that include hydraulic power actuator cylinders. These control systems measure and control water flow rates that determine the turbine speed and the dam's electrical output. They use actuators that control gates and these actuators have locks installed that generally only have several fixed or "step" locking positions. This limits their accuracy and their ability to provide precision control of gate position and water flow. Most existing dam mechanical locks are sometimes complex in design or cumbersome. Bear-Loc® provides simplicity in design and less components to maintain. The Bear-Loc® infinite position locking ability allows for exact and variable adjustment of the water flow so that the dam has much more precision and control, as well as enhanced generation efficiency. The more precise adjustments can also prevent sudden shifts in forces on turbines, sustain equipment investments and enhance service life. A few civil engineering applications in which Bear-Loc® functions to ensure safety and performance include:

1. **Flood control and prevention:** flood control is essential for ensuring community safety as well as preventing structural damage in hydroelectric systems. There are over 90,580 dams in the U.S. and over 15,500 of them are rated as high-hazard potential dams by the American Society of Civil Engineers. There are tens of millions of citizens that can be impacted by their ability to prevent flooding.

continued, p. 4.

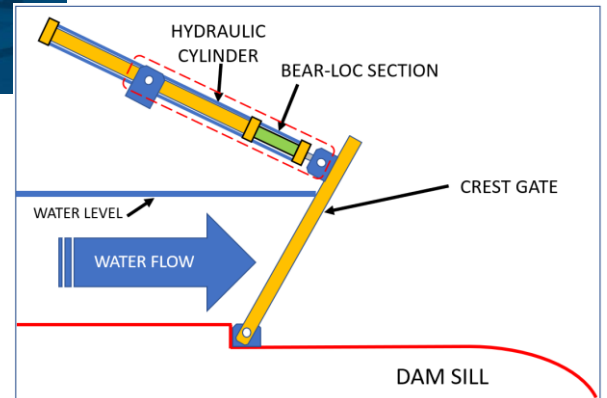
Superior Hydro-Control Design *continued from p. 3*

Using **Bear-Loc in Hydro Control Systems** provides precise control of turbine speeds and the rate of power generation.



Crest Gates' externally mounted actuators control water flow. Flooding carries debris that becomes entrapped. A Bear-Loc® ensures that the actuator remains locked and in position even if debris damages other fluid power parts.

2. Moveable bridges, canal locks and lift safety locks: Proper hydraulic system locking is essential in movable bridges, canal locks and water related lifts. When these systems include hydraulic systems, safety and liability avoidance is found in integrating a fail safe locking device on hydraulic cylinder rods or as stand-alone parallel locks. Bear-Loc® can prevent a bridge, lift or canal lock from having unplanned movement and help protect property and save lives.



3. Hydro-electric generation and equipment protection: Proper hydraulic locking is critical for safety in hydroelectric energy generation. Hydroelectric dams require hydraulic cylinders for power generation intake gates to admit and prevent the flow of water. These hydraulic cylinders require locking mechanisms. These locks secure gate position to protect power generation turbines from sudden water surges that can cause equipment damage and lost revenues due to generation downtime. Bear-Loc® can lock at fully open and closed positions® and any place in between with the same locking power to assure protection of generation equipment from sudden flow surges. This ensures locking at any place in stroke in case of power loss to the hydraulics that could cause unplanned gate movement and flow changes.

Even just one hydro-control system failure can cost millions of dollars. Protect your investment with the best lock available. [Contact us](#) today to purchase a custom hydro-control solution or to learn more.

SUPPLIER HIGHLIGHTS

Our thanks go to **Allegheny York** (www.alleghenyork.com) a valued neighbor and supplier of our hydraulic seals. Allegheny York works hard to fill our orders. They often exceed our expectations with their quick turn arounds.

We appreciate Allegheny's attention to detail and going above and beyond for their customers. Their customer service is top-tier and we enjoy connecting with Allegheny York staff when we receive our hand delivered seals!

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

Wishing you and yours a happy, safe and prosperous 2021!

The York Precision Team

