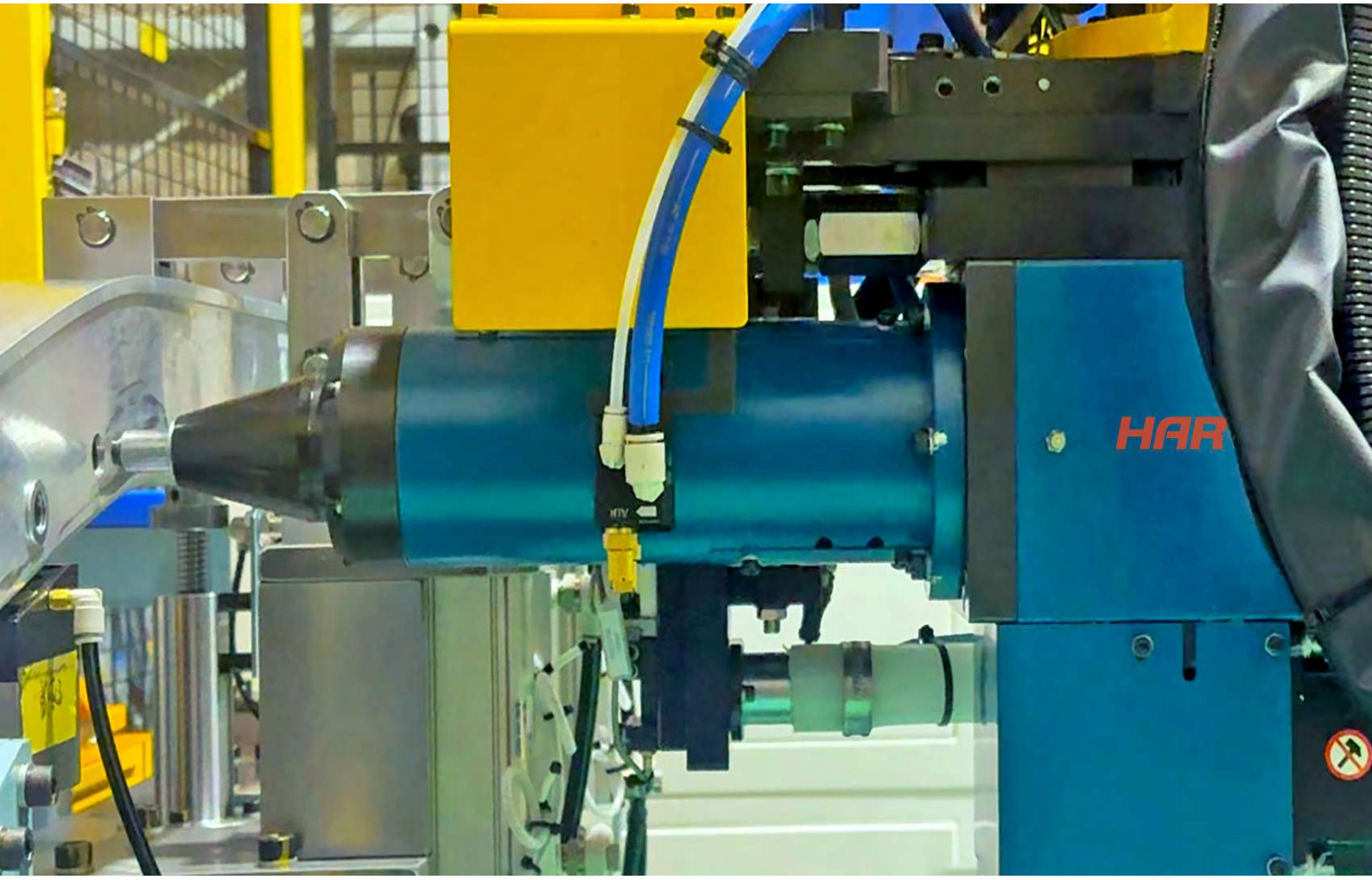
HDRNS

Automatic Rivet Nut System with Visual positioning



3D Vision Guidance + Fully Automatic Servo-Controlled Rivet Nut Riveting System

— HDRNS

HARDY Rivet Nut System

Features:

- Patented floating head design enables X/Y-axis and angular adaptive riveting
- Adaptive Sheet Metal Riveting
- Dual servo drive system with full-process monitoring
- Up to 60kN setting force (M16 and below compatible)
- Quick-change head configuration

