Developments in the North American Iron and Steel Industry — 2016

by Sam Kusic

It's fair to say that in 2016, the automotive sector continued to control the fortunes of North America's steelmakers. In fact, 2016 proved to be another record sales year for light-vehicle manufacturers. Not surprisingly, then, a number of capital investments that were announced or completed last year were designed with that industry's needs in mind. Some investments were in the tens of millions, such as POSCO's new wire rod processing plant that will make fasteners in Indiana. Others were in the hundreds of millions, such as the hot-dipped galvanizing facility Nucor and joint-venture partner JFE Steel are proposing for Mexico. Following is a more complete look at some of the projects that came about or were continuing to progress last year.

AK Steel Corp.

AK Steel completed a US$29 million modification to the hot-dipped galvanizing line at its Dearborn Works in Michigan, enabling production of its NEXMET 1000 and 1200 product lines — next-generation, advanced high-strength steels that offer improved ductility and tensile strengths of 1,000 and 1,200 MPa. Through the project, the company outfitted the line with new process technology that allows it to produce both coated and cold-rolled sheet. It was a critical upgrade required to produce the NEXMET 1000 and 1200 lines.

The company was set to begin providing samples for customer qualification in 2017.

Also, the company completed two other projects: a US$36 million research center and an upgrade to its Butler Works in Pennsylvania.

Located in Middletown, Ohio, the 135,000-square-foot research facility sits on 16 acres, and houses more than 90 researchers, scientists and engineers.

The Butler project provided a 5% boost in capacity to make higher-value grain-oriented electrical steels, specifically its TRAN-COR DR and CARLITE families of high-permeability steel grades.

Additionally, AK subsidiary AK Tube LLC commissioned a new manufacturing facility in Querétaro, Mexico. This plant will produce carbon and stainless welded tubing for use in many applications throughout the region, including automotive and truck exhaust systems. The plant continued to ramp up production throughout the third quarter of 2016.

Altos Hornos de México (AHMSA)

The integrated steelmaker has received EUR417 million (about US$442.5 million) in financing for a project that will diversify its product portfolio away from merchant grades and into value-added steels for the automotive industry.

Under the project, the company will replace the current curved-mold continuous slab caster with a straight-mold machine to improve slab quality; retrofit the hot mill to increase its capacity and allow it to produce steels of greater hardness and strength; and add a third cold mill.

A hot plate rolls through the exit section of the normalizing line at Altos Hornos de México's Monclova works. The line processed its first plate in May 2016.

Photo credit: Primetals Technologies

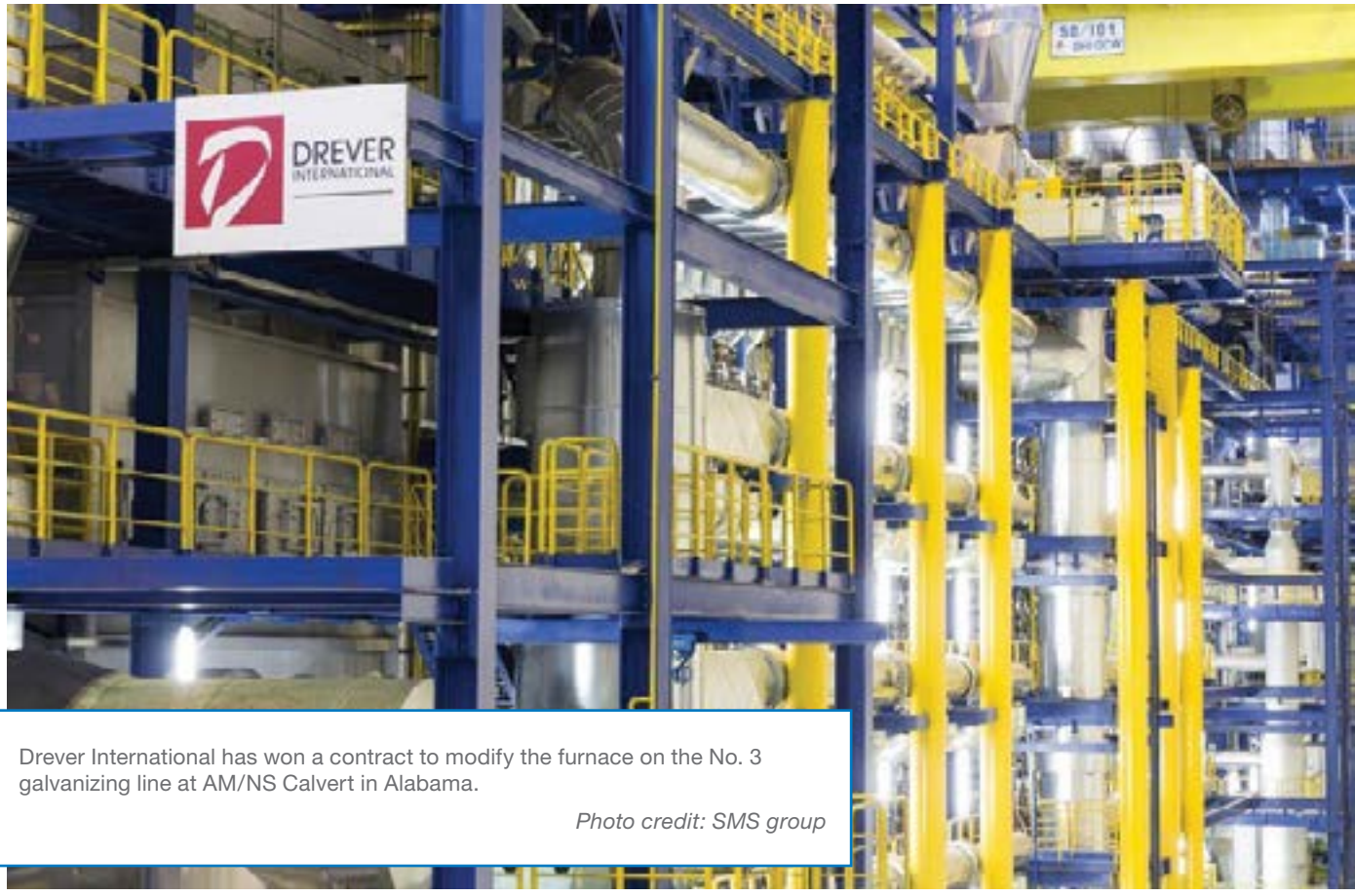
The new caster will increase capacity from 2 million to 2.5 million tons, and the upgrades to the hot mill will provide for a 25% boost in capacity, taking it to 3.5 million tons. The third cold mill will increase capacity by 800,000 tons to 2.3 million tons annually.

Additionally, AHMSA plans to install a double-reduction tinplate mill, which will lift capacity from 150,000 to 450,000 tons annually. Primetals Technologies was awarded the contract to supply the equipment. The company said the project is an initial phase of a broader program intended to move its offerings up the value chain and displace imports of higher-end steels used in the automotive and transportation sectors, among others.

