

TENOVA PYROMET - MEDIA RELATIONS

PRESS RELEASE

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Northam awards PGM furnace contract to Tenova Pyromet

High capacity furnace and smelting plant specialist, Tenova Pyromet, has been awarded a contract from platinum miner, Northam Platinum Limited, covering the basic engineering and future supply of a PGM Smelting furnace, feed system and off gas handling plant, as well as detail design of the furnace building and all associated civil works, infrastructure and services. Tenova Pyromet is part of the global, total technology solutions provider, Tenova Mining & Minerals.

The PGM furnace for Northam's smelter in Thabazimbi, South Africa, will be designed, supplied and commissioned by Tenova Pyromet, with basic engineering already in progress, and a planned construction start in the 3rd quarter of 2015. The technical solution will incorporate Tenova Pyromet's state-of-the-art technology, featuring electrodes and copper cooling elements, as well as the off gas handling and furnace controller. The furnace will tap into the existing tapping bay and will be housed in a building connected to the existing tapping bay building.

A distinctive feature of the design is that it will give Northam the flexibility to operate the furnace either as a submerged arc operation or brush arc operation. The transformer will feature a wide operating band to ensure excellent performance even under the higher electrical current requirement of brush arc operation. The roof will be able to withstand a range of heat loads acting on it, from the lower range of submerged arc operation to the very high heat loads resulting from



exposure to the open arc operation when running in brush arc mode. Similarly, the shell and taphole are also being designed to withstand the temperature and heat load fluctuations as a result of the different operating modes.

"This flexibility in design is a typical example of the design capabilities of Tenova Pyromet and our continuous drive to provide the optimal, most advanced and reliable technical as well as commercial solution to our clients," says Andre Esterhuizen, General Manager, Sales and Marketing, Tenova Pyromet.

""In winning this latest award, our proven design expertise in the type of furnace required was enhanced by our established reputation and relationship with Northam," adds Esterhuizen. "This includes the recent design of a complete furnace cooling system, based on Tenova Pyromet's plate coolers, for Northam's existing 15 MW furnace. These were the first Tenova Pyromet copper cooling elements to be installed on a six-in-line furnace."

Tenova Pyromet plate coolers are also being applied in the new circular PGM furnace. These coolers, which can be variously configured to provide different degrees of cooling, offer patented safety features to improve the lifetime of the equipment and prevent burn-throughs, in addition to limiting damage caused by leaks.

Tenova Pyromet is a leading company in design and supply of high capacity AC and DC furnaces and complete smelting plants for production of ferroalloys, base metals, slag cleaning and refining. Tenova Pyromet also designs and supplies equipment for material handling and pre-treatment, alloy conversion and refining, granulation of metal, matte and slag, furnace off-gas fume collection and treatment, and treatment of hazardous dusts and waste. Tenova Pyromet has several technologies to reduce operating costs and increase production power consumption.



Tenova Mining & Minerals is a total integrated solutions provider to the global mining, bulk materials handling and minerals beneficiation and processing sectors, offering innovative technological solutions and full process and commodity knowledge across the mining industry value chain.

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