

PLARAD® MESSENGER

THE OFFICIAL COMPANY NEWSLETTER



Plarad's advanced bolting automation

Plarad introduces an advanced automation solution featuring a large mobile platform with up to 10 degrees of freedom including Plarad's segment, integrating a robust Comau NJ-165-3.0 robot arm. Capable of moving payloads up to 165 kg, this system ensures safe operation with its internal safety mechanisms and offers omnidirectional movement at speeds up to 1.4 m/s, using laser scanners for obstacle recognition and autonomous driving. In cooperation with RWTH-WZL Aachen and Broetje-Automation, Plarad is pushing the boundaries of automated industrial bolting.

Tools such as tensioners or nutrunners from Plarad can be seamlessly attached to the arm, enabling it to autonomously fasten and loosen bolts with minimal human involvement. This makes it an ideal tool for production facilities and various industrial applications. With its modular architecture and real-time control, Plarad's solution enhances automation processes, offering unparalleled efficiency and reliability across multiple sectors.



Technical Specifications

- Payload capacity: Up to 165 kg
- Degrees of Freedom: 10
- Movement Speed: Up to 1.4 m/s
- Safety Features: Internal safety system, laser scanners
- Autonomous driving: Nvidia Isaac Sim
- Manoeuvring speed: 250 mm/s
- Navigation: Lidar & ROS2

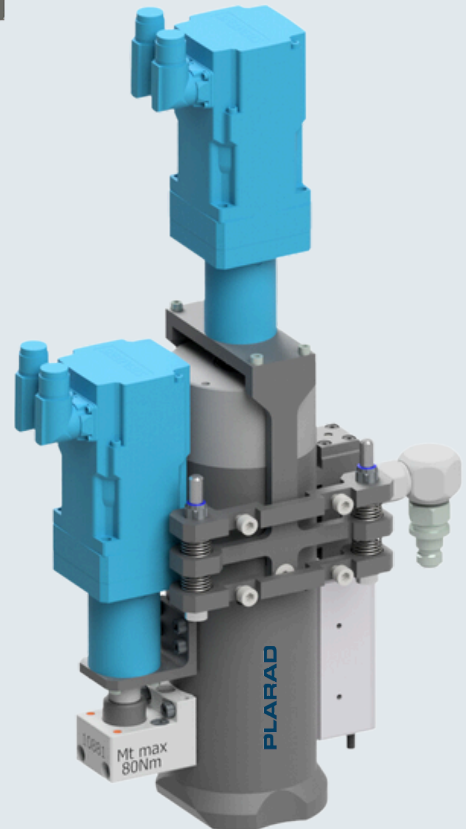
Key Benefits

- Efficiency and Precision: Plarad's Hydraulic Tensioners with the robotic arm ensures precise bolt fastening and loosening
- Ergonomic Design: Confined spaces and bottom-up tightening applications
- Minimal Human Involvement: Enhances safety and productivity
- Versatile Applications: Ideal for wind energy, manufacturing, and more
- Safety: Advanced safety features ensure reliable and secure operations

Use Cases

- Wind Energy: Automated manufacturing of larger components such as gear boxes, rotor, stator, shrink disc
- Heavy machineries: Bolting of slewing ring of excavator or hydraulic cylinder

Explore how Plarad's torque and tensioning tools can transform your automation process today!



For more information and further technical details, please feel free to contact us.