In May 2016, the company processed the first plate on a new, 300,000-ton normalizing line also supplied by Primetals. The equipment can process plate in thicknesses of between 4.5 and 50.8 mm and in widths of between 1,500 and 3,048 mm.

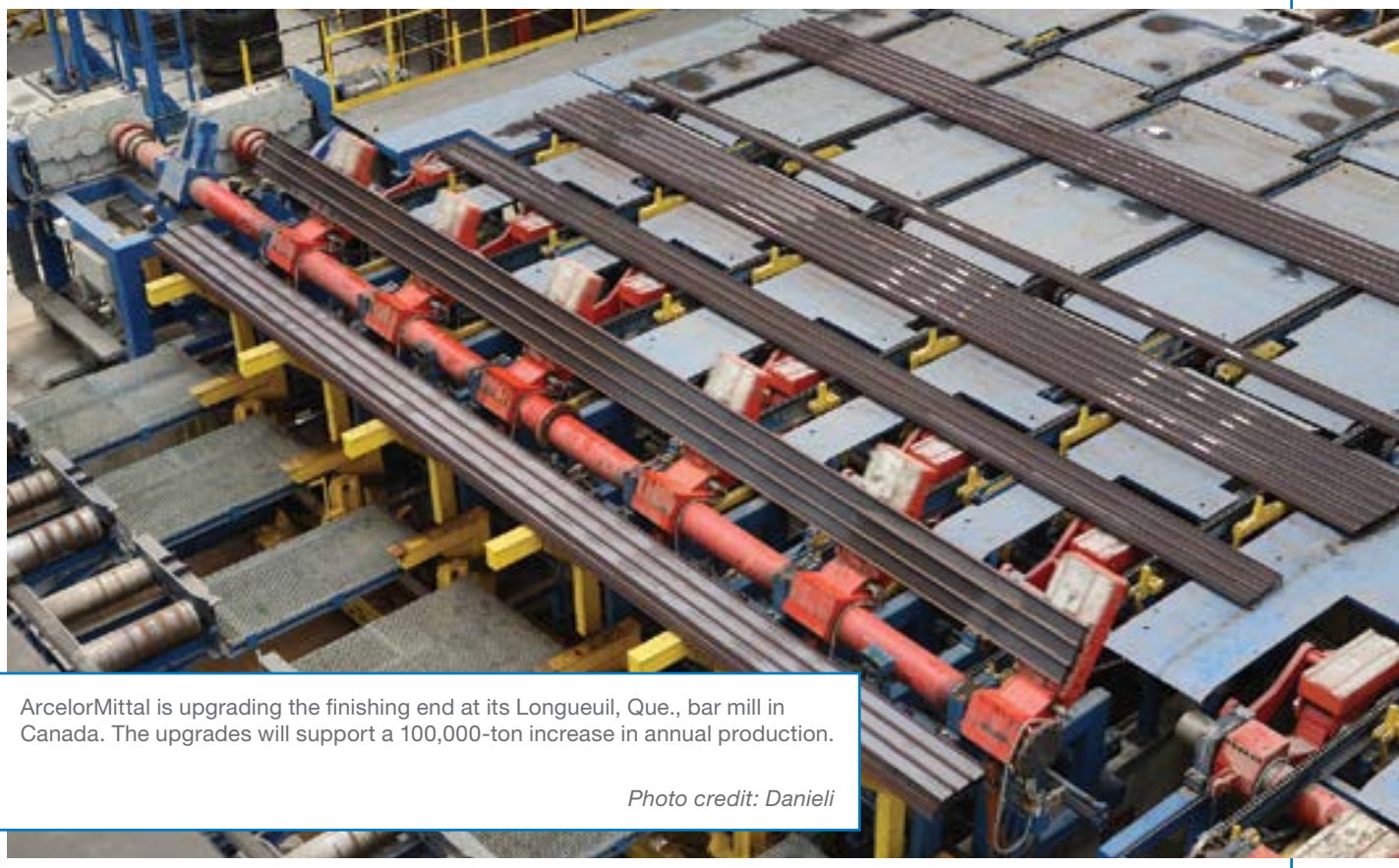
AM/NS Calvert LLC

The ArcelorMittal and Nippon Steel & Sumitomo Metal Corp. joint-venture mill in Alabama continued to make progress on a US$40 million expansion of the slab yard at the hot strip mill, a project that will increase slab-staging capacity and efficiency. Through the project, the company is adding two bays, and installing overhead cranes and a roller table to feed the hot strip mill. As it is currently configured, the mill can stage, at most, nearly 3.4 million tons of slabs on an annual basis. The goal is to increase it to 5.3 million tons annually. The first phase of work was finished at the beginning of 2016, and an intermediary phase wrapped up later in the year. The final bay is to be completed in 2017.



Drever International has won a contract to modify the furnace on the No. 3 galvanizing line at AM/NS Calvert in Alabama.

Photo credit: SMS group



ArcelorMittal is upgrading the finishing end at its Longueuil, Que., bar mill in Canada. The upgrades will support a 100,000-ton increase in annual production.

