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WORLD STAINLESS STEEL

cover story:

Chromeni Steels facility roars into stainless steel industry

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Chromeni Steels facility roars into stainless steel industry

New facility – Chromeni Steels in Gujarat, India is one of the largest integrated stainless steel manufacturing sites in the world.

Mr. Pratik Shah, Director of Chromeni Steels, has a prediction for 2020: “it’s going to be a good year for the company, for India, and for the global stainless steel trade.” Mr. Shah has cause for optimism. Early in 2019, construction had finished on Chromeni’s new production facility in record-breaking time, and their operation rang in the new year at full capacity. A unique DRAP, 5 stand tandem mill distinguishes Chromeni’s integrated stainless steel production plant in Gujarat, India, pushing the company towards their 4 million ton per/annum goal by 2025. And with all major approvals and certifications in place, Chromeni Steels is poised to carry Indian stainless steel—and India itself—into the future.

By Daniel Sweet

The story of Chromeni Steels begins with Chinese stainless steel manufacturer Tsingshan Industries and an invitation. Keen to live up to their corporate motto of “Dare to be the First,” Tsingshan began eyeing India as a potential site for investment several years ago. The first step for Tsingshan was to observe and strategize, which eventually led the stainless steel giant to seek out the top players in the Indian

market. The choice was clear: the Shah family, with over 40 years of experience in Indian stainless steel, were ideal business partners.

An invitation to the Shahs led to a meeting in Shanghai in August 2016. From there, both parties took up planning in earnest, culminating with a Memorandum of Understanding in January 2017. Chromeni Steels would unite the scale and scope of the largest

stainless steel producer in the world with five leading business houses of India, securing the company’s success in India and on the global market. The unique, multi-national collaboration between Tsingshan and their Indian partners make Chromeni the biggest joint venture in the stainless steel industry. On the Indian front, Chromeni Steels consists of Sunrise Group, Suncity Group, JP ISCON, and VD Group.



Chromeni finished product ready for delivery.

Sunrise Group has a long history serving domestic and international stainless steel markets for the past four decades. Suncity Group brings 25 years of experience in stainless steel to Chromeni, while JP ISCON brings expertise in real estate development in Gujarat and Mumbai. Finally, the VD Group has been active in the diamond industry for a decade, with their most recent diversification being stainless steel.

Construction completed

As Mr. Pratik Shah explained in a recent interview, the first step to setting up Chromeni for production was to begin construction of a new facility. “The foundation stone for the facility, located in Mundra, in the Western state of Gujarat, India, was laid on January 23, 2018. In a record-setting 14 months, work on the facility was complete, and since August 2019, we have been up and running.”

Chromeni’s new facility—part of a USD 2 billion investment—ranks among “only a handful of stainless steel manufacturing plants that can accommodate melting, slab casting, and hot/cold rolling for coil production at one location. In fact, it’s the fourth largest facility with this capability in the world,” said Mr. Shah.

Chromeni leadership has a number of goals for the site. “Our targets stretch over five years. By the end of 2019, we expected an output of 1 million cold rolled coils. Happily, we met that goal. By 2022 we are aiming for an additional 1 million cold rolled coils, and by 2025 our goal is to have produced 4 million hot rolled coils in mainly the 200 & 300 series. These are ambitious targets, but due to investment in the latest manufacturing equipment and techniques, we are confident that our goals can be met.”

DRAP, 5 stand mill

Mr. Shah went on: “Chromeni’s production is quite unique. We have set up a DRAP (Direct Rolling Annealing Pickling) line in a 5-stand tandem mill, which is unlike anything else in the world. The production lead time is quick, completing the finishing process in minutes rather than the weeks required by conventional finishing techniques.” More detail on the DRAP line can be found in a feasibility study produced by Chromeni. That document reveals that the DRAP line is mainly used for “rolling, annealing, pickling and skin pass rolling in order to produce

qualified cold rolled stainless steel coil fully and continuously.”

After the stainless steel enters and exits Chromeni’s 5-stand tandem mill, it undergoes solution heat treatment in the horizontal catenary annealing furnace. In the pickling section, the strip is pickled in a process of “neutral salt electrolysis + mixed acid pickling,” and the pickled strip enters the intermediate looper before coming to 2-h skin pass mill.

After skin pass rolling, the strip runs to the horizontal inspection section where both the top and bottom surface of the strip are inspected to determine

Automation

Mr. Shah noted that “the facility is completely automated with the help of sophisticated software. The software enables every component of the system to synchronize. This is important for two reasons: it keeps the production line up to a high standard of productivity and a high standard of quality. With such high capacity—one line producing almost 1 million tons of stainless steel annually—standardizing and automation of the process is of the utmost importance.”



Scan the QR code to view Chromeni’s latest corporate video.



