MAN Energy Solutions



Press Release

Deggendorf, August 2, 2023

MAN Energy Solutions SE Stadtbachstraße 1, 86153 Augsburg Germany

Postal address: 86224 Augsburg, Germany

www.man-es.com

Group Communications Simon Wächter P +49 821 322 6887 simon.waechter@man-es.com

MAN Energy Solutions Deggendorf Celebrates Milestone of 800th Reactor

Chemical reactor begins journey to Evonik Industries plant in Alabama, USA

MAN Energy Solutions in Deggendorf, Germany has reached a new production milestone with the manufacture of its 800th reactor. Starting on the Danube, the new chemical reactor recently began a two-and-a-half-month journey that will take it across the Atlantic to the Evonik Industries chemical plant in the US city of Mobile, Alabama. Upon installation, the 132.5-tonne reactor will produce methyl mercaptan, a chemical used to produce the amino acid, L-methionine, which is needed for animal food production.

Norbert Anger, Site Manager MAN Energy Solutions, Deggendorf, said: "We have been producing customised reactor systems for chemical and petrochemical applications at this very site for almost 70 years. In that time, we have gathered a valuable and unique knowledge of process engineering and the assembly of these highly complex systems. This milestone reactor proves once again that our customers trust the outstanding skills we possess in Deggendorf."

The process gases the reactor experiences during use require it to be highly corrosion-resistant and gas-proof, as well capable of handling operating temperatures of up to 400°C. Accordingly, materials such as heat-resistant carbon steel and stainless steel were used in its manufacture, requiring complex welding work, a local hallmark.

MAN Energy Solutions in Deggendorf

Originally founded as a shipyard in 1924, MAN Energy Solutions, Deggendorf has manufactured reactor systems for the chemical and petrochemical industries at its site on the river Danube since 1955. It currently employs more than 500 workers.

Deggendorf is also a pioneer of e-fuels technology and the site has extensive know-how in the development and manufacture of reactors for the production of climate-neutral synthetic fuels, such as green methanol and synthetic natural gas. Both fuels are produced with green hydrogen and can, for example, power large ocean-going container ships in a climate-neutral way.

Anger added: "We urgently need synthetic fuels to decarbonise sectors that are difficult to electrify, such as shipping and aviation. In Deggendorf, we already have proven and mature reactor technologies to produce these urgently required climate-neutral fuels in large quantities today."

In this context, MAN Energy Solutions Deggendorf has supplied the methanolsynthesis reactor for the e-fuels demonstration plant, 'Haru Oni', near the southern Chilean city of Punta Arenas. The plant produces climate-neutral petrol (egasoline) on behalf of Porsche AG. The plant first generates green hydrogen from

MAN Energy Solutions



wind power, which is then converted into green methanol, and finally into climateneutral gasoline. Approximately 600 tonnes of green methanol and 130,000 litres of e-gasoline are produced annually.



MAN Energy Solutions in Deggendorf, Germany has reached a new production milestone with the manufacture of its 800th reactor (Picture: Steve Schnieke)



The MAN Energy Solutions Deggendorf team and representatives of the customer Evonik Industries in front of the 800th reactor (Picture: Steve Schnieke)

MAN Energy Solutions



MAN Energy Solutions enables its customers to achieve sustainable value creation in the transition towards a carbon neutral future. Addressing tomorrow's challenges within the marine, energy and industrial sectors, we improve efficiency and performance at a systemic level. Leading the way in advanced engineering for more than 250 years, we provide a unique portfolio of technologies. Headquartered in Germany, MAN Energy Solutions employs some 14,000 people at over 120 sites globally. Our after-sales brand, MAN PrimeServ, offers a vast network of service centres to our customers all over the world.