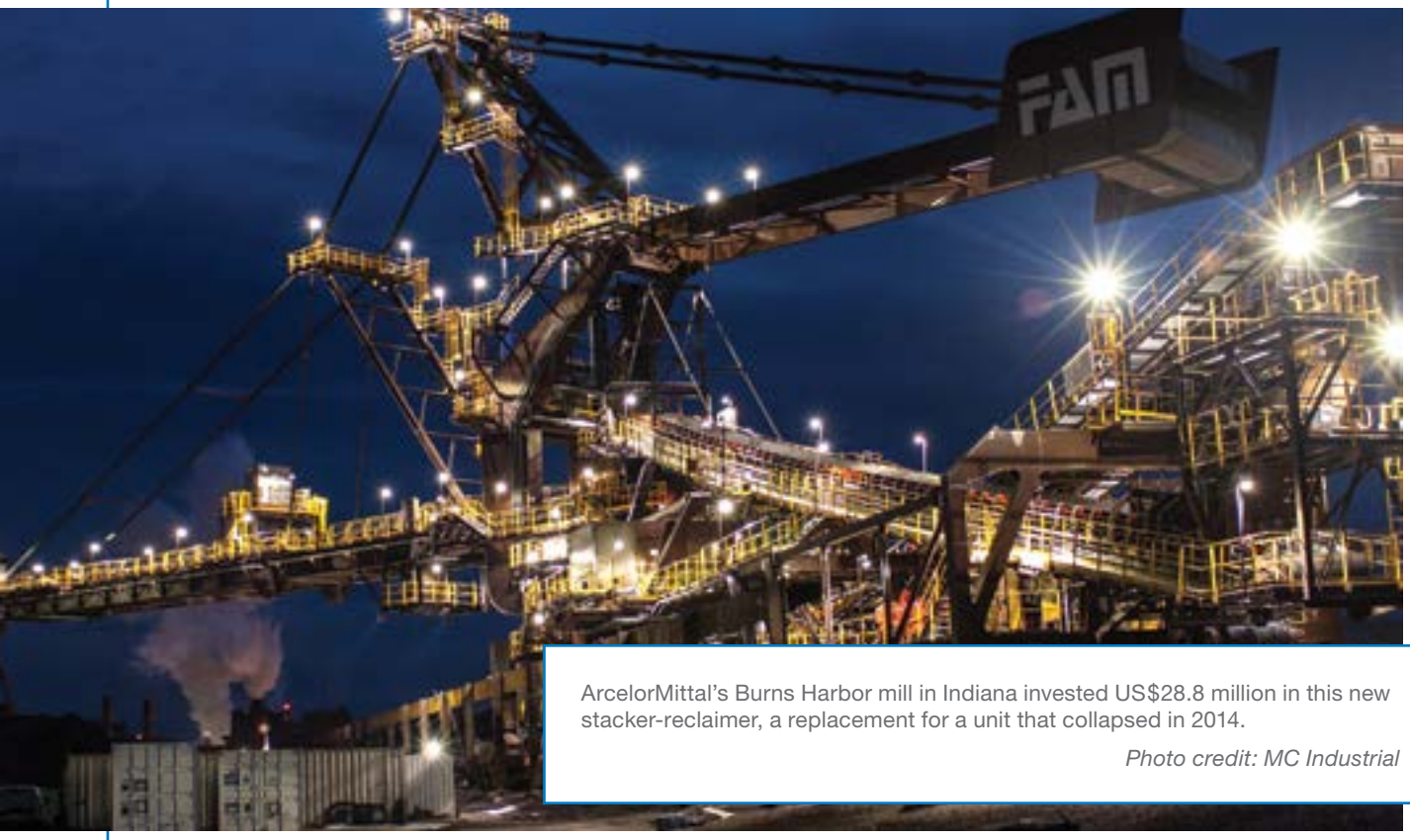
Photo credit: Danieli

Additionally, the joint venture modified the furnace on the No. 3 hot-dipped galvanizing line, allowing it to coat third-generation advanced high-strength steel. As part of the project, SMS group's Drever International provided additional seal roll assemblies, new deflector roll boxes, induction heaters, a partitioning section, a final cooling section and an exit section with a hot bridle. SMS said the modifications give the line required quench-and-partitioning abilities necessary to produce advanced high-strength steel.

ArcelorMittal

ArcelorMittal last year launched what it has been calling a footprint optimization project at its integrated Indiana Harbor facility in Indiana, part of the Action 2020 initiative it announced at the beginning of 2016. The project is designed to boost efficiency and cut costs. As part of the project, the company idled what it said are redundant facilities, including the No. 1 aluminizing line, the 84-inch hot strip mill and the No. 5 continuous galvanizing line. The No. 2 steel shop is coming down this year. At the same time, it is investing approximately US$200 million in a new caster at the No. 3 steel shop, a project that was to have been completed in the final quarter of 2016; restoration of the 80-inch hot strip mill; and upgrades to finishing and logistics operation. The optimization is expected to be completed in 2018.

At its Burns Harbor facility, the company put a new 1,700-ton stacker-reclaimer into service. The new unit, fabricated by FAM, replaced a stacker-reclaimer that collapsed in 2014 when it suffered an electromechanical failure. According to ArcelorMittal, the failure caused the boom to rise to a height beyond the control of the operator and caused the machine to collapse. The new unit, which is the recipient of the 2017 AIST Project Excellence Award, was put into operation in May 2016, in time for the beginning of the 2016 raw material shipping season on the Great Lakes. EMCOR Hyre Electric, MC Industrial and ArcelorMittal Burns Harbor carried out commissioning.



ArcelorMittal's Burns Harbor mill in Indiana invested US$28.8 million in this new stacker-reclaimer, a replacement for a unit that collapsed in 2014.

Photo credit: MC Industrial

In Canada, ArcelorMittal is set to commission an upgraded finishing line at its Longueuil, Que., bar mill. The CAD27 million (US$20.7 million), project will boost finishing capacity from 400,000 to 500,000 metric tons annually. As part of the project, the mill is installing a water-forced cooling system and lining-up rollers on the existing cooling bed, a cooling bed exit table with an automatic layer prep system, a 10-roll multi-strand straightener, an 1,100-ton cold shear, and an automatic, single-head magnetic stacker. According to Danieli, who won the order for the work, the upgrades not only support a capacity increase, but allows for production of new added-value products.

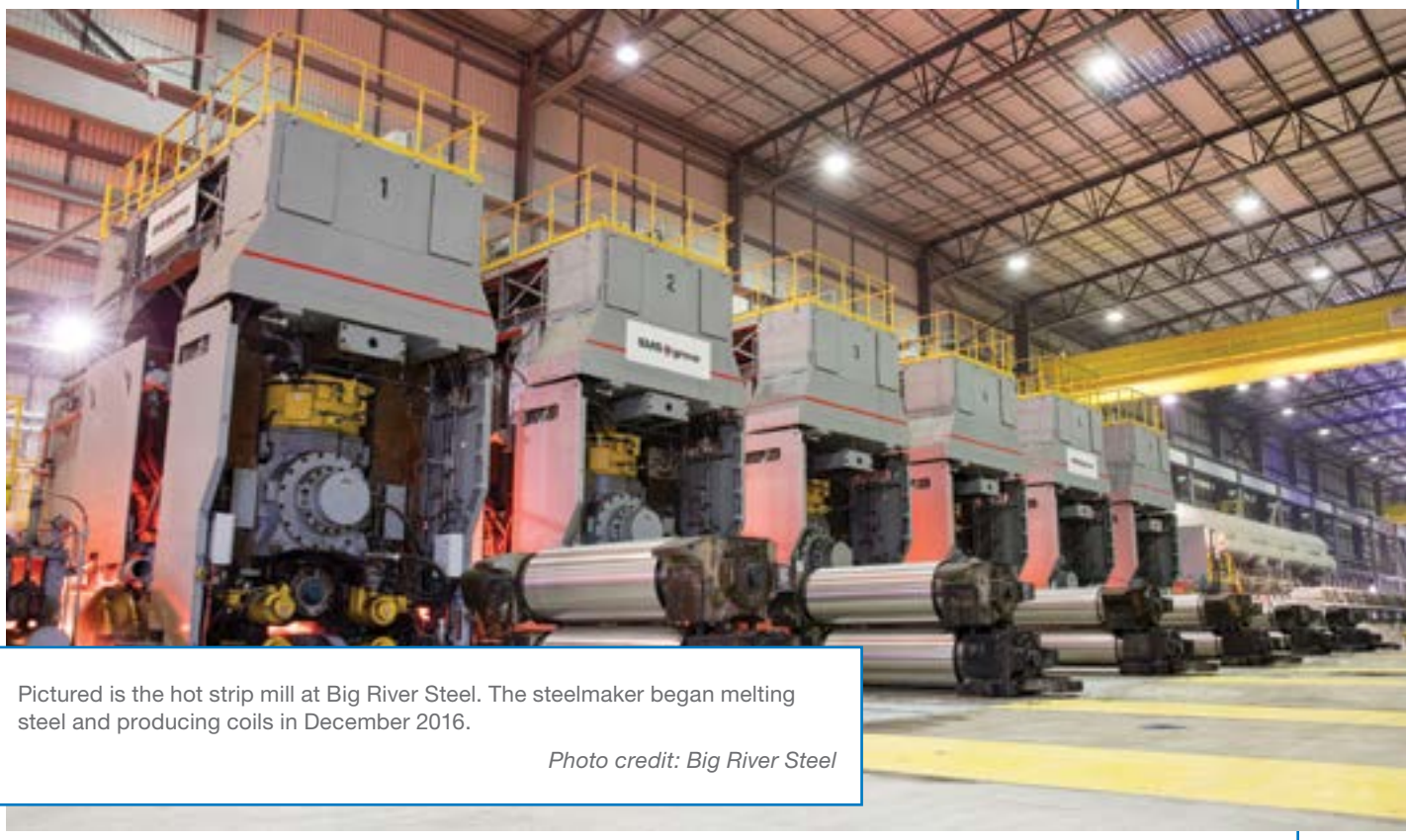
The mill rolls special quality and merchant quality bar, rebar, and other semi-finished products for North American customers.

