

Voss Clark Cranks Up the Horsepower

The toll processor at the Port of Indiana in Jeffersonville has upgraded its tension-level pickle line to handle the next generation of advanced high-strength steels.

Voss Clark's latest investment in its Port of Indiana facility began with a question. In 2012, some of the toll processor's largest automotive customers cornered Voss

Clark executives and asked: Are you prepared to handle the new grades of high-strength steel? Four years later, they are.

Voss Clark finds itself at the epicenter of the auto industry's struggle to find new ways to make vehicles lighter and more fuel efficient. As a toll processor of automotive steels, the company realized it had to prepare for the new advanced high-strength steel grades it would be expected to level and pickle, explains company President Joe Rhodea.

Voss-Clark, with the assistance of the SMS Engineering

“ The company has always had a reputation of looking ahead in technology. ”

Joe Rhodea, Voss Clark

the high-strength steel jobs coming its way. Phase I, completed in December 2014, included the installation of a new Resetar recoiler, exit bridle system and Peabody electrostatic oiler. Seven months later, the company launched Phase II, which delivered an extension to the exit accumulator, new bridle system ahead of the accumulator, and two new steering systems on either side of the accumulators. Finally, in November 2015, the company completed Phase III, upgrading the tension leveling unit with 72-inch bridle rolls and new

Group, soon embarked on a three-stage process to upgrade its tension-level pickle line. The existing SMS tension level line was designed for steel with a yield strength of 500 MPa or less and a thickness of 0.040 to 0.217 inch—not enough to handle

gear boxes, while upping the total connected horsepower to 4,000, giving the tension leveler the capacity to process up to 1,200 MPa material. The line has a gauge range from 0.040 to 0.375 inch and can run widths from 24 to 76 inches. Should “the next big thing” in steel warrant it, the line's horsepower can be expanded even further.

Among the upgrades to Voss Clark's tension-level pickle line was the addition of a Peabody Electrostatic Oiler, which controls the oil thickness on the sheet.

(Photo courtesy Voss Clark)





The end result is a line that's ready to handle anything the mills can deliver, now and in the future, Rhodea claims.

Voss Clark tackled the project in phases to limit the disruptions to customers in the busy automotive market. Extended outages would have been troublesome for the company and its customers. Even with the phased operations, "it was difficult, but we made it through," says Doug Voss, director of operations.

Steel producers continue to roll out new grades of high-strength material. "It's still an up-and-coming technology. AHSS grades are coming up on the cold-rolled and coated side and are working their way into hot-rolled. We know that's where

Voss Clark has completed the upgrades to its tension-level pickle line and slitting lines at the Port of Indiana, which will allow the toll processor to handle the latest high-strength steels used primarily by the auto industry. (Photo courtesy Voss Clark)

Voss Clark at a Glance

- **Address:** 701 Loop Road, Jeffersonville, IN 47130
- **Phone:** 812-285-7700
- **Website:** www.vossindustries.com
- **Key Personnel:** Joseph Rhodea, president; Timothy Bilkey, director of sales; Doug Voss, director of operations; David Voss, controller.
- **Total Employees:** 130
- **Facilities:** 550,000-square-foot operation at Port of Indiana, Jeffersonville.
- **Products:** Flat-Rolled Carbon, Hot-Rolled.
- **Services:** Pickling (tension leveling), Slitting and First-Operation Blanking.
- **Equipment:** Tension-Level Pickling Line, 3 Slitting Lines, 2 Blanking Lines.
- **Markets:** Automotive, Appliance, Lawn and Garden, General Manufacturing in Midwest and Mexico.

they're going, and we're running with it," says Tim Bilkey director of sales. Adds Rhodea: "The company has always had a reputation of looking ahead in technology. Whether its automated surface inspection or tension leveling, we're always ahead of the curve."

What really sets the new pickle line apart, company executives say, is the horsepower. While some mills may have lines that approach its capabilities, it's unusual for a "freestanding line with no allegiances to any mill," Rhodea says.

It's that independence that Voss Clark offers its partners and potential partners in the steel industry. The company is "accessible to anyone in the market. We get a lot of business, even from our competition, because of what we can do," he says.

In terms of productivity, the new line has proven to be more efficient. Today, it can handle up to 47 coils per shift, depending on the product mix and gauge, up from 42 coils before the upgrade. That helps in a booming automotive market, the company says.

The new line has other advantages, Voss says, such as new laser gauges from LAP Technologies that work well with advanced high-strength steels. "The new lasers don't have to account for the different densities [common in conventional steels], which provides better data to the customer," he says.

Among other features, additional loopers and accumulators were added to the pickle line to increase run times and allow for more drying time for the Dry Lube Coating System. A Reseter Recoiler was installed with reverse wind capability, as well as a new Peabody Electrostatic Oiler to better control

the oil thickness on customer-finished products. In addition, the company upgraded its Parsytec Surface Inspection System, giving it the enhanced inspection capabilities needed for some hot-rolled pickle applications today. "We do a lot of hot-rolled products that are put into exposed applications and people are not accepting of any flaws, even small in nature. The human eye can't detect them," says Voss.

