

# EXTREME FASTENERS (STUDS) 10.9 & 12.9

32CrB4 EQ | 32CrB4 EQ PLUS



Quenched and tempered (Q&T) steels with high mechanical properties for wind fasteners at extreme conditions

## APPLICATION

**Studs:** our customer manufactures them from induction hardened and tempered bars.



## ADVANTAGES

### Class 10.9 characteristics\* in big diameter studs

Up to M56 mm with 32CrB4 EQ and M75 mm with 32CrB4 EQ PLUS

### Class 12.9 properties\* in big diameter studs

Up to M48 mm with 32CrB4 EQ and M64 mm with 32CrB4 EQ PLUS

\*Specified in the standard EN ISO 898-1:2013.

## APPLIED TECHNOLOGY

- In general Cr-B steel grades with controlled S and P. For the highest diameters a Ni addition is employed.
- Specific secondary metallurgy focused on optimizing the wind fasteners mechanical properties.