Elsewhere in Canada, ArcelorMittal is preparing to replace three end-of-life boilers at ArcelorMittal Dofasco Inc.'s Hamilton, Ont., plant with a single unit. The new unit is to be delivered in late 2017. Installation is to be completed by August 2018, followed by commissioning until February 2019. In addition to the boiler, Babcock & Wilcox is providing burners, a furnace, a steam drum, an economizer, ducting and fans, among other components.

Big River Steel LLC

The start-up steelmaker brought its US$1.3 billion, flat-rolled mini-mill into production in late 2016, realizing the concept proposed by the company's founder, the late John Correnti. The mill's first coil was shipped in December, and it has been ramping up production since. In January 2017, its first full month of production, the mill produced 63,000 tons of hot-rolled coils. That's a record for first full-month production, according to SMS group, which outfitted the mill.

The highly automated mill is unlike traditional mini-mills in that it is designed to produce the types of steels more commonly associated with integrated operations, yet maintain the operating flexibility of an



Pictured is the hot strip mill at Big River Steel. The steelmaker began melting steel and producing coils in December 2016.

Photo credit: Big River Steel

electric arc furnace facility. The mill has a nameplate capacity of 1.5 million tons, and can produce deep-drawing grades; high-strength, low-alloy steel; and advanced high-strength steels.

A second phase of construction could lift capacity to 3 million tons annually. SMS group provided the mill's 150-ton DC electric arc furnace, twin ladle furnace, an RH degasser, a Compact Strip Production (CSP) thin-slab caster, a pickling line and tandem cold mill, a skinpass mill, batch annealing furnaces, a universal galvanizing and annealing line, and the plant's automation system.

Cascade Steel Rolling Mills

The Oregon-based mini-mill completed upgrades to one of its two rolling mills, but has decommissioned the second, an older and less-advanced facility. The company said the older unit accounted for a smaller share of finished products, and at the same time the work on the younger rolling mill improved efficiency and product quality and boosted the facility's overall capacity.

Danieli announced in 2015 that it had been awarded a contract to upgrade the finishing end of one of the mills.

Through the project, Danieli replaced the lance bundler with its patented Perfect Forming and Bundling system. The system is designed to make perfectly formed and aligned bundles, and the project is expected to lift the mill's throughput to 150 tons/hour, Danieli said at the time.

Charter Steel

Construction is to begin this spring on a US$150 million expansion of the steelmaker's Cuyahoga Heights, Ohio, USA, mill. Through the expansion, the company will add a special bar quality (SBQ) mill, allowing for greater production flexibility and the means to break into new markets.

The company said the new mill will be highly automated and will produce engineered, cut-length bars in diameters between 0.75 and 3.25 inches in lengths between 12 and 50 feet. Start-up is scheduled for the second half of 2018. The family-owned company said the project will be its largest single investment in its 81-year history.

Since 2006, the company has invested more than US$250 million in the plant, which produces SBQ coiled rod and coiled bar products.

Commercial Metals Company

Work continued throughout 2016 on the company's US$250 million micro-mill in Durant, Okla., USA. Scheduled for completion later this year, the facility will be the long steel manufacturer's second such mill — its first being the Mesa, Ariz., facility.

The so-called micro-mills are unique in that they utilize a "continuous-continuous" process in which scrap is melted, cast and rolled from a single, uninterrupted strand. The method allows for higher yields and lower energy costs than the traditional mini-mill process. Danieli is supplying the technology.

The mill will produce long products, including rebar. But it also will produce fence post under its CMC Southern brand, as well as spooled rebar. The company has said spooled rebar alleviates some of the challenges rebar fabricators must contend with when working with coiled rebar. For one, the company said, spooled rebar won't twist as it's being fed into uncoiler, and it can be packaged in larger units than coils can, reducing changeout times.

Its hot-rolled, spooled rebar will be available as Nos. 3 to 6 bar to ASTM specifications, and in spool weights of between 1.5 and 4.8 tons. Fence post and spooled rebar production are to begin in 2018.