Innovation • Excellence • Leadership

HARDY

HDRCS

Handheld Rivet nut setting control system

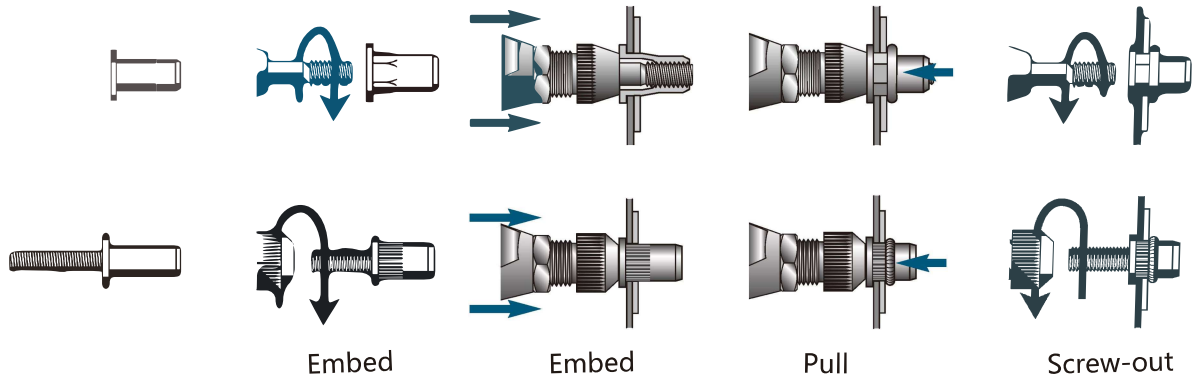
Rivet Nut /Stud System

Pneumatic Rivet Nut/Stud Tool

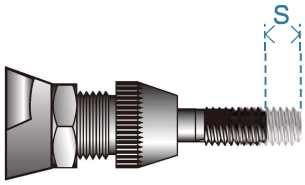
Cordlessc Rivet Nut Tool

Innovation · Excellence · Leadership

Process Technology

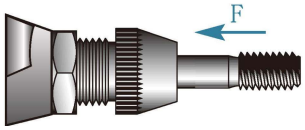


Riveting Control Solutions



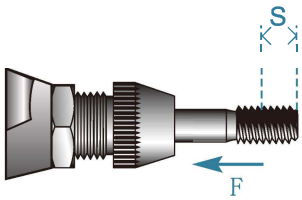
Stroke Control Mode - based on preset stroke parameters

- Ideal for materials with consistent and uniform thickness
- Fast and simple operation



Pressure Control Mode - based on preset riveting force

- Provides stable riveting for materials with thickness variations
- Force sensors enable quality monitoring



Pressure-Stroke Hybrid Control - Simultaneously monitors force and displacement

- Delivers optimal adaptive riveting for variable material thickness
- Enhanced quality control with graphical data visualization & dataization of all riveting anomalies
- Multiple program storage for automatic product changeover
- Maintenance logs for optimal mandrel life management
- Single tool compatibility with various rivet nut specifications

HDRNS Automatic Rivet Nut System

Technical Parameters

Applicable rivet nut/stud	≤M16（rivet nut materials: stainless steel, steel, aluminum）
Applicable material thickness	≤14mm
Setting force	≤ 60kN
Force control accuracy	1N
Displacement control precision	0.01mm
Drive power	Dual servo system
Power supply	380V/50Hz
Bus communication protocol	EtherNet/IP、ProfiNet、DeviceNet etc.

HDRCS Handheld Rivet Control System

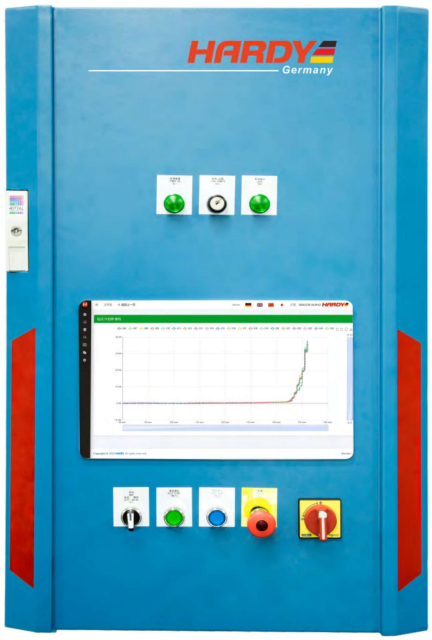
HDRCS

Technical Parameters

Applicable rivet nut	Nosepiece of M3, M4, M5, M6, M8, M10, M12 for rivet nut tool of M3~M12
Pull Force Range (kN)	22.5 （MAX adjustable） /6bar
Stroke (mm)	10 mm(MAX djustable)
Air Pressure (M Pa)	0.55-0.7MPa
Tool weight	2.8KG
HMI Hardware/Software	Yanhua Industrial PC+HUADA Software
Pressure Sensor Accuracy	±0.3kN
Displacement Sensor Accuracy	±0.1mm
Cycle Time	5S~6S (Depends on operation)
Operating Temperature	-10°— 45°
Humidity	< 95%
Device Noise Level	< 75db(1 M)
Power Supply	AC220/380V 50Hz