The company's roots date back to 1951 in the Detroit area, when it was founded as a service center. It became a dedicated toll processor in the mid-1970s. The company now handles vastly more steel than it ever did as a service center, running more than 140,000 tons through its Indiana processing lines in June alone. The facility has grown to 550,000 square feet, with the capacity to store up to 130,000 tons of steel under roof. Its location at the Port of Indiana offers numerous advantages, including close proximity to many nearby players in the auto industry, as well as southern steel mills, along with ready access to highways, rail lines and the adjacent Ohio River. "As the auto industry has moved south, we're kind of in the center of it all, able to deliver south, east and west," says Bilkey. "That's why this location is working."

“As the auto industry has moved south, we're kind of in the center of it all.”

Tim Bilkey, Voss Clark



Voss Clark upgraded its tension leveling unit with 72-inch bridle rolls and new gear boxes, and increased its horsepower to 4,000, giving it the capacity to process up to 1,200 MPa material. (Photo courtesy Voss Clark).

Voss Clark makes good use of its spot on the port. Not only does it receive material on barges moving up and down the Ohio, but it also sends material back the same way. “We can get a barge load of steel, unload and reload the same barge in a day and a half. It’s great for our shipping numbers,” says Bilkey.

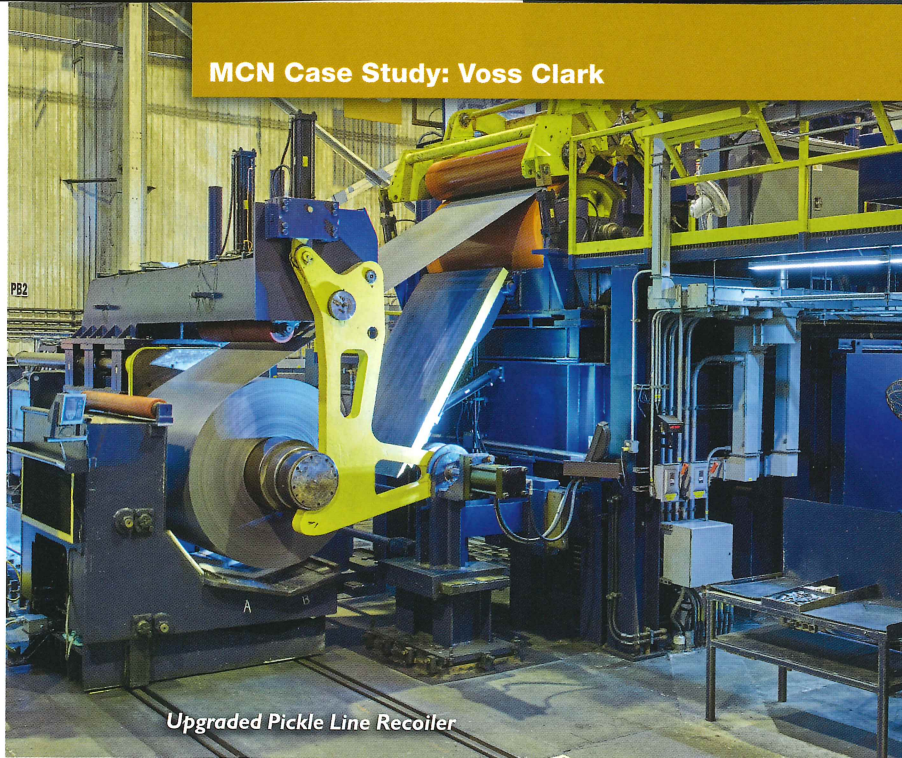
Quick turnaround of material is a key element of Voss Clark’s business model. As a toll processor, the company lives and dies by its service. “The mills require on-time delivery. When the Tier 1 expects delivery by 3 o’clock, they’re pounding the table if the truck shows up at 3:30,” Voss says. “We make sure the truck shows up at 2:30.” Fortunately, the new equipment didn’t require much in the way of additional training for the company’s workforce, a group he respectfully describes as having “that old-school, farm-boy work ethic.”

“As a toll processor, we don’t own the materials, so

there’s a huge downside if we mess it up,” Bilkey says.

Having completed the upgrades at Voss Clark, the company’s next move is to upgrade its Voss Taylor operation in Michigan.

“We are already working with SMS on that project,” Bilkey adds. ■



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VOSS Industries has been in the steel processing business for over 60 years. The foundation of our company was built on our commitment to customer service, and we've maintained that commitment for all of these years. As a toll processor in the steel service business, we recognize the increasing demands for quality and cost efficiency imposed on our customers by a world market.