Dura-Bond Industries

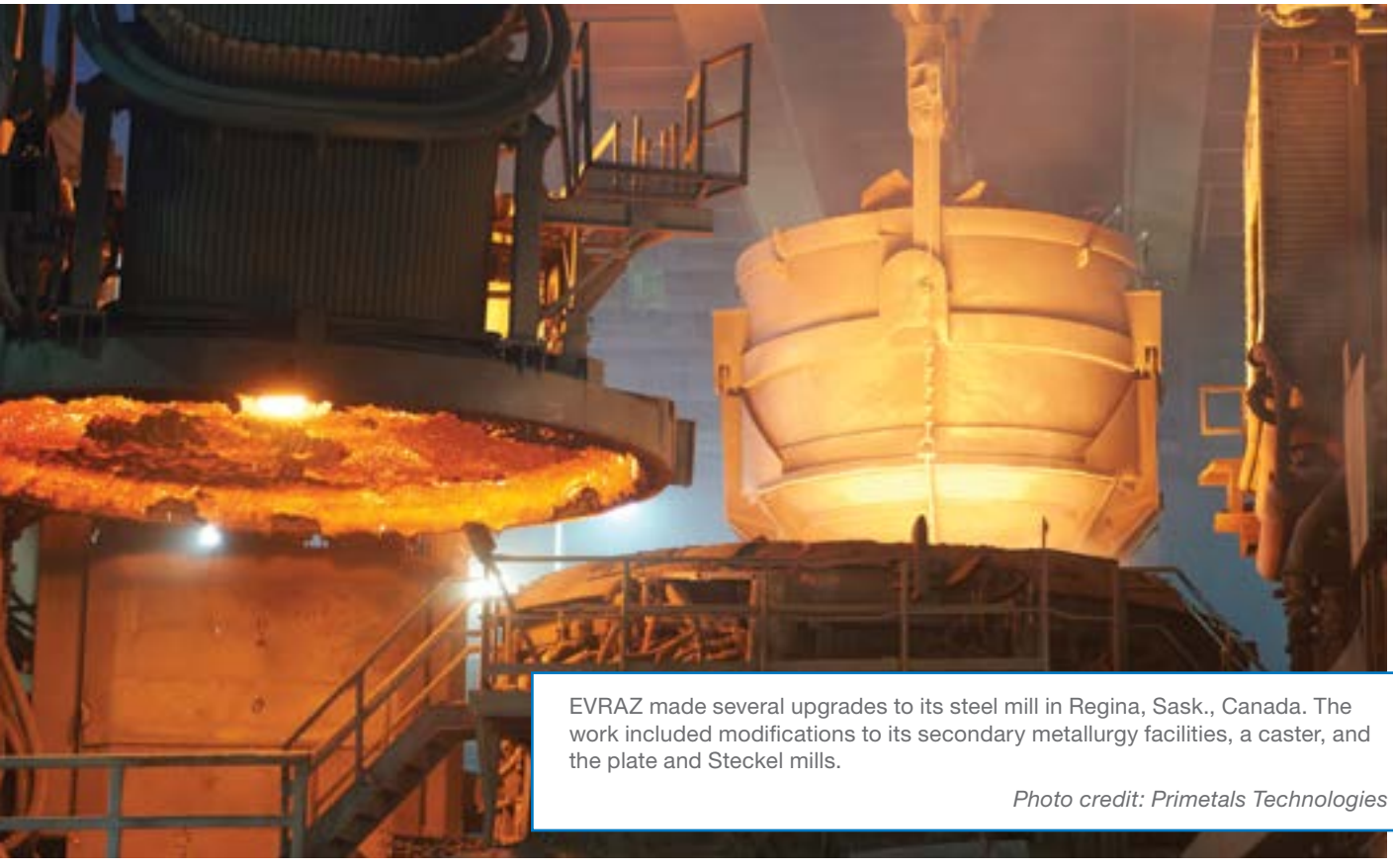
The Pennsylvania-based line-pipe manufacturer has acquired the remnants of United States Steel Corporation's once-sprawling National Tube Works in McKeesport, Pa., USA, and plans to begin production of oil and gas pipe. The company said production will complement its product offerings — it makes large-diameter pipe at a former Bethlehem Steel facility in Steelton, Pa. It also has coating and steel fabrication operations in Steelton and near McKeesport. Dura-Bond has said it plans to make significant investments in the facility, but has not revealed the size of the investment. U. S. Steel closed the facility in 2014. Under U. S. Steel, the electric resistance welded (ERW) facility made pipe in diameters of between 8 5/8 and 20 inches.

EVRAZ North America

EVRAZ North America completed a US$200 million project at its Regina, Sask., Canada, mill, where it built a new large-diameter pipe mill and made several other upgrades. The upgrades included a new 135-ton, twin-tank vacuum degasser, and an overhaul of the existing slab caster, plate and Steckel mill. The power and size of its rolling mill also were increased to allow for production of thicker, wider steel coils. The goal was to improve product quality, increase capacity for casting by 110,000 tons annually, and increase rolling capacity by rolling by 250,000 tons annually. The project also added 150,000 tons of pipemaking capacity.

Dura-Bond Industries has acquired the assets of United States Steel Corporation's former National Tube Works in McKeesport, Pa. The buildings housing the operation are in the foreground.

Photo credit: Regional Industrial Development Corp.



EVRAZ made several upgrades to its steel mill in Regina, Sask., Canada. The work included modifications to its secondary metallurgy facilities, a caster, and the plate and Steckel mills.

Photo credit: Primetals Technologies

Gerdau

Gerdau spent approximately BRL1.3 billion (approximately US$400 million) on capital projects during 2016, a decline of 43% from the prior year. Of that, 17% was invested in its North American mills, and 11% went to its special steel mills. The company expects to spend about the same in 2017, placing a focus on maintenance projects and productivity improvements.

Among its North American projects, Gerdau notably invested US$10 million to upgrade the non-ferrous scrap separation system at its Whitby, Ont., Canada, long products mill. The system, provided by Danieli Centro Recycling, allows Gerdau to sort and extract non-ferrous scrap, significantly increasing the amount of both ferrous and non-ferrous materials it is able to recover from its scrap stream. The system is designed to annually process 40 million lbs. of non-ferrous scrap.

The company wrapped processes work in 2016 on a similar project at its Jackson, Tenn., USA, long products mill. The US$20 million project to process nearly 15,000 tons of non-ferrous scrap annually.

Grupo Simec

The company broke ground last year on its US$600 million greenfield mini-mill in the Mexican state of Tlaxcala. The mill will be capable of annually producing 600,000 tons of special bar quality (SBQ) steel and will make large round blooms, large-diameter bar and wire rod. The new mill is being built close to Grupo Simec's existing SBQ mini-mill, which annually produces about 400,000 tons of small-diameter steel bars and flats. Danieli has been awarded the contract for the mill. The new mill incorporates all the process steps: scrap processing and melting, secondary refining, round billet casting, hot rolling, heat treatment, cold finishing and bar inspection facilities, as well as an advanced wire rod line. Danieli Automation is supplying all of the electrical components and an advanced level 1 and 2 automation system for the entire plant. Start-up is scheduled to take place by the end of this year.

Johnstown Wire Technologies

The country's largest independent producer of cold-heading quality wire last year concluded a multi-year, US$10 million investment program designed to expand its capacity and product portfolio as well as to improve quality.

Through the project, the company installed what it said is one of the largest automated clean-and-coat lines in North America, which consists of numerous multi-hole wire-drawing machines and unspecified technologies that enable production of larger-diameter wire. The company said the work lifts its output of cold-heading quality wire rod and value-added spring wire products and boosts the quality of its draws of both high- and low-carbon grades.

Nippon Steel & Sumitomo Metal Corp.

The Japanese steelmaker broke ground on a US$50 million wire rod processing plant in Indiana, the first U.S.-based facility for the company's bar and wire rod division. Nippon Steel & Sumikin Cold Heading Wire Indiana Inc. plans to annually produce about 39,000 tons of cold-heading wire for use as nuts, bolts and other automotive fasteners.

The facility, which is being built to capitalize on sustained demand in the North American automotive market, will consist of four wire-drawing machines, two heat treatment furnaces, and a pickling and coating line. The company said that it expects to have the plant up and running by the spring of 2018. It could employ up to 70 people by 2021.

