Based in Oakville, Ontario, M&G Steel Ltd. has grown into one of the leading structural steel fabrication and erection contractors in Canada. Founded in 1987 by engineers Mel Grimes and John Mark, M&G has grown quickly based on its ability to serve a vast range of clients ranging from owners to project managers and general contractors. Over the past 30 years, M&G Steel has been contributing unique and innovative buildings to the Canadian landscape and has received many awards of distinction from the Canadian Institute of Steel.

M&G Steel operates out of a modern facility that is 30,000-square-foot plant and is the home of the PythonX Structural Steel Fabrication System. The PythonX is 12 old years and is still an integral part of their everyday operation.
Complicated Projects

M&G has a project portfolio that includes universities, hospitals, data centers, power plants and complex renovation projects. M&G Steel takes pride in the quality and workmanship of the products they produce. They are not your typical structural steel fabricator; they do more customized structural steel. Their niche is working on and through very complex projects that present challenges in engineering, site access, tight timelines and coordination. They do not fabricate many simple rectangular structures. They excel at more complicated projects that require intricate work that involve engineering and support. Brian Thompson joined the team in 1997 and is currently the VP of Operations and has led the team through some very exciting projects. “We take pride in the quality of our structural steel compared to others in the way we produce it and put it together. We are not a box building contractor in steel, we are an ICI contractor, and we do more unique projects than greenfield box buildings. We need to think outside the box to provide a good quality product to our customers.” However, one of the challenges that M & G Steel faces is that customers expect a quality product that is on time and as cost effective as possible in the market and sometimes that can be a challenge as well.

Embracing New Technology to Tackle Challenges

Brian Thompson explained that about 12 years ago, the owners of M&G Steel decided to automate in order to address this challenge and increase their efficiency, so they began their search for an automated beam line. M&G Steel was performing all fab shop operations manually and quickly needed to get up to date with technology to get an edge on the competition. Coincidentally, Tony Weitzenbaur, Plant Manager received a CD from PythonX in the mail. Once he viewed the CD, he was impressed with the capabilities of the PythonX and immediately knew that it was the right system for M&G Steel. The PythonX was completely different from any of the other machines that they were considering. So he approached the owners of the company and said “Why are we getting a beam line and a drill line when the PythonX can cut copes, slots, etc., we should be getting one”. M&G realized that adding a traditional drill line and saw only brought their capabilities to that of some of their competitors, what they were looking for was something that gave them a distinct advantage over their competitors. They immediately contacted PythonX that happened to be close by in Burlington, ON to see this new technology. The key decision makers within M&G brought drawing files and material to the PythonX facility and asked them to run the parts so they could see the finished product. Once they saw that the PythonX cut the parts perfectly and in significantly less time that their current manual production line, they
knew they had to buy the PythonX. So a week later, they took a leap of faith and purchased one. As Thompson explains, “We believed in what we saw in the PythonX and what the company was trying to undertake. They were pioneers. We felt it was a better piece of equipment compared to what else was out there.”

**Overwhelming Throughput**

Within a week of installation, the operators were comfortable enough to operate the PythonX at full production. However, M&G did not anticipate the dramatic capacity increase that the PythonX would cause. “Our production at least doubled once we started using the PythonX”, said Weitzenbaur.

Also, more staff needed to be added to handle the increased amount of steel that the PythonX fabricated. As Weitzenbaur explains, “As soon as we got the PythonX, the staff was worried that automation was going to result in layoffs. However, exactly the opposite occurred. The PythonX produced more steel than we could finish off so we had to hire more people. The company grew their manpower as a result of the increased production due to the PythonX.”

**Reliability and Longevity**

For over 12 years, the PythonX has remained the key piece of equipment at M&G Steel. The PythonX still produces over 100 tons of structural steel per week and depending on the product mix, it can be over 200 tons per week. As Weitzenbaur states, “The PythonX has been the most reliable machine that we have ever had in our shop. It outperforms every other piece of equipment in the shop. The only parts on the machine that we have had to replace are those that are caused by everyday wear and tear and those parts are easy to replace. The PythonX requires minimal maintenance”.

A Partnership for the Future

What made them decide to take a leap of faith and purchase this new technology? For M&G Steel, they believed and had faith in the PythonX from the moment they discovered it. After 12 years, the PythonX is better than ever and have proven to be the most profitable piece of equipment they have ever owned.