

# Powering **Steel** Transformation from within

## Calender

A calender is a series of hard pressure rollers used to finish or smooth a metal sheet, also used in industries transforming plastics or rubber. There are various types of calender with two, three or four rollers driven customarily by hydraulic motors and planetary gearboxes.

Whereas metal sheets can be heated prior to processing, some calender rolls are themselves heated or cooled according to the process and the physical characteristics of the material being processed.

## Bending Machine

A bending machine is used for the plastic deformation of a metal sheet. Performed cold or hot, deformation results in a curvature of the sheets themselves. For tube making, the sheets are preheated in an oven and bent to form a tube, welding the two ends together. The rollers are driven by transmissions (usually planetary) with either hydraulic or electric motors. The bending machines are sized according to the maximum thickness and width of the sheet metal, maximum bending radius and minimum number of passes.

## Brevini® Industrial Planetary Gearboxes – S Series

- Modular concept
- Extensive ratio range
- Supports torque range up to 2200 kNm
- Spheroidal graphite cast iron housing
- High efficiency
- Diverse low-speed shaft options
- Premium sealing
- Low noise

## Brevini® Plano Helical Gearboxes – High Power Series

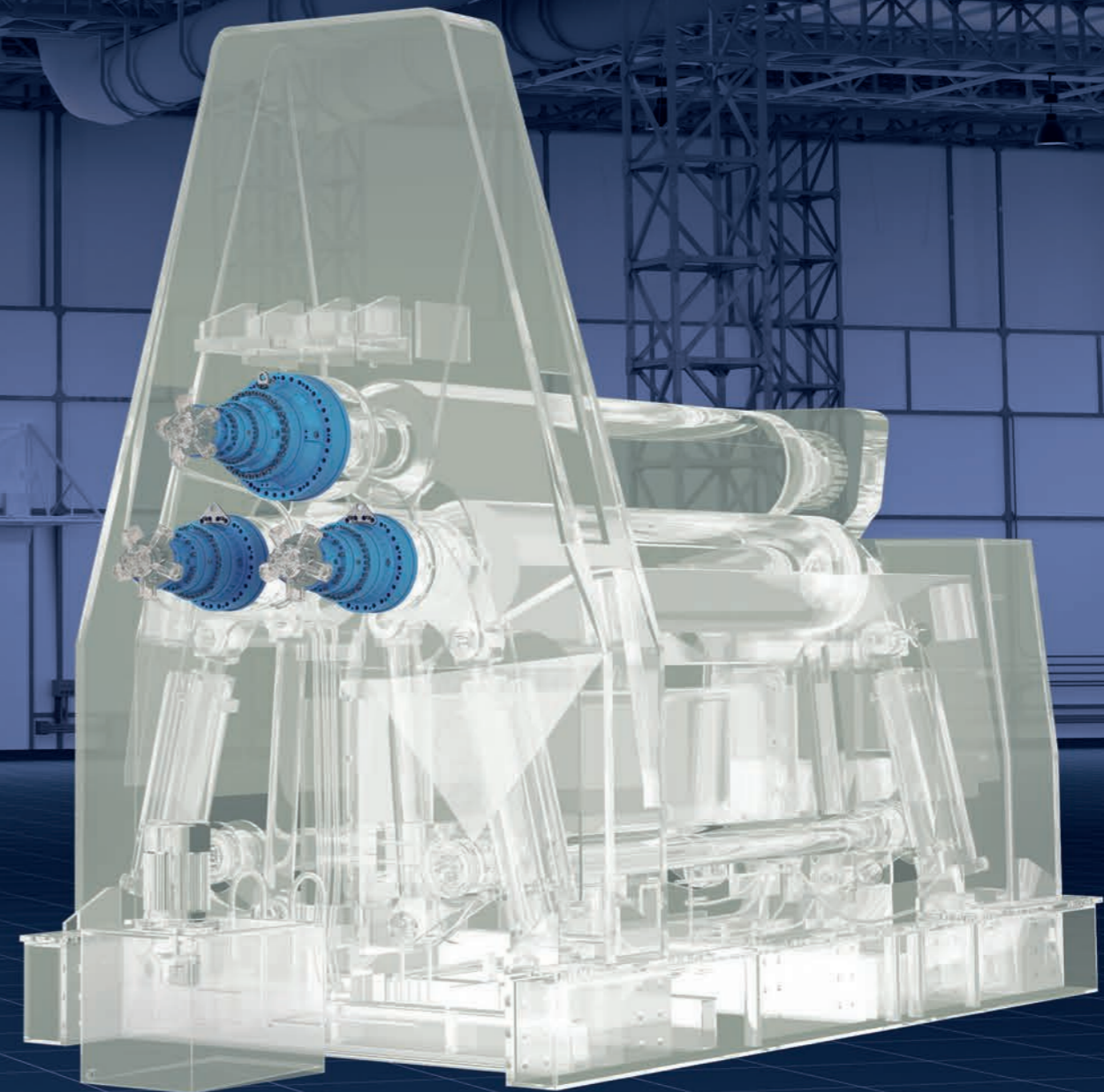
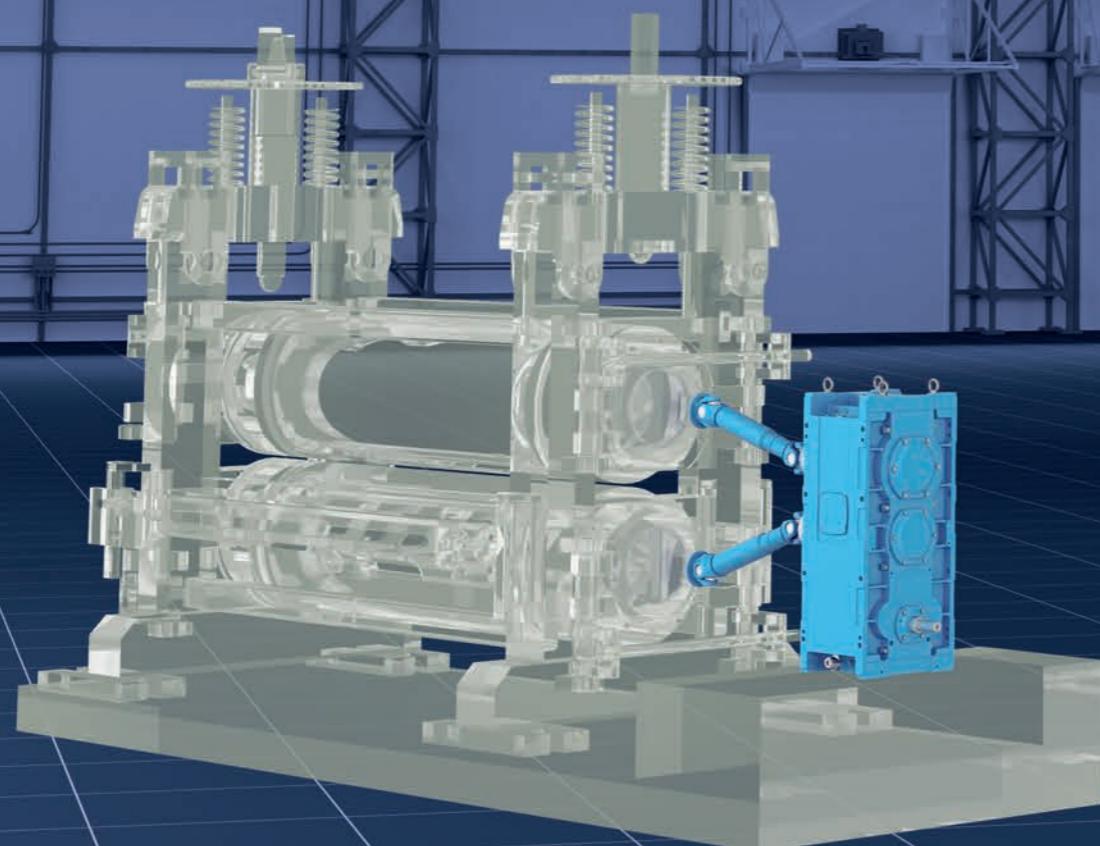
- Extensive ratio range
- Supports torque range up to 2200 kNm
- Increased thermal capacity due to shared oil chamber
- Spheroidal graphite cast iron housing
- High efficiency
- Diverse low-speed shaft options
- Premium sealing
- Low noise
- Customized male shaft with keyway

## Brevini® Helical Gearbox TS Series

- Dedicated design
- Shape and cost customization
- Double output drive
- Forced lubrication (and cooling) on board in case of need
- Extensive ratio range
- Supports torque range up to 1300kNm
- Spheroidal graphite cast iron housing
- High efficiency
- Diverse low speed shaft options and quantity of shafts
- Premium sealing
- Reliable operation

## GWB® Cardan Shaft

- Complete product range featuring flange/ swing diameter from 120 to 1300 mm
- Superior bearing life
- High torque capacity
- Designed for ease of maintenance with service-free option
- Engineered to withstand harsh conditions, proven with a 70-year history on the market
- Minimized total cost of ownership



Dana offers customized solutions to meet a range of customer needs, including modular designs and add-on accessories.