NLMK

In a bid to improve quality and efficiency, NLMK Group is investing US$80 million in a new reheat furnace at its hot strip mill in Pennsylvania. The furnace, which is being designed to heat 395 metric tons worth of slabs per hour, will replace three obsolete pusher furnaces that serve the strip mill. Executives said the new furnace will not only eliminate surface defects, but would burn less natural gas and reduce emissions. Construction is to begin in the third quarter of this year, and the furnace is to come on-line in 2018. Tenova Inc. was awarded the contract for the project.

North American Stainless

North American Stainless fired up a new 20-roll cold mill and bright annealing line in January 2017 and began test rolling its first stainless coils on the new equipment. The EUR116 million (US$122.3 million) project is intended to give the steelmaker entry into the bright-annealed stainless strip market and put some excess capacity to work. SMS group won the contract to equip the Ghent, Ky., USA, facility. It said the rolling mill will be able to process strip up to 6.2 mm in thickness. The company also said the project includes an all-electric Drever vertical furnace. North American Stainless is a unit of Spain's Acerinox.

Nuco Steel Bar Steel Technologies

The start-up business announced plans in 2016 for what it says will be North America's most advanced cold-finished bar mill. The company said it will be investing US$36.9 million in the greenfield facility, located in Valpariso, Ind., USA. It will produce cold-drawn steel bars for the automotive, agricultural, off-road equipment and toolmaking sectors. Nuco said the facility will have a continuous production line, allowing it to draw, process and package bars in line.

It will be outfitted with a Danieli drawbench and be capable of drawing rounds of up to 5 inches, flats in dimensions of up to 2 x 12 inches, and squares of up to 4.5 inches. The facility is to come on-line later this year.

Nucor Corp.

Nucor disclosed plans last year for a US$230 million specialty cold mill to be built at its Blytheville, Ark., USA, facility. Nucor said the mill is part of an effort to offer products higher up the value chain — it intends to make advanced high-strength; high-strength low-alloy; and motor lamination steel products. The mill is to be completed in 2018.

Elsewhere, the company completed installation of heat treating equipment at its Memphis, Tenn., special bar quality bar mill and began running trials of new value-added products. The new equipment expands it capabilities to include quenching, tempering and annealing of bars between 2.5 and 12 inches in diameter.

In another development, Nucor added direct quenching capability to its Tuscaloosa, Ala., plate mill, allowing for low-alloy grades. The system is designed to perform in-line quenching of strips and plates rolled by the Steckel mill in combination with the existing laminar cooling system. The equipment can treat strip and plate in thicknesses of between 4.76 and 63.6 mm and in widths of between 1,220 and 2,438 mm.

Other projects include: an expansion of Skyline Steel LLC's structural pipe piling production capability; installation of direct-reduced iron handling equipment at its Gallatin, Ky., sheet mill; and expanding the port facility at its Berkeley County, S.C., sheet and beam mill.

Nucor-JFE Steel Mexico

In June 2016, Nucor and the Japanese steelmaker announced that they were forming a 50-50 joint venture to build a US$270 million galvanizing plant in Mexico. The plant is being designed to coat 400,000 tons of sheet per year. Nucor and JFE are to contribute equal volumes of substrate. The plant is to open sometime in the second half of 2019. Nucor chief executive John Ferriola recently said that the equipment has been ordered and that construction is to begin sometime in late spring. He also said that the intent is to build the facility in Mexico, despite the uncertainty surrounding the Trump administration's trade policies with Mexico. However, he said that should it begin to look like Mexico isn't the place for the facility, they'll have to consider other options.

Nucor-Yamato Steel Co.

The joint venture between Nucor and Yamato Kogyo Co. Ltd. wrapped installation of new process technology on its No. 2 rolling mill that allows for production of high-strength, low-alloy steel beams.

The QST technology, provided by Danieli, involves intensive cooling applied to the entire surface of the section after rolling.

QST makes it possible to increase the mechanical properties of the beams with reduced alloy quantities, such as vanadium and niobium, and to achieve top-quality grades with fine grain structure, excellent weldability, high yield stress and low-temperature resilience.

Trial production began in the third quarter of 2016, and the company shipped its first load of high-strength beams in January. It plans to complete trials of the entire product line by the end of June.

POSCO

The South Korean steel giant broke ground last spring on a US$19 million wire rod processing plant along the Ohio River in Indiana. Situated on 10 acres at the Port of Indiana-Jeffersonville, the 136,000-square-foot facility will make

Indiana officials and POSCO executives toss shovels of dirt during an April 2016 groundbreaking ceremony. The ceremony marked the start of construction on POSCO's wire rod processing plant at the Port of Indiana-Jeffersonville.

Photo credit: Tyler Stewart/News and Tribune *(Jeffersonville, Ind., USA)*

The new paint line at Steel Dynamics Inc.'s Columbus, Miss., sheet plant processed its first coil in December 2016.

Photo credit: Danieli

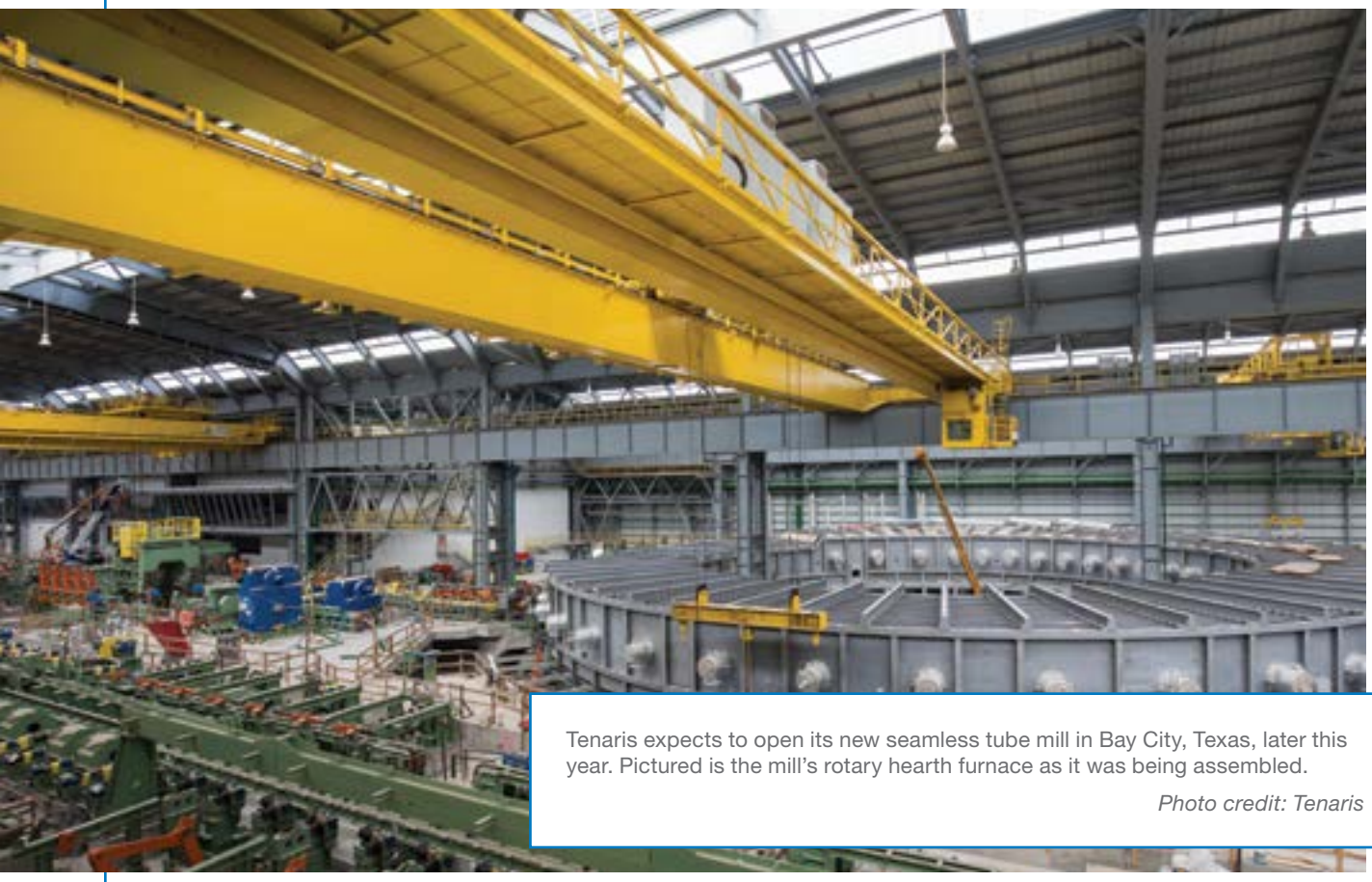
parts used in the automotive industry. It also will serve as a distribution center for other POSCO products. The company said it chose the port because of its river access to steel- and automakers in the Midwest. It also said the river access will make possible just-in-time deliveries for its automotive customers.

