



Fall 2015

# Quantum

## FORMING SYSTEMS



### *Letter from the President*

The challenge in creating a sustainable company in a global economy is collaborating effectively within all departments internally as well as with customers all over the world. At Quantum, we have always put our customers and employees first when making decisions about our products. I believe it begins with a simple idea - invent or create better solutions for our customers' ever-changing wants and needs. Throughout 2015, Quantum has strived to meet these demands, and as a result, achieved one of our best fiscal years to date.

As 2015 comes to a close, I would like to thank our customers, both new and long-standing, for their continued support of our products and services. I would also like to express my gratitude to our employees for their tireless efforts to meet customer demands in a timely manner. Lastly, I appreciate all of the hard work of Quantum's suppliers who have met tough demands and tight schedules this year.

It is my goal to continue to achieve the excellence that has been associated with Quantum Engineered Products in the past. I look forward to a strong and fruitful 2016.

**Steven Kozora**

*President, Quantum Engineered Products*

**Solving your container forming problems is more than just a part of our business, it is our only business!**



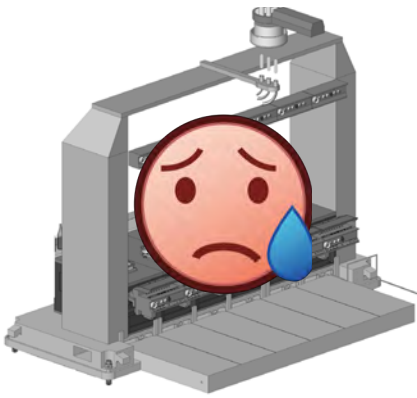
This past September the container glass industry came together to celebrate and to explore the technology of tomorrow. The Glassman Latin America event was held in the capital city of the Jalisco state, in Guadalajara, Mexico. The city is home to a major Mexican business center and is a global hub for high technology industries.

Mexico is a very important market for Quantum and our Forming System is the standard for the largest manufacturing group of Mexico, as well as other highly reputable glass makers. Quantum took the opportunity to meet with our current customers and longtime friends, all while exploring new relationships and opportunities throughout Latin America.



*Adam Neupert, Steven Kozora, and Mr. Vargas in the Quantum booth.*

# I.S. Machine Maintenance and the Quantum Upgrade

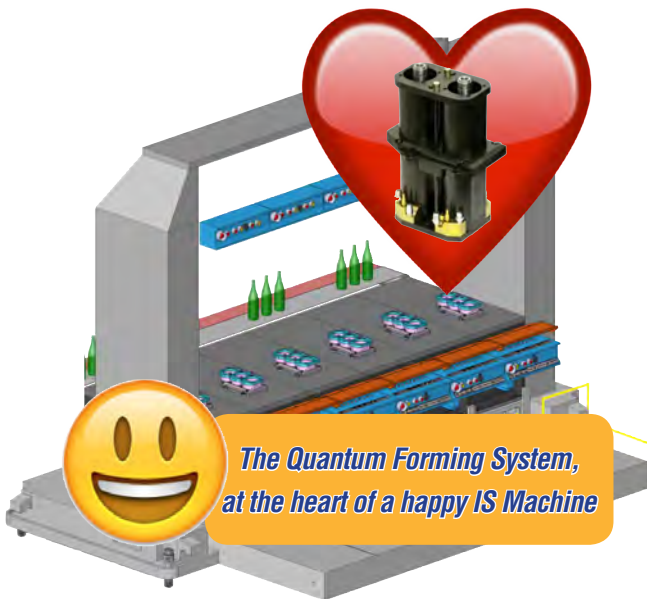


## *Are you planning a major or minor IS Machine repair project?*

Take advantage of your planned downtime and consider upgrading the performance of your I.S. machine with the Quantum Forming System. During many I.S. Machine repair projects the existing forming system needs to be overhauled or replaced, so this is the perfect time to consider a forming system that will last longer and provide better performance. Rather than settling with an O.E.M. forming system, Quantum's customers choose to work with our team of Engineers and Technicians to seamlessly integrate a newly supplied Quantum Forming System. Once installed, the equipment will operate at a high level for decades!

The Quantum Forming System is designed to operate with no metal to metal contact throughout the entire forming process. The overall design, coupled with the quality of materials used in Quantum's specialized manufacturing process, is what creates the long lasting dependability of the equipment. Once in production, the system requires very little attention and only minor maintenance is needed every 2-3 years of continuous production. The maintenance procedure is easy to perform and consists of replacing inexpensive seals and bearings. Once an investment is made in Quantum equipment, it is the last time that a capital purchase will be needed for the forming system of that I.S. machine.

*The Universal compatibility of the Quantum Forming System makes it a perfect choice to upgrade any IS machine, regardless of the O.E.M.* The standard Quantum Cylinders will integrate into any type of I.S. machine and provide an immediate improvement in many areas of production including;



- Q Higher quality containers, cleaner containers, and better glass distribution in the Blow and Blow Process
- Q Stronger, lighter, and higher quality containers in the NNPB Process
- Q Job change and conversion flexibility for faster response to changes in production schedules
- Q Dependability - less mechanical failures eliminate unplanned machine downtime
- Q Better air flow capacities provide superior plunger cooling, counter blow, and allow for production speed increases

When planning your next I.S. Machine repair project think what your existing forming system could be costing you. Remember that Quantum can meet all of your blankside forming needs!



