

PRESS RELEASE

Contacts:

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

Alessandro Martinis, +39 347 279 0113, a.martinis@danieli.it

Energiron® direct reduction plant contracted by Salzgitter AG represents a SALCOS® milestone reached

Castellanza, Buttrio, May 24, 2023 - A consortium comprising **Ternova, Danieli and DSD Steel Group** has been contracted by **Salzgitter AG** to build a **direct reduction plant (DRP)** on the site of Salzgitter Flachstahl GmbH. The unit is the largest sub-plant in the first stage of the **SALCOS® - Salzgitter Low CO2 Steelmaking transformation program** and has a production capacity of more than 2 million tons of direct reduced iron (DRI) per year. The award of the contract marks a further, decisive milestone on the way to low CO2 steelmaking at the Salzgitter location and for the Salzgitter group.

The aim of SALCOS® is to achieve near to CO2-free steel production, which will be implemented in three stages. The first stage will go into operation as early as the end of 2025 and consists of a direct reduction plant, an electric arc furnace and a 100 MW electrolysis plant for hydrogen production. By the end of 2033, the transformation of steel production at the Salzgitter site will be complete, far ahead of regulatory requirements.

The SALCOS® program is already in the midst of implementation: the financing of stage 1 of SALCOS® has been secured through subsidies from the Federal Republic of Germany and the State of Lower Saxony totaling around € 1 billion, as well as through substantial own funds of Salzgitter AG amounting to over € 1 billion. Prior to this, an electric arc furnace had already been ordered as another important production plant for low-CO2 steel production. The DRP, the largest sub-plant in the SALCOS® program, has now been ordered.

The direct reduction plant is based on innovative "Energiron ZR® Direct Reduction" technology, jointly developed by Ternova and Danieli, which can be operated flexibly with hydrogen and natural gas in any mixing ratio. Salzgitter AG is the first European steel producer to have taken the investment decision and placed all major contracts for its transformation, thus living up to its claim of being a pioneer of sustainable industry.

The plant will already provide half of the total DRI capacity planned until 2033. It will be connected to the neighboring electric arc furnace via the well-proven Hytemp® pneumatic transport system, so that the reduced iron pellets can be fed into the furnace in a hot state even if they come from a long distance. This ensures excellent energy efficiency of the overall process.

Roberto Pancaldi, Ternova CEO, stated: *"The award of this contract today is the result of a yearslong collaboration with Salzgitter on the development of the SALCOS® project, and we could not be more honored to be the consortium leader. From the beginning, Salzgitter identified Energiron ZR® as the only technology that was developed and extensively tested to use any proportion of reducing gas mixture without plant modifications, thus enabling a seamless transition from natural gas to hydrogen. Furthermore, the use of the Hytemp® system will strongly reduce the energy consumption at the EAF, greatly contributing to a further reduction of CO2 emissions".*

Giacomo Mareschi, Danieli Group CEO, also commented: *"Danieli is proud to be beside Salzgitter Flachstahl in this outstanding project that will be a lighthouse for the steel industry decarbonation. The use of the Energiron® technology, that we jointly developed with Ternova, is a definitive step towards a*

Green Steel era, with the possibility to use different amounts of hydrogen, up to 100%, as an alternative reducing agent in order to lower more and more the carbon footprint without changing the standard and mature plant configuration. We are fully committed as a technological partner of Salzgitter to make this a great success."

Gunnar Groebler, Chairman of the Executive Board of Salzgitter AG, stated: *"We are underpinning our motto 'A new way of thinking for a new industry' today with a clear signal to the market. As early as 2026, we will be in a position to produce significant quantities of green steel and make it available to our customers. I am pleased and also a little proud that we, as a pioneer with fully up-front financing for the first stage of our transformation program, have today awarded this contract to our strong partners. We have thus taken a decisive step forward on the way to a scheduled start of production of the SALCOS® route in 2026."*

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

About Danieli

Danieli designs, manufactures and installs metal producing plants and equipment worldwide, either on a turnkey basis or supplied as individual units, covering, with company-owned technology, the whole process cycle, from ore and scrap processing to finished flat, long, tube and extruded products, for ferrous and non-ferrous metals. Danieli plants are run by Danieli Automation process control, power and instrumentation systems, robotics, and include DIGI&MET smart manufacturing solutions (Industry 4.0). Sustainable production is guaranteed by energy-saving processes, hybrid plants using renewable energies, and hydrogen-based processes, as well as Danieli Environment solutions. 10,000 people operate in the Group companies located in Italy, Germany, Sweden, Austria, France, The Netherlands, Spain, UK, USA, Brazil, Thailand, Vietnam, China, India and Japan. Danieli Group average annual turnover is over 3 billion Euro. Investments in R&D amount to 150 million Euro per year (average for the last five years).

For more information, visit www.danieli.com