Steel Dynamics Inc.

The company in December wrapped up work on a US$100 million investment through which it added a 250,000-ton paint line and Galvalume® capabilities to its Columbus, Miss., USA, sheet mill. The plant shipped its first Galvalume coils in August 2016, and started up the paint line in December, about a month ahead of schedule. Overall, the project expands the mill's product offerings. The paint line, which can coat high-quality double-wide steel, gives it access to the southern U.S. and Mexican markets for surface-critical, appliance-grade steel and construction-related products.

Also during 2016, Steel Dynamics opened new pickling capacity at its Butler, Ind., sheet mill. The project added 600,000 tons of capacity. Separately, the company is putting US$15 million into a project that will expand the mill's galvanizing capabilities by 180,000 tons. It plans to comission the project this summer and will ramp up production in the second half of the year.

Elsewhere, the steelmaker is investing US$28 million into its Roanoke, Va., bar mill. Through that project, the mill will install new equipment allowing for multi-strand threading and finishing of rebar. The project is designed to utilize excess melting and casting capacity. Work is to be completed in 2018.



Tenaris expects to open its new seamless tube mill in Bay City, Texas, later this year. Pictured is the mill's rotary hearth furnace as it was being assembled.

Photo credit: Tenaris

Tenaris

Tenaris continued to progress on its US$1.8 billion seamless tube mill in Bay City, Texas, USA, and passed the halfway point of the project last year. The very first pieces of equipment were installed in late 2015, and setup of the hot rolling mill began in May 2016. Tenaris said that part of the project entailed installation of 13,000 tons of equipment, 700 tons of piping and supports and 3 million feet of cable. Build-out of the finishing area began last July. Tenaris said the finishing area includes a straightener, a hydrotester and other non-destructive testing equipment. It also is being outfitted with 21 robots, more than are in any of Tenaris' facilities worldwide. The plant is scheduled to open in 2017 and will be capable of annually producing 600,000 tons of oil country tubular goods.

Elsewhere, Tenaris' Mexican division, TenarisTamsa, has ordered a new roller hearth furnace for its plant in Veracruz. The furnace, which will heat treat carbon steel tube, will be able to process a variety of sizes, in diameters of between 15 and 120 mm and in lengths of between 3 and 16 m. The order includes automatic loading and unloading tables, a normalizing cooling section and final water jacket cooling chamber. Danieli Olivotto Ferré is supplying the equipment. Installation is to be completed by January 2018.

United States Steel Corporation

The integrated steelmaker said it is increasing its capital spending by US$200 million in 2017 as part of an asset revitalization program. The program, a part of U. S. Steel's ongoing Carnegie Way initiative, is intended to lift the company's profitability and competitiveness by undertaking projects that will boost capability and quality, improve reliability and efficiency, and lower costs. The program is largely focused on its flat-rolled assets.

Although it hasn't identified specific projects, the company said the projects generally are smaller and relatively straightforward — 40% of spending will be on projects that cost less than US$10 million, and 60% will be on projects that cost less than US$20 million.

The company said it will execute the revitalization program over the next three years. To minimize production disruptions, U. S. Steel reactivated its Granite City, Ill., USA, hot strip mill, which it had idled in 2015. Restarting the mill will allow U. S. Steel to shift production as other facilities undergo outages related to the project.

