EXECUTIVE SUMMARY

CUSTOMER NAME: LeJeune Steel Company

INDUSTRY: Structural Steel Fabrication

LOCATION: Minneapolis, MN, USA

CHALLENGE: Automate existing processes to get out of the ‘analog age’

SOLUTION: Installation of the PeddiWriter layout marking line, Advantage-2 drill line and the DG-1250 band saw

RESULTS: Successful fabrication in excess of 40,000 tons of structural steel per year

A Solid Structural Foundation

Beginning in the early 1940s, LeJeune Steel was founded by the LeJeune family with a specialization in commercial steelwork. By 1989, the company was purchased by APi Group Inc. – a family of more than 38 independent construction-related companies. This acquisition allowed the company to experience growth via resources unavailable to the average fabricator, a core factor that would increase the company’s presence within the structural steel industry.

For over 75 years, LeJeune has serviced the commercial, industrial, education, hospitality, healthcare, retail and sports venue markets, and a recently-expanded bridge market with an AISC advanced certification. Based out of Minneapolis, Minnesota, USA, LeJeune also operates as the parent company to Wisconsin Structural Steel located in Barronett, Wisconsin. These two firms successfully fabricate in excess of 40,000 tons of structural steel per year. But their secret to continued success isn’t really a secret at all.

“I think the best way to understand LeJeune’s evolution is to look at the Minneapolis skyline,” explained LeJeune’s Vice President of Operations, Matt Rovnak. “The majority of the steel buildings are LeJeune’s work. Over the years technology has changed, and our perspective on our future has changed. We’ve done a lot of things from a people,
technological and business development perspective. It’s allowed us to continue to grow and provide the best services to our customers.”

**Growing with CNC Support**

With a strategic company growth plan, LeJeune began investigating CNC machine tool manufacturers for an anticipated third expansion in 2004. Wanting to reach additional markets, Matt and the team at LeJeune knew the need to invest in automation. After networking and learning about ‘key players’ within the industry, LeJeune made an initial investment in Peddinghaus technology with a heavy plate processor, CNC drill line, saw and material handling.

LeJeune described their operation prior to CNC machinery as ‘living in the analog age’. Recognizing the importance of moving from ‘analog to digital’ within the fabrication realm, Matt and the LeJeune team saw their future in technology and moved forward to surpass the competition. “One of the reasons we continue to purchase Peddinghaus equipment is the level of service provided by Peddinghaus and the sales force, Paul Muraski specifically,” Matt stated. “When we considered our second large capital expansion, we not only felt familiarity with the equipment, the ease of transition for our operators and the reliability of the equipment was critical, but that the level of technical service and support we received from Peddinghaus set them apart. We were happy with it all”.

**Bridge Work Puts Peddinghaus to the Test**

The LeJeune team experienced a dramatic increase in production following the Peddinghaus CNC technology installations. Matt and the LeJeune team were impressed with the level of accuracy, repeatability and added capabilities to their shop. But moving from manual processing methods to new fabrication technology, LeJeune was still unsure of their new potential to pursue projects that previously would have been out of their reach. “We were initially hesitant,” Matt described. “We had to convince ourselves that we now owned equipment we could rely on.”

The Washington Avenue Bridge, located on the University of Minnesota’s main campus, connects the East Bank and West Bank across the Mississippi River within Minneapolis. The retrofit bridge project needed an estimated 450,000 drilled holes in plate and box girders. Matt and his team knew this project was the initial test in putting the Peddinghaus technology to work.

“The box girders were fabricated in our Minneapolis facility and then
were trucked to our Wisconsin Structural Steel facility to run through the Peddinghaus CNC,” Matt described. “Complete assembly took place back in Minneapolis to demonstrate the fit to the customer. My colleagues and I can count on one hand the number of holes that required a ream to be put in them. The customer was ecstatic. That project really set the tone for the future pursuit of projects, and the confidence level we could have in equipment. It was a milestone for LeJeune.”

**Peddinghaus ‘Epically’ Performs**

Investments in Peddinghaus technology enabled LeJeune to fulfill the company strategic goal of expansion not only into new facilities, but into new markets. To-date, nine Peddinghaus CNC investments have played a critical role in the successful completion of the aforementioned Minnesota Vikings’ football stadium, the Minnesota Twins Ballpark Target Field, the University of Chicago Medical Center and a five-story underground Epic Systems Deep Space Auditorium.

“The Epic Systems Deep Space project was built in a 60-foot (18-meter) underground excavation for the 13,000 seat auditorium,” Matt recalled. “We relied heavily on the Peddinghaus equipment to fabricate trusses up to 370 feet (112 meters) long and the king truss with wide flange at 955 lbs/ ft (1240 kg/m). The project required accuracy for splice plates and chord splice bolt hole locations; we couldn’t afford a missed drill hole. Each and every truss was assembled in our Minneapolis facility and demonstrated complete accuracy. This was another successful project using the Peddinghaus equipment.”

**Scoring Big Success**

The most recent completion of the U.S. Bank Stadium, home of the Minnesota Vikings, further put LeJeune on the map as a structural steel force to be reckoned with. Utilizing all of their Peddinghaus technology, Brad Fox, General Manager of Wisconsin Structural Steel, and his team fabricated box truss top, bottom and tension chords for 62 truss sections that were then assembled at the Minneapolis facility. Each truss was comprised of 4-6 sections weighing 40-55 tons (36-50 metric tons) per section. Thousands of drilled holes and splice plates were seamlessly fit up with little error. This demonstrated LeJeune’s ability to be flexible and agile with an evolving design throughout the duration of the massive project. The over $1 billion USD project was successfully completed six weeks early with a grand opening on September 18, 2016.

“Clearly the success that we’ve had on projects is heavily dependent on the Peddinghaus CNC equipment accuracy, reliability and efficiency,” Matt confirmed, “there’s no question about that. Would we have been
able to complete these projects without the use of the equipment? No, because we wouldn’t have been the go-to supplier if we hadn’t had the equipment. The technology is proven, the equipment is reliable, and the service and support are there. It’s an absolute key component of our strategic growth plan.”

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