

PRESS RELEASE

Contacts:

Sara Secomandi, +39 0331 444 111, communications@tenova.com

Tenova joins RINA's 100% hydrogen-fueled Hydra project backed by the European Commission

This partnership will drive innovation in sustainable steel production leveraging Tenova's cutting-edge technologies.

Castellanza, March 20, 2024 - Tenova, a leading developer and provider of sustainable solutions for the green transition of the metals industry, is partnering with **RINA**, a multinational engineering consultancy, inspection, and certification company, on the ambitious **European Commission-backed Hydra project**.

The €88M project is **funded by the European Commission's NextGenerationEU** and backed by the Italian **Ministry of Enterprises and Made in Italy**. It aims to **drive 100% hydrogen-fueled steel production** and **allow all steelmakers to test it**, using the results to drive future investment plans towards sustainable production of steel.

Recognized for its expertise in innovative green technologies that facilitate the decarbonization of the steel sector, Tenova has been contracted to supply a 30m tall **Direct Reduction Iron ore (DRI)** tower which will use **hydrogen as a reducing agent**, and an **Electric Arc Furnace (EAF)**. The DRI plant, based on the cutting-edge **ENERGIRON®** Direct Reduction technology, jointly developed by Tenova and Danieli, together with the Tenova EAF will produce up to seven tons per hour at its full production capability within 2025.

Thanks to this pilot mini mill, European steelmakers will therefore have the opportunity to **test steel production with several different combinations**: the DRI plant can use different percentages of natural gases and hydrogen as well as process a wide range of iron ores that will be tested in Tenova EAF providing thus concrete results and analysis for future investment and applications. In addition, plastics or other waste materials can also be injected into the EAF steel bath as an alternative to carbon.

"I am very proud of this project with RINA as it provides all European steelmakers the first open-source facility that will enable them to test the process with our pilot plant and drive their future investments to drastically reduce their emissions," says **Roberto Pancaldi**, Tenova CEO. *"Our cooperation with RINA dates back to the nineties with several projects successfully developed"*.

"Hydra aims at decarbonizing the steel production process through hydrogen-based technologies," adds **Carlo Luzzatto**, CEO and General Manager of RINA. *"Thanks to the help of our partners, we will build a pilot plant to experiment with steel production, emitting a marginal fraction of the carbon emissions currently released by the world steel industry. Hydra is available to the entire supply chain for research & development on the production of clean steel"*.

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