

Press

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Primetals Technologies and PSI Metals receive order for melt shop Manufacturing Execution System (MES) from Gerdau Ouro Branco

- New Manufacturing Execution System (MES) will modernize production management
- Increased process transparency due to deep integration with existing level 1 & level 2 systems
- Product based solution offers professional release management

By end of February, Primetals Technologies received an order for the installation of a Manufacturing Execution System (MES) for Gerdau's integrated plant melt shop in Ouro Branco, Minas Gerais, Brazil. The new solution will replace an existing system, which offers only limited upgrade options after several years of operation. The project will be executed by Primetals Technologies in cooperation with PSI Metals, thus combining leading automation, metallurgical and software know-how in the steel industry. The new melt shop MES offers a deep integration with the existing level 1 and level 2 systems of Primetals Technologies based on standard interfaces. The solution makes use of the standard software product PSI Metals, which offers regular updates and upgrades, and which is already used in the plate mill and hot strip mill lines at Ouro Branco. This project is one of the results of the strategic cooperation between Gerdau and Primetals Technologies, which was signed during METEC 2019, and of an Industry 4.0 study conducted by Primetals Technologies for Gerdau in 2018.

New MES modernizes production management

The existing melt shop Manufacturing Execution System of Gerdau in Ouro Branco cannot meet the high-quality demands of the Brazilian steel producer any more. Limited options for upgrades are the main reasons to source a new solution. The new PSI Metals based MES solution is offering the operators a holistic view of the running production from the melt shop to their plate and hot strip mill to improve the quality of the production processes. In 2019 Primetals Technologies finished the installation of new level 1 and level 2 systems for a 6-strand billet caster and level 2 system for two blast furnaces at

Gerdau Ouro Branco.

Primetals Technologies, Limited A joint venture of Mitsubishi Heavy Industries and partners Communications Head: Gerlinde Djumlija

Product based solution offers professional release management

The new MES solution will be created in cooperation of Primetals Technologies and PSI Metals, which have closely been cooperating for production management solution projects in steel industry since 2016. The software of the Manufacturing Execution System from PSI is a standard software, which offers regular updates and upgrades. The installed solution is configured and customized by Primetals Technologies and Gerdau and therefore equipped with automation, digitalization and metallurgical knowhow. By sourcing such a harmonized MES from the two companies, Gerdau will reduce integration costs, shorten project runtimes and simplify IT processes.

Strategic cooperation and Industry 4.0 study

Gerdau and Primetals Technologies signed a strategic partnership during METEC 2019. The main goal of this cooperation is the development and realization of a digitalization roadmap for Gerdau. The modernization of the melt shop MES is now an outcome of this cooperation. In late 2018 Primetals Technologies also conducted an Industry 4.0 study consisting of the assessment of an integrated process route from blast furnace to continuous casting and the assessment of an EAF route from scrap handling to long rolled products. The results of this study are now the basis to decide about actions to further transform the production of Gerdau in Ouro Branco into a smart steel factory.

With 119 years of history, Gerdau is Brazil's largest producer of steel, a leading producer of long steel in the Americas and one of the world's leading suppliers of special steel. In Brazil, it also produces flat steels and iron ore for its own consumption. With the purpose of empowering the people that build the future, the company is present in 10 countries and has over 30,000 direct and indirect employees in all its operations. The largest ferrous scrap recycling company in Latin America, Gerdau uses scrap as an important input: 73% of the steel it produces is made from scrap. Each year Gerdau transforms 13 million tonnes of scrap into various steel goods. Gerdau's shares are traded on the São Paulo (B3), New York (NYSE) and Madrid (Latibex) stock exchanges.



The new MES from Primetals Technologies and PSI Metals for Gerdau in Ouro Branco will deeply integrate with the existing level 1 and level 2 systems and provide regular updates and upgrades. Photo credits: © iStock.com/vm

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Primetals Technologies, Limited, headquartered in London, United Kingdom, is a pioneer and world leader in the fields of engineering, plant building, and the provision of lifecycle services for the metals industry. The company offers a complete technology, product, and services portfolio that includes integrated electrics and automation, digitalization, and environmental solutions. This covers every step of the iron and steel production chain—from the raw materials to the finished product—and includes the latest rolling solutions for the nonferrous metals sector. Primetals Technologies is a joint venture of Mitsubishi Heavy Industries and partners, with around 7,000 employees worldwide. To learn more about Primetals Technologies, visit the company website www.primetals.com.