

PRESS RELEASE DÖRRENBERG EDELSTAHL GMBH

GREEN STEEL at Dörrenberg



Environmental protection, resource-saving work and reduced energy consumption have characterized the way Dörrenberg Edelstahl GmbH works for decades. The use of **return scrap**, including from our own operations, represents an established circular system.

For all production sites, we obtain climate-neutral **electricity 100% from renewable sources**.



In the steel mill at our central location in Germany Runderoth we melt our steels using the low-CO₂ **electric steel route**. By using return scrap and climate-neutral electricity, this production process only produces emissions of approx. 280 kg CO₂ / t of steel. In comparison, integrated steel mills emit approx. 1.700 kg CO₂ / t of steel via the blast furnaces.



The melting of **return scrap** in our induction furnaces in the steel foundry emits almost no CO₂ because of the use of climate-neutral electricity. The globally unique introduction of a **modified sand system** in the foundry reduces the amount of the used sand to be landfilled to almost zero.



We use electrically operated vacuum furnaces with gas quenching to temper the steel. Significantly less CO₂ is produced than, for example, oil burning during oil quenching. The nitriding treatment, in contrast to case hardening, requires a further reduction in CO₂ emissions.

These measures have led, among other things, to the fact that we only generate around 25% of the emissions compared to conventional hardening plants.

For further information please contact:

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