Chromeni's process for stainless steel coil manufacture is "unlike anything else in the world thanks to the state-of-the-art DRAP line and 5 stand tandem mill."

if the strip needs to be dressed or even reprocessed. With the help of weld seam tracking system, the line slows down automatically when the weld seam reaches the exit section and the exit hydraulic shear cuts the strip at the point before or after the weld seam. At the final stage, the coil is unloaded from the tension reel and is prepared for storage.

Strategically located

In addition to its size, capacity, and technological features, the Chromeni facility is notable for its location. The plant is located "right outside the biggest port of India: Mundra Port. We have such easy access to the port, and in terms of logistics, this gives us a very strong advantage. India has a now started using lot of waterways that can

be utilized in shipping, not to mention all the other modes of transport that surround Mundra. Since we began full-scale operations, the logistics of moving raw material to the Chromeni facility and moving finished products out has been proceeding without issue." Mr. Shah also commented on the roadways that surrounds the Chromeni facility, noting that one of the "major sales regions, what is known as the 'Northern Belt' is easily accessible from the plant. This access will allow Chromeni to cover the entire belt and thus the entire region. This will be another first for the industry, as we will become the primary company to carry stainless steel coils throughout the entirety of the belt."

International attention

When a company like Chromeni picks up operations, word travels fast. According to Mr. Shah, the response has been enthusiastic. For example, Mr. Shah explained that at the recent Stainless Steel World Conference & Exhibition 2019, in Maastricht, the Netherlands, foot traffic at the Chromeni booth was heavy. "People were really excited to learn more about how the early months of operation played out, and my staff and I were constantly fielding questions from show attendees. On top of that, Chromeni was featured as a key component to one of the conference presentations, which helped spread the Chromeni message to all attendees."



Mr. Pratik Shah along with his core sales team – Aesha Shah and Sanjoy Bhuyan – attending to customers at SSW2019 in Maastricht.

That presentation, entitled “Stainless Steel: Key Opportunities and Threats in 2020” and delivered by Wolfgang Lipp, played out to a packed theater of stainless steel professionals. Covering the current trends within the industry, Mr. Lipp discussed Chromeni as “the New Kid on the Block” and “a company to watch closely.” Framing Chromeni within the broader context of Asian stainless steel capacity, the analysis of the company was clear to all in the room: in the coming years, Chromeni will become a major force for change in the market.

Make in India

Discussing Chromeni with Mr. Shah, it becomes quickly apparent that his vision for the company is bound up with his vision for India. “What we see in India is what we at Chromeni like to call the three-Ds: Democracy, Demography, and Demand. India is the world’s largest democracy, made up with a rich and diverse demography of incredibly young and ambitious citizens. Our large population is hungry for growth, which brings us to demand. With one of the fastest growing economies in the world, there is growing demand. If businesses can supply it, then businesses will succeed.”

“With this in mind,” Mr. Shah continued, “Chromeni was founded partly in response to Hon’ble Prime Minister of India, Shri Narendra Modi’s initiative, Make In India. The initiative calls upon Indian business to reexamine everything the country is importing, and if we can make it ourselves, we should



Chromeni Steel's continuous inline annealing furnace.

at least try. So it is along these lines that we have set up our manufacturing plant, and because India is a very big market, in the coming years it will continue to grow. India doesn't have many manufacturers in our sector, but that is all going to change in the future.” When asked how Chromeni would help bring about India’s manufacturing future, Mr. Shah said that “With its state of the art manufacturing plant, Chromeni will help the local downstream industries to grow. This will meet the demands of the stainless steel industry in India, and in turn it will meet the demands of the Indian economy. More specifically, because we believe in giving back to society, Chromeni is committed to employment generation and improving social welfare. As the company grows, we hope to provide direct employment to around

Visit Chromeni at Tube 2020

Chromeni Steels will be exhibiting at the Tube 2020 event in Düsseldorf, Germany. Meet them at Booth No: 3 E46 from March 30-April 3.

12,000-15,000 individuals. Indirectly, that number is closer to 50,000-60,000 individuals. All this together will play a major role in the growth of the country.”

Fresh ideas

In keeping with Chromeni’s focus on India, Mr. Shah pointed out that the company’s leadership reflects the demographics of the country. “The top team of Chromeni, it is worth pointing out, is a very young team. The youngest team member is 28 while the senior-most is 45. This includes our sales team and general company team. Sometimes people ask me why I find young people so vital to growth in business. And I tell them that young people come with fresh ideas, with a hunger and passion that leads to new strategies. Because our company leaders are young, I see this same passion for fresh ideas in Chromeni: we are the largest joint venture that has ever existed in the stainless steel industry. And I see this same passion in India itself. It's what makes us as a company—and as a country—so successful.”



Pickling line at Chromeni Steels.

Facts & Figures

Name:	Chromeni Steels
Founded:	January 2017
Employees:	15,000 (by 2025)
Headquarters:	Mundra, Gujarat, India
Products:	Cold rolled coils, hot rolled coils in 200 & 300 series
Website:	https://chromenisteels.com/