



Where Local Meets GLOBAL

Quabbin Wire and Cable Co is a local business operating in a global industry. The company was founded by President Paul Engel in 1975 using \$15,000 of borrowed money. Initially, Paul, who has a background in computer systems engineering, spotted a need in the market for cable products. The company started out in Ware, Massachusetts and, despite enormous growth in an ever-changing industry, still calls the place home.



WIRE & CABLE CO., INC.

Written by David O'Neill

he company experienced periods of expansion in its early years, namely increasing its staff by fifty in 1983. However, the long-term strategies of the company shifted a decade later when the focus included an emphasis on data cables. Adapting its products led to some in-house changes such as rebuilding its main manufacturing plant, entering new industries in search of a broader customer base, and training staff on the new equipment that was needed to meet these demands.

Chief Technology Officer Jim Rivernider suggests that the innovation needed to serve the industrial sector has ensured that Quabbin Wire and Cable has continued to push forward. "One of the reasons we have been able to sustain ourselves is that we have adapted to different needs. The data cable industry turned very much into a commodity industry. We have been able to adapt a lot of the data cable to industrial type products.

These are more specialized; they have materials to deal with the harsh environment of factories, but they are still a data cable." The company also works in commercial fields such as datacenters, financial institutions and other enterprise facilities.

Jim sees the harsh working environments as beneficial to the product design, and something from which all customers of the company are sure to benefit. "We have adapted to where we put shield on cable; we use different types of jacketing material, so there is a lot more customization. It has the same function, but there are other requirements that have been added. It has to be resistant to the chemicals that are used to wash a food factory or oil or sunlight resistant, types like that."

Senior Marketing Coordinator Jacqui Jamieson believes that the two facets of Quabbin's business are intrinsically linked and that one guides the other in terms of product development. "We found that commercial cable performance is entering the industrial sectors. It will get introduced there (in the commercial environment), and then there are modifications made so that it can be used as an industrial cable." Telecommunications Industry Association (TIA) standards play a part in these changes.

"We still manufacture a lot of commercial business and that sort of business follows along with TIA standards. When there is not a lot happening with the standards, we could be making the same product for three or four years, and then there is a change to a new standard like Category 8, recently completed, so we are working on that product."

The TIA's Category 8 standards for cables are 'designed to support short-distance (between 5 and 30 meters) runs of 25- or 40-Gbit/sec transmission.' according to *Cabling Installation and Maintenance* magazine.

Outwardly, the data industries are presumed to be constantly evolving and technologically rapid. Yet, this is not always the case. The industry is similar to many others in that it has a number of constant products that are a reliable foundation on which other products grow and develop.

"It's not as fast as a lot of industries, or as we sometimes expect, and it is surprising how some of them (cables) last. We expected them go to away or become obsolete, but they are still around. We still sell Category 5e because it is suitable for so many applications."

However, when changes to the industry standard are required, or a new standard is introduced, a company like Quabbin has to plan development in terms of years rather than days. "The problem for us is that it is very capital intensive, so if we need to buy a piece of equipment, it can be a twelve-month lead

time on the equipment, so we have to anticipate a change and a need for the new equipment well in advance. There can be slow periods followed by a lot of change happening quickly. We are about to enter a phase with a lot of change."

Jim is clear on the importance of planning and using a well-established knowledge of the industry to predict changes. "We are always trying to improve our products so that they are ready for the next step in our process. We try to anticipate what is going to be needed for the next cable, and we start doing it for the current cable so that we will be ready when the time comes."

This analysis and anticipation of the industry challenges mean that Quabbin Wire and Cable has had to have reliable skills in a broad range of markets. "We do a lot of our own development in-house. Our specialty is the electrical performance of the cable, but we recently started to learn more about materials and the compounds that are used, particularly in the jacket so that we can participate in more markets." >>

"Jim sees the harsh working environments as beneficial to the product design, and something from which all customers of the company are sure to benefit."





"The PLTC-ER (which stands for power-limited tray cable, exposed run) cable is ready to launch, and the company is eager to show its customers what it can do."

Application for DataMax Extreme Industrial Ethernet

▶ The company is doing just that and is excited to present a new product to the market. The PLTC-ER (which stands for power-limited tray cable, exposed run) cable is ready to launch, and the company is eager to show its customers what it can do. "What it does is that it allows the cable to be used in an exposed way in a factory. It basically replaces what would be an armored cable which would be a lot more cumbersome. This is strictly plastic, but it meets the same crush and impact resistance as an armored cable."

While this may be viewed as a minor tweak to an existing product, the company has managed to combine versatility with smart elements, ensuring that its customers can now revolutionize their work practices by offering the ability to use



industrial Ethernet "in a place where they might be using an older data-bus-type cable."

The adaptation means that clients can now enjoy much more versatility in their workflow. "It is definitely more versatile. It is a data cable as well, so it can be used in areas where data cables haven't been used before. We believe it is going to spread throughout the market, and we have plans to do even more with it, add more features, in terms of listings and approvals to it, so that it can go into the oil and gas industries, oil field applications, et cetera."

Jim is eager to point out that the product is at launch phase. The company is aware that other areas of the industry need to catch up and time is needed to allow practices and processes within the industry to use the newly available cable. For Jim, patience is vital.

"What we usually see is that we need to have people start to design the cable in. When there was nothing available, people worked around it somehow. We need to make sure that we introduce it to enough people, and there is typically a waiting period for someone to do a design that requires it. The key, to us, is that we want to make something and put it in people's hands so that it is real, and then as we prepare to make it at volume they will be designing it in."

Quabbin Wire and Cable Co. is justifiably proud of the roots that it has been growing in Ware for over forty years. However, in an industry as diverse and global as data network, those inside the company are aware of the need to keep a focus on the bigger industrial landscape. Jacqui points out that this is highly important due to the differing needs of clients in different jurisdictions. "As far as the listings and ratings that we have on our cables, we try to be aware of requirements in different countries, even different states, because it can change throughout. We take that into consideration when designing cable."

This is a company that has remained in an industry that has seen huge technological leaps, and it has not been successful by remaining stagnant. Ensuring that the company stays in touch with global developments is something that will put it in a very strong position for the next forty years. "We try to be both price competitive and technically competitive. We are always trying to learn what's going on. We are in a small town, and it can be easy not to see over the small hills, to not pay attention to what is happening in the world, but it will impact us. We definitely have to pay attention to the industry, to constantly be aware of what's happening."



Innovation Data Cable made smalle

DataMax mini commercial cable



SUPPORTED BY	

ACCEL INTERNATIONAL HOLDINGS, INC.

POLYONE CORPORATION www.polyone.com