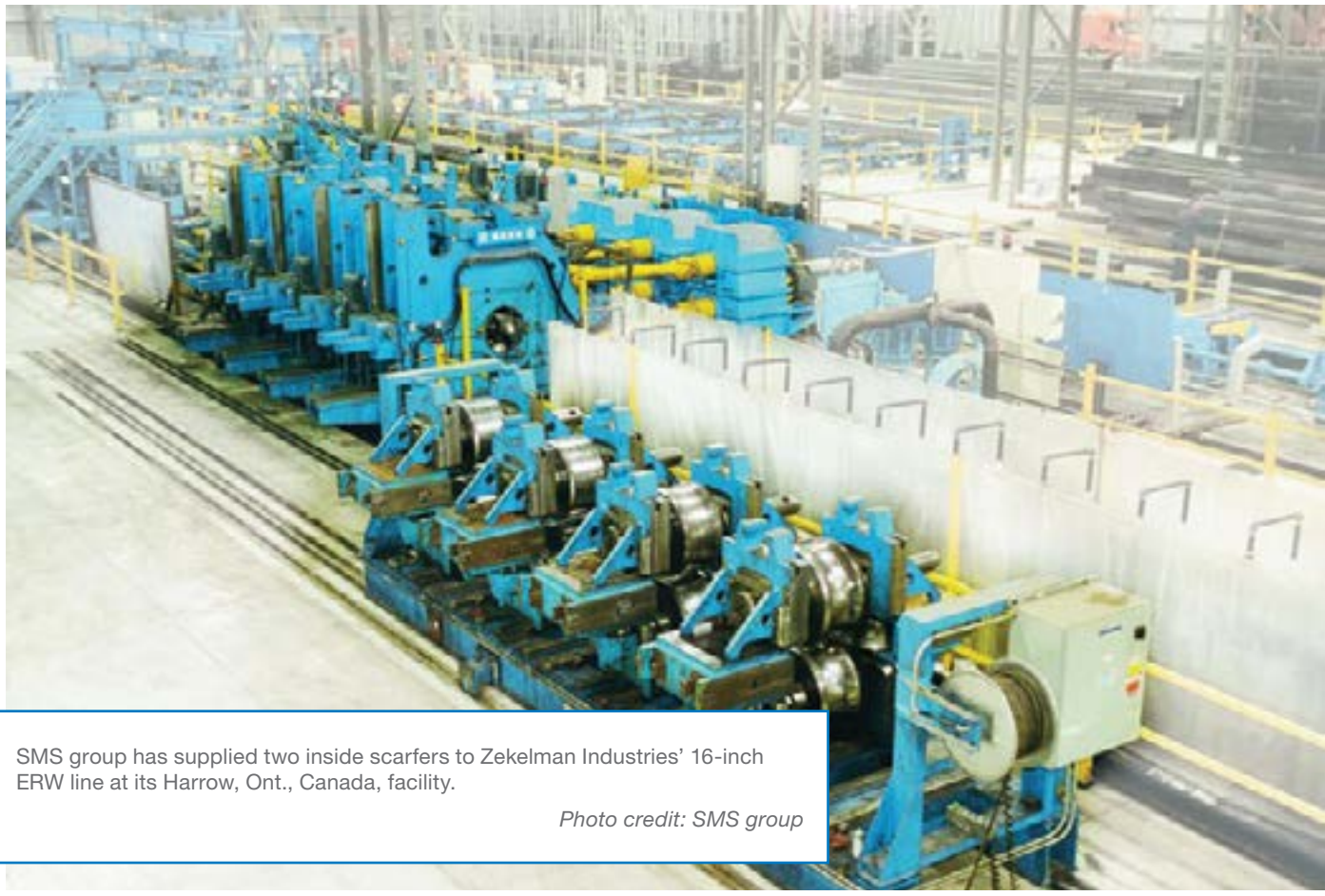
voestalpine

After two-and-a-half years of construction, voestalpine completed work on its hot briquetted iron plant in Corpus Christi, Texas, USA. The plant started up on 27 September 2016, and within approximately 24 hours, it was operating in stable condition.

The plant, which uses Midrex technology, is capable of making 160 metric tons per hour, or about 2 million metric tons annually. Approximately 40% of the output is bound for voestalpine mills in Linz and Donawitz, Austria. The rest is to be sold to outside customers, including Big River Steel, which has contracted for up to 240,000 tons annually. But much of the output — about several hundred thousand tons worth — will be bound for Mexican steelmaker TYASA's

voestalpine opened its new hot briquetted iron plant in Texas last year. The plant is designed to produce 2 million metric tons annually.

Photo credit: voestalpine



SMS group has supplied two inside scarfers to Zekelman Industries' 16-inch ERW line at its Harrow, Ont., Canada, facility.

Photo credit: SMS group

furnaces. According to Midrex, TYASA recently made significant increases to its crude steel capacity and is adding sophisticated steel grades to its product lineup. It intends to make high-quality flat steels requiring the use of higher-quality charge materials, such as hot briquetted iron from voestalpine's plant.

Zekelman Industries

The independent pipe and tube maker is upgrading its Atlas welded tube facilities in Blytheville, Ark., USA, and Harrow, Ont., Canada, installing new equipment that will boost capacity and expand its product lines.

At the Blytheville plant, a 16-inch tube line will receive a new sizing section, allowing it roll structurals up to 18 inches in diameter as well as square and rectangular hollow sections. Section sizes will range from 14 square inches to 18 x 10-inch rectangles. The maximum wall thickness will be 17.3 mm. Additionally, the cross-welder will be outfitted with a patented welding system provided by SMS group, which was awarded the project contracts.

At the Harrow plant, a pinch roll/breakdown stand is being added to the 8 5/8 inch line, allowing it to roll higher steel grades and heavier wall thicknesses. Also, two newly developed inside scarfers have been installed on the facility's 16-inch line. These scarfers allow the line to produce tubes with heavier wall thicknesses, up to 17.3 mm. The scarfers already have been put into service.

Looking Ahead: Auto Demand to Drive 2017 Capital Spending

Casting an eye toward the months ahead, North American steelmakers will be busy executing on previously announced projects and preparing for new projects, especially as confidence in the industry rebounds on account of improving shipments and prices. However, the pace at which new projects are released remains to be seen.

According to several industry representatives who offered forecasts on the industry's 2017 capital spending, steelmakers indeed will be investing in their facilities, but the rates of investment may on improving market conditions. Or, they may not.

Either way, they expect the automotive sector and its demand for advanced steels to be a significant driver of many of the projects that come about.

Ron Devoe, vice president of sales for Primetals Technologies, said that steelmakers had utilized mill builders extensively in 2016 for projects that were to be realized in 2017. He also said they were optimistic about prospects for the year even before the November election.

"Now that the election is over, opportunities in North America are moving very fast. We expect quite a few larger projects to be released in the first half of 2017," he said.

He and others agreed that there are likely to be some interesting projects that come about, especially from the flat products world as steelmakers confront the realities of attempting to produce challenging value-added automotive steels on older equipment.

"As demand for harder and thinner materials increases, major capital investments will be required to leapfrog the competition. Producers are now at least preparing to make these larger investments for this reason. I think the potential pipeline of projects in North America at the moment is much better than any other individual country relative to the amount of steel production," Devoe said.

However, Becky Hites, president of Steel-Insights LLC, a management consultancy, said she doesn't expect producers will be breaking open their treasuries. Margins are still vulnerable, she said, and investments are being undertaken cautiously. She also said that by her count, producers' 2017 capital budgets are split, with about half up modestly, and the other half down modestly. And the investment dollars that are made available are more likely to be put toward flat steel facilities, she said.

"Within the flat product markets, finishing and coating lines ran at near capacity in 2016, so investments are being focused on increasing individual mill capacities for value-added products and developing new alloys, new processes and new applications."

Devoe agreed.

"Automotive is always the hot topic in North America and will still dominate the conversation, especially in Mexico," he said, adding that investments are going to be required in all production facets — meltshops, casters, hot mills and cold mills — to achieve the hardnesses, thicknesses and quality demanded by automakers.

"However, given the commitment of the new government toward infrastructure in the United States, we also see a lot of movement in construction and pipe-grade materials in both flat and long products specifically in the United States," he said.

Bill Emling, vice president of steelmaking and casting for SMS USA LLC, said that while there is a lot of optimism floating around amongst steelmakers, there is, at the same time, a healthy amount of "wait-and-see," especially as it pertains to the Trump administration and its trade polices with Mexico.

"Our customers in Mexico are concerned," he said, adding that there are now a number of potential projects that are impacted. ✦