CASE STUDY





Conveyor Rollers | LaserClad®



The Challenge

Conveyor rollers used in the transportation of iron ore are subject to severe abrasion. The worn out rollers used to be protected with a 6mm spray & fuse coating that would expose the parts to some heat deformation. The customer was looking for a reliable solution and a better process for the protection of 30 rollers that would preserve the integrity of the substrate as much as possible.



The Solution

Based on the customer expectations and application requirements, the Castolin Eutectic wear management team decided to use LaserClad. The low heat input inherent in this process results in minimal distortion of the substrate and reduces post-cladding machining. A 4mm layer of XHD powder was applied to the parts. This reduced not only the weight of each roller but enhanced the performance thanks to our proprietary XHD alloy that ensures hard, dense, wear resistant coatings along with uniform carbide distribution.

The Outcome

The conveyor rollers were shipped on time. The dimensional tolerances have been successfully respected. LaserClad allowed for a better process control and stability than the previous solution. In the long run, the reduced weight of the rollers will positively impact on the overall performance of the conveying system.

- Higher resistance than thermal spray coatings
- Costs savings through outstanding operational efficiency
- Global service network | Local support throughout North America









Global Support