Saudi Arabia



Venezuela



Germany



Mexico



France



India





## Quantum successfully commissions another complete NNPB Blankside Forming System



One of South America's leading hollow glass manufacturers continues to standardize its forming technologies with Quantum's complete NNPB Blankside Forming System. An 8 section 4 1/4" Triple Gob machine was recently upgraded to include Quantum's Universal Individual TWT<sup>®</sup> Cylinders and the Total Forming Analysis (TFA<sup>™</sup>), Quantum's full stroke real-time Process Control system with automatic gob weight control. This installation was the last of three completed for this customer in 2015 and the complete standardization project is set to continue. This customer produces over 6.5 million high quality bottles and jars per day for both the domestic and export markets. Quantum is very proud to partner with this highly esteemed manufacturer on this large scale upgrade project to their forming systems. The first installation brought an immediate positive impact to the pack-to-melt percentage of a 4 1/4" Triple Gob line. The precision and performance of the Quantum Plunger Mechanisms reduced forming defects and the accuracy of the TFA<sup>™</sup> brought significant positive results to the gob weight stability.



**Sergio Aguilar and Steven Kozora of Quantum along with our customers. Tragically, not long after this installation, our friend Nestor (right) was in a fatal automobile accident. We send our deepest condolences to his colleagues, friends and family.**

## Get to Know...

**Q - Day to Day at QEP – Give a brief description of your daily duties at QEP.**

A - My main function is to oversee any item related to technology. Basically, that includes everything from R&D to Customer Service.



**Mike Albert**

**Q - Hobbies – Give a list of things you like to do outside of work**

A - We are an outdoor family. I mostly enjoy activities with my family. We love to camp, hike, bike, and ski, basically anything that involves the outdoors.

**Q - Give a list of 3 to 5 of your favorite Movies.**

A - I'm a classic movie guy, I also enjoy Sci-Fi and Adventure movies. I would say my all time favorite movie is "Cool Hand Luke". From the Sci-Fi genera I would say the Star Wars movies are number one and from Adventure, I love the Indiana Jones flicks.

**Q - If you could visit one place on earth where would you go? What would you do?**

A - Considering my position takes me all over the world, this is a tough question. My dream holiday is to take my family to Peru and spend at least a month visiting the Inca ruins.

**Q - People would be surprised to know that I...**

A - Designed and built Race Cars before coming to Quantum.

**Q - What is the best vacation you have ever been on? What did you do?**

A - With all of the places we've been on holiday, my whole family would agree that NYC at Christmas was the most amazing vacation we have ever been on. Maybe it was just the time of year combined with the atmosphere, but it was fantastic.

**Q - If you could have lunch with one historical figure who would it be and why?**

A - I've always been fascinated by Ancient Civilizations. I would say that I would love to have the opportunity to meet the Egyptian Pharaoh Ramses, to discover just what his thought process was exactly. He was definitely ahead of his time (a forward thinker).



*To Western Pennsylvanians the onset of the autumn season brings memories of traditions and customs that are commonplace in our area around this time of year. When the cool air of Fall moves in and the leaves begin to change, pumpkins, apple cider, and wonderful fall recipes are all popular. The fall is also a great time for beer drinkers to explore the new aromas and tastes of autumn beers. Here are some of our favorite local fall brews.*



**The Church Brew Works** – Oktoberfest  
The brewers of Bavaria, Germany typically brewed a special beer for the annual Oktoberfest celebration. This Oktoberfest is a light amber colored beer. It is malty in both flavor and aroma making it a delicate beer, which is very drinkable. The hop bitterness is kept low to accentuate the maltiness. All of the ingredients are imported from Germany—and a German yeast strain is used so this beer is as close to authentic as you can get on this side of the Atlantic. Prost!



**Straub** – Oktoberfest  
Straub Oktoberfest pours a white foamy head, with a malty aroma and is rich with notes of dried fruit. The taste is bready with mild hop bitterness on the finish. Overall, Straub Oktoberfest is brewed in the classic Oktoberfest & Marzen style. Three German malts are used to provide the rich, bready malt character that fills the aroma and taste. The mild hop bitterness balances the sweetness and helps to create a balanced “festbier”



**Duquesne** – Lager Paterno Legacy  
Duquesne Lager Paterno Legacy Series is a Vienna style lager characterized by its rich, red caramel color and subtle hop flavors. The beer is moderately carbonated which helps bring out the flavors of malts and hops. Duquesne Lager Paterno Legacy Series is the perfect beer for fall football games.

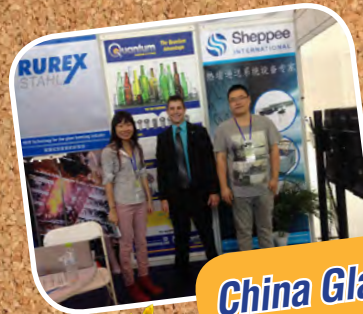


In 2017, Friends of Glass will send the recipe of glass to the moon! Friends of Glass, an influential community movement that encourages Europeans to look beyond the label and choose glass packaging, is working with Lunar Mission One to send the recipe of the precious material to the moon on the Astrobotic Lander in a bid to preserve it for generations to come.

## Quantum Events



**AFGM Conference**



**China Glass**



**Picture Day**



**www.quantumforming.com**

438 Saxonburg Boulevard  
Saxonburg, PA 16056 USA

Tel (724) 352-5100  
Fax (724) 352-4443

**Quantum**  
FORMING SYSTEMS