

## Optimized Sintering Innovation Labs

Maximize efficiencies and minimize costs. If your steel plant needs to achieve these goals, all aspects of its operations need to be optimized. However, processes such as sintering come with their own set of challenges, which need to be addressed to maintain your plant's productivity and profitability. Tata Consultancy Services (TCS) brings you the Optimized Sintering solution to meet this end. The solution helps you model, optimize and control iron ore sintering process in a cost-efficient way and increase plant productivity.

### Overview

The ideal sintering environment is one in which a highly-productive sintering machine delivers good quality sinter, which adheres to blast furnace specifications, while optimizing factors like energy consumption, sinter bed permeability and granulation. This controls energy usage and minimizes adverse effects on the sinter machine and the blast furnace, ensuring that they support stringent production requirements.

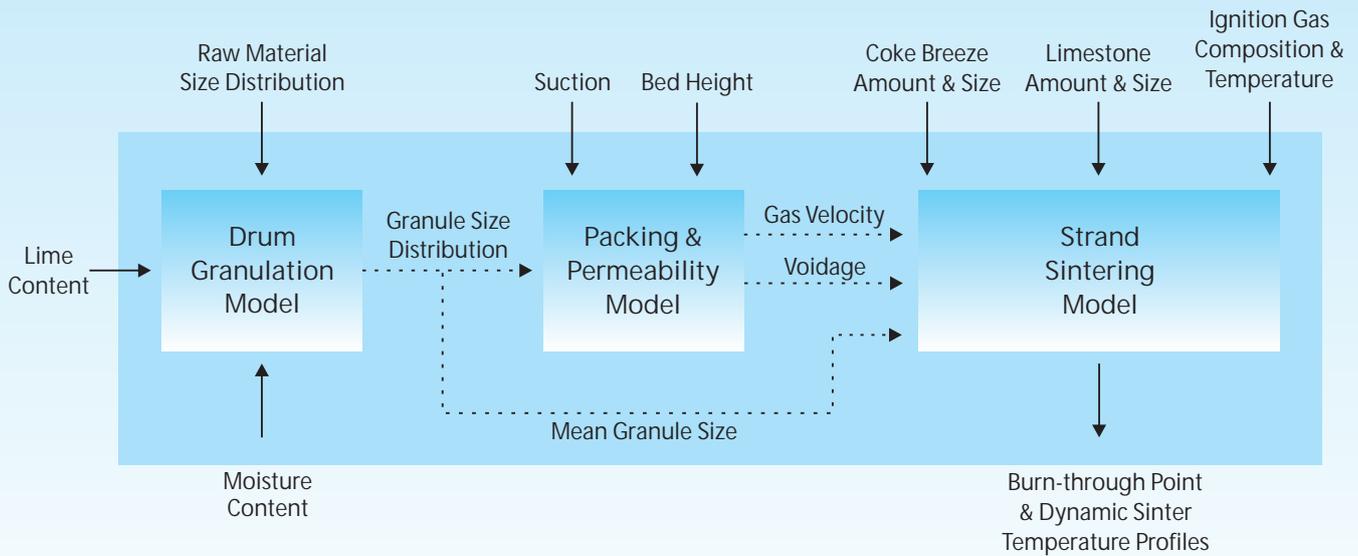
Our model-based process optimization and control solution helps you to create and maintain this ideal environment. We bring a software tool for multivariable optimization, which aids you in controlling various factors that affect your sintering process.

### Benefits

Our solution is based on an integrated approach to overcome issues in the sintering operations. Some of the direct benefits you gain from it include:

- Increased sinter machine productivity;
- Adherence to quality requirements of blast furnace feed;
- Enhanced control of granule size distribution and sinter bed permeability;
- Optimized fuel consumption.

## An overview of the structure of our integrated iron ore sintering model



## Why TCS

TCS has been working to create appropriate solutions for operational challenges in process plants. What makes us your reliable partner is our:

- Focus on innovation. The TCS Innovation Labs – Tata Research Development and Design Centre (TRDDC), is the flagship center of our innovation ecosystem. Our professionals here focus on developing new tools, technologies and processes that impact enterprises and bring in novel solutions to problems. It has links with the academia and research centers to further innovation, and works in collaboration with the industry and customers to deliver reliable solutions in a timely and cost-efficient manner.
- Experience in iron and steel industries. Our professionals have a through knowledge of the steel industry and use their skills to simplify the problems of enterprises in this space. Our vast experience with metals industry in general and iron and steel in particular has helped in tailoring solutions to meet specific needs.

## Case Study

Our implementation of the solution for an integrated steel plant in India yielded improvement in sinter machine productivity, better granulation efficiency and enhanced sinter bed permeability.

## About Tata Consultancy Services (TCS)

Tata Consultancy Services is an IT services, business solutions and outsourcing organization that delivers real results to global businesses, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled services delivered through its unique Global Network Delivery Model™ recognized as the benchmark of excellence in software development.

A part of the Tata Group, India's largest industrial conglomerate, TCS has over 100,000 of the world's best trained IT consultants in 50 countries. The company generated consolidated revenues of US \$5.7 billion for fiscal year ended 31 March 2008 and is listed on the National Stock Exchange and Bombay Stock Exchange in India. For more information, visit us at [www.tcs.com](http://www.tcs.com)

## Contact

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