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Letter from the President

A t Quantum, our goal is to provide "best in class" service and support. This approach leads to an overall better product and sets us apart from our competition. Another advantage we offer our customers is our skilled

team's knowledge level which allows us to offer both electrical and mechanical solutions. We supply not only a better product, but also offer solutions that result in cost savings.

Creating a sustainable company in a global economy is a continuous challenge. Maintaining excellence requires a complete effort from every department at Quantum. Our mission is simple: constantly collaborate to invent and create better solutions for our customers' wants and needs. Throughout our 42-year history, Quantum has endeavored to meet these demands. Recently we were rewarded by having one of our best years to date. We pride ourselves in always placing our customers first when making decisions about our products.

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 thank our dedicated employees for their efforts to supply orders and customer replies in a timely manner. Lastly, I would be remiss if I did not recognize the hard work and efforts of our representatives as they obtain sales and our suppliers as they meet tough demands and schedules.

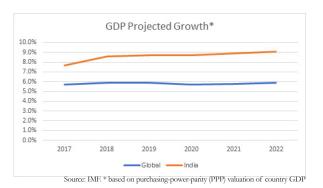
I am looking forward to a strong and fruitful 2019.

Steven Kozora

President, Quantum Engineered Products



Quantum estimates that in 2018 India will produce around 8 billion glass containers. Production is concentrated in the south, west and north regions. There are about 160 I.S. machines lines in operation, the market is expected to resume investment in anticipation of incresing demand of the beer sector. Due to regulations the beer market decreased in 2017 when the government introduced Goods and Services Taxes and banned alcohol consumption on highways. Demand is expected to grow as India per capita beer consumption is less than 2 liters per person and the global average is about 30 liters.



India Gross Domestic Product (GDP) for the first quarter (April-June) Q1, of 2018-19, is estimated at ₹33.74 lakh Crore, as against ₹31.18 lakh Crore in Q1 of 2017-18, showing a growth rate of 8.2 percent. Manufacturing sector grew by 13.5 percent as compared to growth of (-) 1.8 percent in Q1 2017-18.



Use original Quantum parts on your I.S. Machine



Find Quantum Forming Systems in:

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. The maintenance procedure is easy to perform and consists of replacing inexpensive seals and bearings. Our manuals detail all steps necessary during a preventive scheduled maintenance.

Quantum developed repair kits for all our cylinders for preventive maintenance of those inexpensive parts. Each repair kit comes with all necessary parts to carry out the maintenance work. The main advantages of using Quantum original parts for all your preventive maintenance are:

- Our repair kits contain all necessary parts;
- High-quality parts that will last the same as the original parts;
- Special repair kit price, I.e., the price of the repair kit is lower than the combined price of them if ordered individually;
- Necessary parts are easy to find as they come labelled for each step of the preventive maintenance according to our manuals.

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.

Canada Chile China Costa Rica Dubai Egypt France Germany Greece Guatemala Hungary India Indonesia Ireland Italy Japan Kenya Kuwait Malaysia Mexico Myanmar Panama Philippines Poland Portugal Romania Russia Saudi Arabia South Africa South Korea Sri Lanka Sweden Taiwan Tanzania Thailand Trinidad and Tobago Turkey Ukraine United Kingdom Uruguay USA Venezuela

Vietnam

Angola Bolivia

Brazil Bulgaria

Cameroon

Quantum Network Expands to Cover Russia & CIS Countries





Quantum continuously looks to improve our network of experts in the glass industry. We are proud to announce coverage to Russia & CIS Countries with BEV Gmbh, Peter Reich. We are very proud to do business in Russia. Russia is the 48th country where Quantum has done business in 5 continents. Quantum is a global company with global network of experts. Peter joins a team with 8 other sales agents that Quantum uses to cover almost all the countries we do business with.

You will find world-class IS machines equipped with Quantum designed Blow & Blow, Press & Blow and NNPB equipment all over the world!

I.S. machines all over the world are experiencing improved process performance with a high return on investment due to the unique mechanical features of the Quantum Forming System.

Contact Quantum today to discover what Quantum Forming Systems can do for your glassmaking operation.

Extended Technical Support in Asia

At Quantum, our number one priority is customer support and service. We pride ourselves in continuous improvement and expansion in this area.

This summer we welcomed the addition of a new team of technicians to our organization. Based in Delhi, under the management of Ceracon (our long-standing representative in India), this team has the knowledge and experience to support all of Quantum products. This support includes, not only mechanicals, but also software and electronics-based service.

To ensure top quality service to our customers, Quantum performed three separate training programs before releasing the team to work independently. The first session was a two-week long training in three different glass plants. This training was quite extensive and included practical education in troubleshooting, rebuild/repair, and process control. The second session

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was held in Quantum headquarters. It is critical to us to have our remote support understand day to day operations of the Quantum business philosophy. Additionally, during this two-week long training session, we covered the core aspects of the Quantum product line (history, development, improvement strategies, etc.). Not only did the training take place in the classroom, we also took advantage of Quantum's in-house testing and development center. The third training session was held again in a glass plant, immediately following the Quantum in house training. It was one week, hands on use of the knowledge gained in the previous one month.

We are excited to have the new team members trained up and ready to support whatever the needs are of our customers. It is of utmost importance for glass producers to take advantage of the services offered.

With the high turnover rate of labor in most manufacturing settings, training is a key factor in successful operation. Having the option to receive the necessary service, on demand, will reduce downtime and increase performance of production, thus increasing the bottom line. Preventative maintenance is a must in our ever changing industry, especially with the introduction of automation in many areas of production. Given the sophistication level for new equipment, production does not simply cease to operate when a problem occurs. It slowly degrades over time and impacts production tremendously. This degradation can be avoided with the proper care and maintenance on a proactive level. Our team is focused on providing the knowledge and tools to achieve a higher level of preventative maintenance.



This past summer, Steven Kozora and his son Jacob had an exciting opportunity to serve on a mission trip to Kenya sponsored by Grace Community Church. With 24 other members of their church, they spent 11-days, from June 27 – July 7, 2018, at the villages of Kandaria and Katito just outside the city of Kisumu.

Grace Community church has partnered with the two communities of Katito and Kandaria since 2009. Through God's grace and provision, they have been able to assist in bringing clean water and a medical center to Kandaria. They have also assisted in establishing a church, school and children's home in Katito. They distributed thousands of Bibles and shared the Good News of Jesus, seeing many Kenyans come to Christ. They are specifically working with House of Hope, a ministry to widows and orphans. They have opportunities to work in schools, speak in churches, assist in medical clinics and participate in construction projects as well as using their gifts and talents in various ways.



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Quantum Welcomes Samuel Nicotra

Quantum is happy to welcome our new Director of Finance, Samuel Nicotra. Samuel, graduate of the University of Pittsburgh, has over 35 years years

working experience in the manufacturing, legal and construction environment. Lifelong Pittsburgh resident, married, with 3 children and one grandchild, Samuel likes to spend his free time with family and friends.



Visit Quantum at:



