Jai Balaji Jyoti Steels implements CDE Asia's advanced Mineral Beneficiation Plant for elevating iron ore processing



kolkata, West bengal Jun 12, 2023 (<u>Issuewire.com</u>) - CDE Asia partners with Jai Balaji Jyoti Steels, a leading private-sector steel manufacturer in Eastern India, to revolutionize <u>iron ore</u> beneficiation in the region.

Jai Balaji Jyoti Steels Limited, a unit of Jai Balaji Group, a trusted name in the steel industry recently installed CDE Asia's Oremax Multi featuring the Prograde Double-deck rinsing screen with three discharge outlets at Raurkela, Odisha. The plant commissioned in 2021 has a feed capacity of 100 TPH and is designed to increase the grade of iron ore by removing unwanted impurities from raw materials, such as silica, thereby improving the quality of the final product. The inclusion of the Xtrill® lined modular Hydrocyclone for Turbo Dual Wash, along with the Attrition Wash Box (AWB), can significantly enhance the washing quality of the product. The plant operates fully automatically and produces three grades of high-quality products (Fe grade 60+) that are suitable for direct use in the steel industry.

The plant is equipped with a PLC-based automatic system that ensures seamless operations, high productivity, and uninterrupted performance. Its eco-friendly design includes Zero Liquid Discharge technology, which enables the recycling of up to 95% of water.



Prior to implementing CDE Asia's Iron Ore beneficiation plant, the client had acquired raw materials (58 to 60-grade iron ore) at a high expense from a variety of mines in the Barbil region to replenish raw material stock. The absence of an in-house iron ore beneficiation plant posed a significant challenge in procuring raw materials from the market, leading to inconsistency in the quality of materials and frequent price fluctuations based on their availability. To address this issue, the client decided to invest in their own ore washing plant and awarded the contract for the entire iron ore washing plant to CDE Asia after conducting a comprehensive testing process.

The cutting-edge washing technology by CDE Asia is effectively eliminating all ultra-fines and generating a clean output, which is leading to a longer campaign life in the furnace for the customer. Furthermore, this is decreasing coal consumption during steel production, which positively impacts the economic feasibility of steel-making.

The 100 TPH <u>Oremax</u> Multi in Odisha produces high-quality calibrated lump ore by removing impurities from low-grade ores. The collaboration between Jai Balaji Jyoti Steels and CDE Asia enabled the former to achieve their sustainable mining goals while simultaneously increasing their productivity and profitability.

Mr. Joseph K Thomas, Project In-charge, Jai Balaji Jyoti Steels, says "the decision to choose the CDE Asia system was based on several factors. Firstly, it operates smoothly with minimal dust and noise pollution, ensuring a safe working environment. Secondly, its compact design requires minimal supervision, reducing risks and maximizing resource efficiency. Thirdly, it produces a superior quality product used in DRI. Lastly, after seeing the successful operation of the plant, we are confident with our decision and would definitely recommend this system to others. We are thoroughly impressed with CDE Asia for the successful commissioning of this project and would like to continue working with them in the future as well".

CDE Asia and Jai Balaji Jyoti Steels champion sustainable steel production through their groundbreaking iron ore beneficiation technology.

For more information please visit us: <u>https://cdeasia.com/news/2023/june/jai-balaji-jyoti-steels-implements-cde-asias-advanced-mineral-beneficiation-plant-for-elevating-iron-ore-processing</u>.

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