Independent control system

- Standardize "embedded PC" control
- The standard HMI for parameter setting,data curve viewing,and Error alarm reminde
- Simple and intuitive interface,password protected access levels
- The riveting process is automatically monitored to ensure the quality of riveting
- Data acquisition allows important data to be uploaded to the factory MES to ensure product quality
- Multiple communication protocols such as EtherNet/ IP, ProfiNet, equipmentNet,CC-Link etc.



Automatic fastener feeding system

Features:

- Direct Blow-Feed to Rivet tool Nozzle
- Simplified & Stable Design
- Customizable Feed Channels to fit fasters
- Modular components for easy maintenance repair

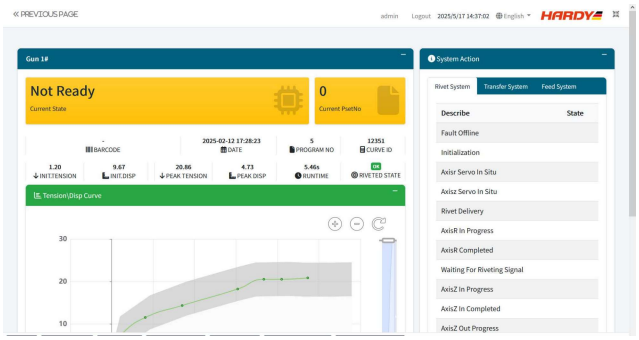
Multi-Spec Remote Transfer

Feeding hose

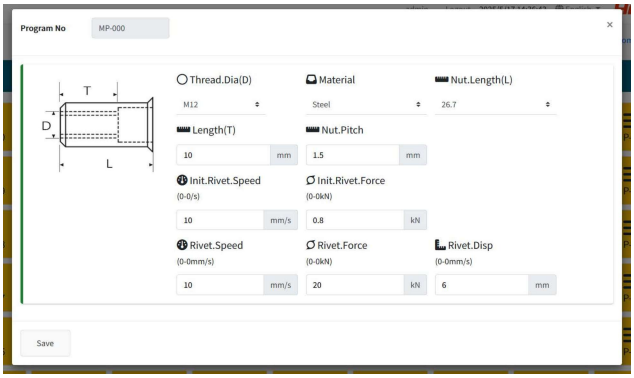
Features:

- Multi-Spec
- Remote Transf

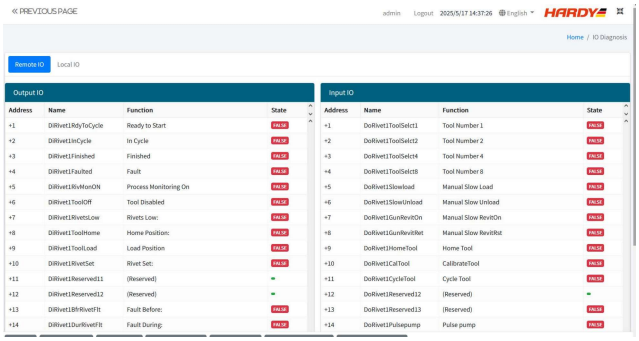
Software



Status display

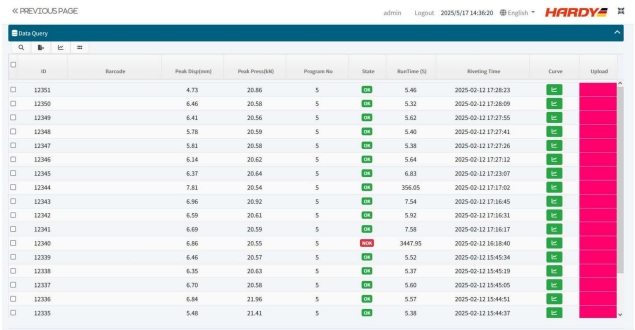


Quick program settings



IO Definition

Curve analysis



Data acquisition