

Doing well while doing good

The Chennai, India-based Jain Metal Group has prospered by using environmentally sound practices to recycle secondary materials from around the world.

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With roots tracing back to the 1950s, the [Jain Metal Group](#) of Chennai, India, long ago established itself as a recycler and producer of nonferrous metals. In the past several years, the company and its leaders have invested to expand its range of services to include processing of additional types of scrap metal as well as plastic recycling.

The company now connects with buyers and sellers from around the world through three operating companies: Jain Resource Recycling Private Ltd. (JRR); Jain Recycling Private Ltd. (JRPL); and Jain Green Technologies Private Ltd. (JGT).

JRR is considered the flagship company and is the largest producers of recycled lead ingots in India, with annual production of more than 150,000 tons.

JRPL, meanwhile, has two plants. Plant 1 is the largest producer of recycled-content copper products in India, with annual production of more than 40,000 tons. JRPL's Plant 2 focuses on reprocessing polypropylene (PP) and

polyvinyl chloride (PVC) scrap, producing more than 12,000 tons of plastic granules annually.

The third operating unit, JGT, produces recycled-content aluminum alloys. JGT is one of the largest exporters of die cast aluminum alloy ingots in India, and it supplies aluminum in molten form to users of recycled-content aluminum.



Above and beyond the bottom line

The Jain Metal Group leadership team of Kamlesh Jain and Mayank Pareek say they have been building a business based on forecasts that 50 years from now, more than 90 percent of metals and plastics globally could be obtained from recycling.

While the company's multipronged approach to sustainability is part of a strategic business plan, Jain Metal Group has invested to be a pioneer in the recycling of numerous materials only emerging as secondary commodities in India.

In the second half of the previous century, Jain Metal focused on the production of recycled-content brass, aluminum and stainless steel. Red metals and aluminum remain important to the group, but in the past dozen years have been joined by several other materials.

In 2013, the group ventured into lead recycling, a metal that requires the utmost attention to safe and environmentally sound handling. In addition to recycling lead-acid batteries, Jain Metal Group accepts other types of lead scrap and lead-bearing copper cable scrap, processing it responsibly.

In 2018, the group set up the largest copper cable scrap recycling plant in Southeast Asia. Soon thereafter, it ventured into plastic recycling, followed by recycling scrap motors, alternators and starters.

The company's willingness to invest to recycle more of the world's discarded materials means it now recycles more than 200,000 metric tons of scrap materials annually, with the United States serving as a critical source. Jain Metal Group is expanding its business aggressively, with a compound annual growth rate (CAGR) of more than 30 percent.

The investments in volume growth have been matched by investments in emerging, environmentally responsible technology, the company's Kamlesh Jain and Mayank Pareek say.



Prepared for a demanding future

The world's demand for more recycled-content material is one driver of Jain Metal Group's growth, but as the company has expanded, it has done so with a recognition that how efficiently those materials are recycled has become increasingly important.

“Recycling is not a conventional industry and has started evolving in the late 1990s in real terms,” says Pareek. “The processes were mainly dependent on manual activities, and production methods were crude in the beginning. Later, the increasing cost of labor and concern for the environment paved the way for technological developments.”

Jain Metal Group has been ahead of those developments, illustrated by the company's commitment to make technology-related investments in all three of its operating groups.

JRR bills its automatic scrap battery breaker as the largest and most efficient battery breaking system in the country. JRPL's automated cable scrap granulation machines perform cable recycling with high efficiency, while that operating company's plastic recycling plant has technology to recycle mixed plastic regrind (containing shredded micro bits of multiple types of plastics) from the cable granulation process.

Finally, the JGT aluminum division transfers aluminum in molten form to the aluminum consuming sector by transporting it over the road.

"The group is always on the lookout to explore, deploy and adapt new technologies in order to bring in higher efficiency, better quality and lower emissions," Jain says.

"In its entire journey of nurturing, growing and diversifying the recycling business, the group always focused on doing technological improvements, advancements and automation," Jain continues. "As a result, operational efficiencies kept getting better. At the same time, the group went on investing in environment control technologies to leave the least possible carbon and emissions footprint. All the plants of the group deploy the best available technology, doing clean recycling with minimum emissions. The group does end to end recycling with zero landfill," he says.



The wide world of recycling

Jain Metal Group's ability to be part of a wider global market with growing demands for recycled-content metals and plastics assist returns on its investments.

In terms of its feedstock, Jain Metal Group has sourcing teams in India and the U.S. that work hard to meet the growing scrap demand of the company's numerous facilities. The teams tap into a base of more than 100 supplier partners located around the world.

Finished and semifinished products Jain Metal Group makes likewise have a global presence, with about two-thirds being exported. The company exports copper, lead and aluminum products to more than 20 countries in Asia, Europe and the Americas. The refined lead ingots produced by JRR are registered as a brand with the London Metal Exchange.

Jain Metal Group is poised to build India's recycling capacity and strength while providing vital services and products to the rest of the world—all while keeping a close eye on how to be beneficial to wider society.

In one such effort, the company is focused on creating employment for female workers. The group currently employs more than 800 women in its plants on the outskirts of Chennai. Jain Metal Group says most of these workers are illiterate or undereducated, with their income filling a vital need.

“The motto is not just to create wealth, but beyond that,” Pareek says, “the group believes in sustainable businesses that are not only environment-neutral but rather should contribute to the environment. Effective recycling meets this objective,” he concludes.

Link: [Doing well while doing good - Recycling Today](#) (Feb2024)