

Putting industrial data to work

First-ever implementation of GE's Digital Smelter solutions at Vedanta's aluminium plant is key to the mining major's digital transformation strategy

FE BUREAU

GE AND VEDANTA – Aluminium & Power Business, have signed an agreement to implement GE's Digital Smelter solutions at its largest smelter in India at Jharsuguda in Odisha to increase its operational efficiency and productivity. This will be the first such deployment of digital twin technology at any aluminium smelter in India and is part of Vedanta's long-term digital transformation initiatives.

The digital twin technology and advanced data analytics being deployed are expected to substantially reduce spe-



Mahesh Palashikar (L), president & CEO, GE South Asia, and Ajay Kapur, CEO – Aluminium & Power business, Vedanta, at the announcement of the partnership for Digital Smelter

cific power consumption at the smelter. Typically, a 1% reduction in specific power consumption based on digital smelter

solutions can save \$4-5 million annually in the smelter potlines alone, for every 1 million ton per annum (MTPA) of alu-

minium production. In addition, this digital solution is expected to improve raw material utilisation, increase smelter pot life, operational efficiency, safety and reduce wastage.

“This partnership with GE will help us enhance sustainability and bring in more predictability to our business as we are constantly looking at innovative digital technologies to optimise our business’ performance levels,” said Ajay Kapur, CEO – Aluminium & Power Business, Vedanta. “The application of digital industrial solutions is an extraordinary opportunity to accelerate productivity levels to benchmark beating standards.”

GE's Digital Smelter solutions are a significant step in charting the next generation of smelting operations globally. “Industrial IoT solutions are becoming mission-critical for industrial companies around the world,” said Bhanu Shekhar, chief commercial officer at GE Digital. “By combining machine learning and predictive analytics with the deep domain expertise of our teams we are helping customers like Vedanta's aluminium business to better operate, analyse and optimise their operations. These predictive insights and process advisories improve operational performance and reduce risks such as unplanned shutdowns,” he said.