Mississauga, October 12, 2023 – ArcelorMittal South Africa, and Tenova Goodfellow Inc., a subsidiary of Tenova, recently entered into a contract for the supply of Tenova’s intelligent Slop Detection System (iSDS®) to detect and to initiate dynamic action to mitigate the effects of Basic Oxygen Furnace (BOF) slopping events.

Tenova is a global company specialized in sustainable solutions for the green transition of the metals industry, while ArcelorMittal South Africa is the largest supplier of flat steel products in sub-Saharan Africa, with a production capacity of 7 million tonnes of liquid steel per annum, supplying over 61% of steel used in South Africa.

The iSDS® is a digital module within Tenova’s iBOF® suite of Industry 4.0 technologies for the BOF. The ArcelorMittal South Africa Contract included supply, installation, detection model tuning and a System Performance Guarantee which specified a minimum slop detection rate plus a minimum advance warning time to enable successful dynamic mitigating action.

ArcelorMittal South Africa and Tenova have mutually confirmed that the contractual System Performance Guarantee has been met or exceeded in full for Vessel #1 at the steel mill. Based on this positive result, ArcelorMittal SA is now proceeding to install Tenova’s iSDS® technology on two more of its BOF converters.

The iSDS® technology provides accurate slop prediction and is a critical tool in the BOF operation. iSDS® continuously monitors changes in BOF lance vibration to detect the initial onset of slopping, thereby allowing quick response and remedial action to mitigate the effects of slopping before there is a major ejection of slag and metal from the vessel. Using real-time alerts, iSDS® provides operators with an advance warning of the onset of slop as well as a measurement of slop severity. Currently, over twenty Tenova iSDS® have been successfully installed or are underway in BOF shops worldwide.

“Tenova Goodfellow Inc. is excited and proud to partner with ArcelorMittal South Africa on this project” stated Marshall Khan, Tenova Senior Project Manager. “Through collaboration and focus we have attained a very important project milestone in our pursuit to bring value added Industry 4.0 technology to ArcelorMittal SA for cost savings and improved operational benefits.”

Stephan van der Walt, ArcelorMittal South Africa Project Manager commented: “ArcelorMittal SA management is very pleased with the project results thus far and we are eager to continue this cooperation to see the system fully functional to mitigate slopping events and achieve the expected plant benefits.”
About Tenova

Tenova, a Techint Group company, is a worldwide partner for sustainable, innovative and reliable solutions in the metals and – also through the well-known TAKRAF and DELKOR brands – in the mining industries. Tenova leverages a workforce of over 2,300 forward-thinking professionals located in 19 countries across 5 continents, who design technologies and develop services that help companies reduce costs, save energy, limit environmental impact and improve working conditions.

For more information, visit www.tenova.com