

Wind energy sector

BOLTING SOLUTIONS FOR WIND TURBINES





Our solutions for wind turbines

OEMs, service and construction companies of wind turbines worldwide rely on PLARAD's comprehensive system solutions. Whether production, assembly or maintenance, on- or offshore. Our bolting tools are reliable, easy to use and guarantee the safety of your employees.

Our customers also appreciate precision, speed and sustainability of our tools, which thus contribute to their productivity. From rotor blades to foundations – our hydraulic and electric tensioning and bolting tools are versatile. Thanks to our smart units, you gain added value – you can automatically record your bolting data and thus make your processes even more efficient.



Battery nutrunner

smart mesurement on

DA2 series for mobile and fast pre tightening

- · optimized handling
- · light and compact
- · patented automatic locking
- · integrated free rotation function
- · active two-steps battery charge indication
- · torque range up to 8,000Nm
- protects the user's muscles and joints and prevents development of HAVS (Hand-Arm-Vibration Syndrome).
- · optional smart functions for documentation



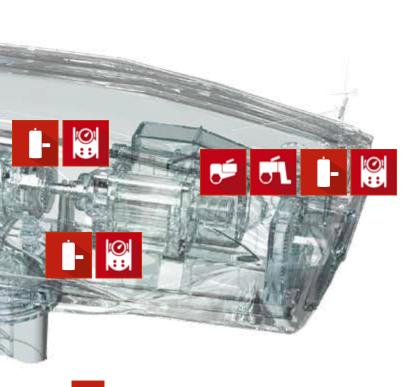
Electric nutrunners

smart mesurement

The DE2 nutrunners for fast and safe pre tightening

- the standard version of the electric nut runner
 DE2 comes with a large variety of features
- the O-LED display affords the user outstanding ease of use and a comprehensive range of indicators.
- the DE2plus extends the feature set of the standard version: torque/torque angle mode, torque limit, torque angle, counted torque angle and a test mode





Low clearence torque wrenches

FSX – the high performance hydraulic torque wrench

- high bolting speeds thanks to optimum harmonization with Plarad power packs
- · torque range 100 45,000 Nm
- · operating pressure up to 800 bar (11,600 psi)
- service friendly due to automatic opening and closing pressure safety valve and high-pressure safety cylinder
- · low maintenance costs thanks to spherical drive system
- fine spline ratchet system for high torque precision and no jamming

Square drive torque wrenches

High torque hydraulic wrench MX-EC

- high bolting speeds thanks to optimum harmonization with Plarad power packs
- · torque range 200 65,000 Nm
- · operating pressure up to 800 bar (11,600 psi)
- service friendly due to automatic opening and closing pressure safety valve and high-pressure safety cylinder
- · for the use of interchangeable sockets
- fine spline ratchet system for high torque precision and no jamming

j.

Hydraulic tensioners

Frictionless assembly and disassembly of bolted joints without torsional loads in the bolt thanks to our PSE, PSD or PSQ tensioner series

- · pre-tensioning force can precisely be adjusted
- · Individually adaptable to any bolting situation
- · single-stage and multi-stage available
- · bevelled support surface to protect weld seams
- · recesses for adjacent bolts
- · easy connection of spacer rings for height adjustment
- · safe due to the tightening depth indicator and the stroke limiter.
- · optional cycle counter for on time service



Tensioner power packs



Hydraulic power pack TAX for tensioners

- the tension process is monitored by microprocessor technology and controlled fully automati cally until it is switched off
- Tensioning process is fully automatic and confirmed by LED
- No overheating due to special under-oil motor technology and high-speed cooling system
- higher accuracy and control ensure shorter assembly times
- Documentation via the optional control unit. Proof that the correct pressure and holding time have been reached.



Hydraulic power packs

smart mesurement and documentation

Hydraulic power packs for hydraulic wrenches

- · high bolting speeds
- handheld and remote control keep an eye on all operating parameters: motor and oil temperature, operating hours, power consumption and pressure
- · available as manual and full automatic versions
- · very robust thanks to the stable frame construction
- extremely durable thanks to proven pump and valve technology
- · 50/60 Hz version for on- and offshore applications
- the fully automatic version provides torque/torque angle mode, torque limit, torque angle, counted torque angle and a test mode
- no overheating due to special under-oil motor technology and high-speed cooling system
- · compact and lightweight design for use at great heights

Special applications and solutions



















Have we piqued your interest?

Then simply get in touch with our specialists, we look forward to your enquiry!







... a successful connection!

Maschinenfabrik Wagner GmbH & Co. KG Birrenbachshöhe 17 · 53804 Much · Germany

www.plarad.de