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news & analysis

Ag-machine maker depends on drill sharpeners

Thanks to an improved agricultural market, the demand for heavy-duty grain trailers is strong. That's good news for Timpte, a 100-year-old firm in David City, NE. Timpte designs, manufactures, and assembles the trailers — the kind you see throughout the grain belt of the United States.



Darex XPS-16 sharpening machines

The 96" and 102" wide semi-trailers move the nation's bulk commodity products, including alfalfa meal, alfalfa seed, whole barley, beans, bran, brewer's grain, cracked and shelled corn, cottonseed, cornmeal, cottonseed meal, common dry dirt, and fertilizer from the farm to market. Such machinery requires at least five manufacturing phases. And there is an intense, overall umbrella of quality control required during manufacture.

One of the keys to building a sturdy, road-worthy trailer is the amount of drilling required to assemble and reinforce everything from front corners, subframes, and rear panels on these aluminum and steel rigs. But that's not all: because semi-trailers must be designed to haul tough, bulky products like wheat feed, bone meal, and other commodities, a big trap opening is required, too.

By demand and design, newer trailers have significantly more moving parts and require more assembly. The result? Additional drilling from top to bottom during manufacturing and construction.

It's not surprising that drill bits get quickly worn down.

The company used to send bits out to be sharpened, but that took too long. With both day and evening shifts at full capacity, sharpening the bits in-house made a lot more sense. Timpte sought help from Darex Corp. With more than 30 years of sharpening expertise, Darex offers machines that can resharpen the complex, high-tech points found on today's premium high-speed (HSS) and carbide drills at the touch of a button and also keep up with the high-production demands to resharpen thousands of drills.

Timpte purchased two XPS-16 sharpening machines from Darex. Maintenance technician Lumir Orborny, who has been with Timpte for 14 years, operates the automated machines.

" By sharpening in-house with our Darex machines — compared to sending out drills to be resharpened by resharpening service — we eliminate shipping costs, our inventory can be minimized because we do not have to worry about vendor turnaround, and it also give us the liberty to sharpen whatever size bit, whenever we need, to keep production running," explains Scott Styskal, a senior maintenance manager at Timpte. " There' s also no need to add an extra staff person to work on the machine."

" Our Darex machines, which our machines are running at least two to three hours a night, have paid for themselves many times over. Whatever we need sharpened can be done immediately with minor setup and without delay," he says.

" Drill bits are like gold," Orborny confesses. " Without sharp bits, you waste a lot of time."

Lumir explains that at Timpte, his drill team uses bits ranging from 1 1/64" to 5/8" in width. Orborny also likes that the machines are simple to operate. " If I can do it," he admits, " anyone else can. You program the bits individually, set up degree of the cutting angle, and let the machine do its thing."

Any time production has to stop means a tremendous loss in productivity at Timpte, which has both a day and a night shift employed to keep up the demand for these sleek rigs. Orborny personally sharpens about 500 to 750 bits a day.

Designing, manufacturing, and assembling in excess of 3,000 semi-trailers per year (average), with each rig minutely inspected during the quality control processes, is no easy task.

" We buy anywhere between 18,000 to 25,000 drill bits a year," says Styskal. " This number will rise because of additional personnel being added to our second shift. It will then be necessary run our Darex machines on that shift also."



The Darex machines are critical for building high-quality trailers that can handle hauling tough, bulky products from coast-to-coast, from the farm to market.

The company's skills and manufacturing facilities have evolved over the years. Among the first products was a delivery body built on a Model T chassis. Farm bodies, local delivery vans, and highway transports followed. By the 1920s, people needed to be moved, too, and Timpte Brothers, as the company was called, responded by manufacturing school bus and bus line bodies for truck chassis. Milk wagons, many types of agricultural bodies, sugar beet bodies, and stake beds were added to the product line. The craftsmanship was expanded to ambulance bodies, local delivery and van bodies, dump bodies, and even utility bodies. Timpte's first semi-trailer was produced in 1931 and was set on a chassis furnished by Fruehauf. Thus was born the age of the semi-trailer, the major product line which is still the backbone of the company today.

" We're proud of our history," says Styskal. " But we're a forward-looking company, too. Making the most of tools like the Darex machine is critical for building high-quality trailers that can handle hauling tough, bulky

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