

# PRESTON

Industrial Assembly Solutions for High-Value Manufacturing



PRECISION • ASSEMBLY • SOLUTIONS

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# BRIDGING MACHINES, SYSTEMS & **PEOPLE**

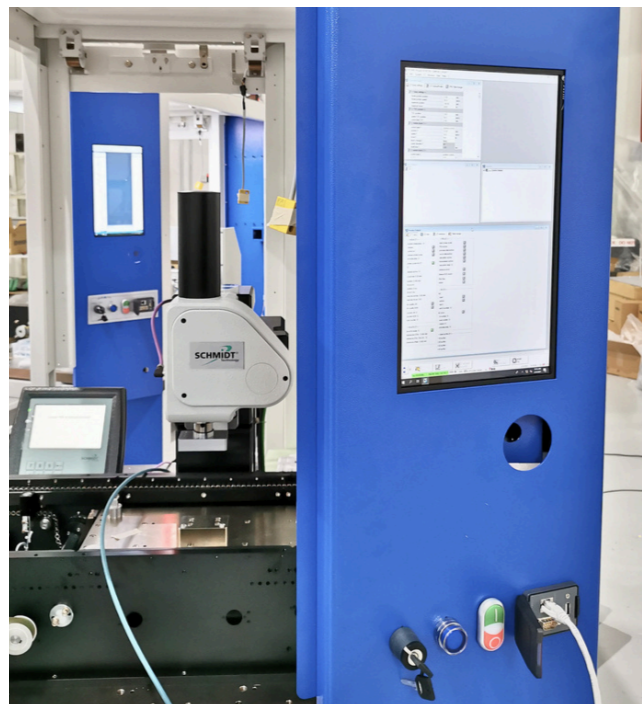
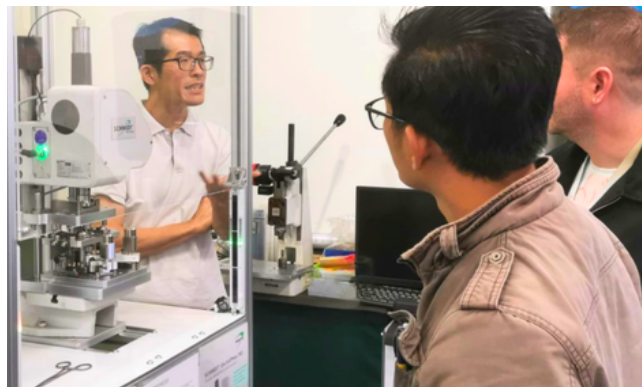
Preston Technology Sdn Bhd delivers industrial assembly and automation solutions for high-value manufacturing environments. Our work covers controlled pressing, smart fastening, custom tooling, MES-ready production data, training, and regional technical support.

We support high-mix, low-volume and quality-critical production environments where every process must be controlled, verified, and repeatable.

**60+**  
Systems & workstations delivered

**25+**  
Manufacturing partners supported

**10+**  
Years of engineering experience



*Real applications, engineering discussion, and production-ready systems brought together for customer assembly needs.*

## CONTROL • VERIFY • TRACE

Every process must be controlled, verified, and traceable.

High-value manufacturing requires more than equipment. Every press, fastening, and assembly process must deliver repeatable quality, reliable process data, and audit-ready production records.

When assembly processes are not controlled, small variations can quickly become quality, traceability, and uptime risks.

Common Assembly Challenges:

### **Manual Variation**

Operator-dependent processes can lead to inconsistent results, errors, rework, and quality risk.

### **Missing Process Records**

Without data capture, it becomes difficult to trace each part, batch, operator, station, and process result.

### **Disconnected Systems**

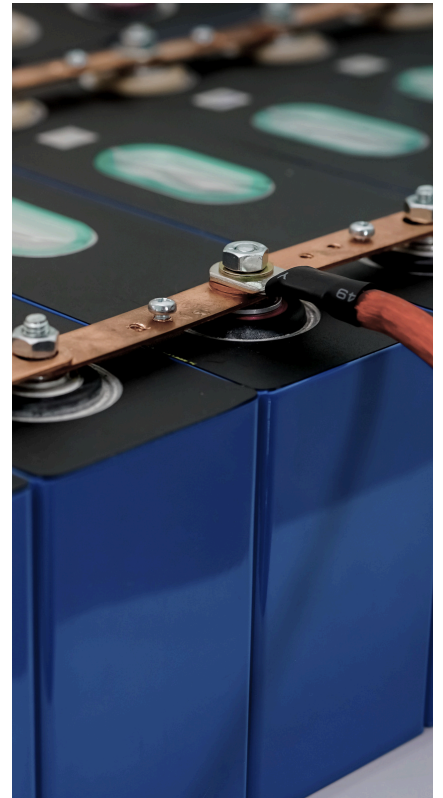
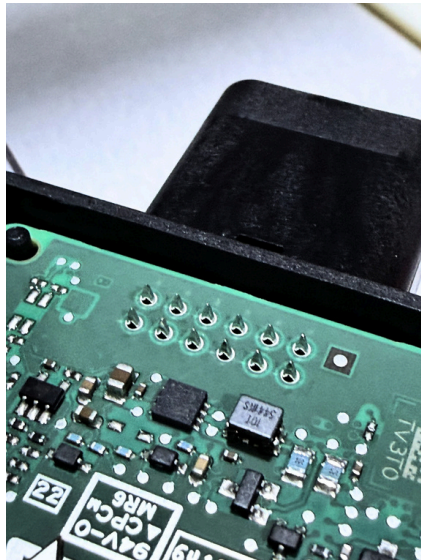
Machines, tools, and production systems often operate separately, making MES integration, troubleshooting, and uptime support harder.



*Manual assembly processes can create variation when control, verification, and data capture are not built into the workflow.*

# BUILT FOR HIGH-VALUE INDUSTRIES

Precision and reliability  
for critical assembly  
environments.



## **Aerospace**

Precision forming and joining for high-specification components requiring process reliability, secure assembly, and production records.

## **Electronics**

Compliant pin press-fit, PCB connectors, snap-fit assemblies, and delicate components requiring controlled insertion, fastening accuracy, and data capture.

## **Medical**

Controlled assembly support for regulated production environments requiring repeatability, validation, and digital production records.

## **Automotive & EV**

EV battery modules, connectors, sensors, and safety-critical parts requiring torque control, press-fit accuracy, and recorded process results.

# WHERE FORCE, POSITION & PROCESS DATA COME TOGETHER

# CONTROLLED

Preston helps manufacturers select the right pressing platform based on process, volume, quality requirement, and data integration needs.



## **Force-Stroke Process Monitoring**

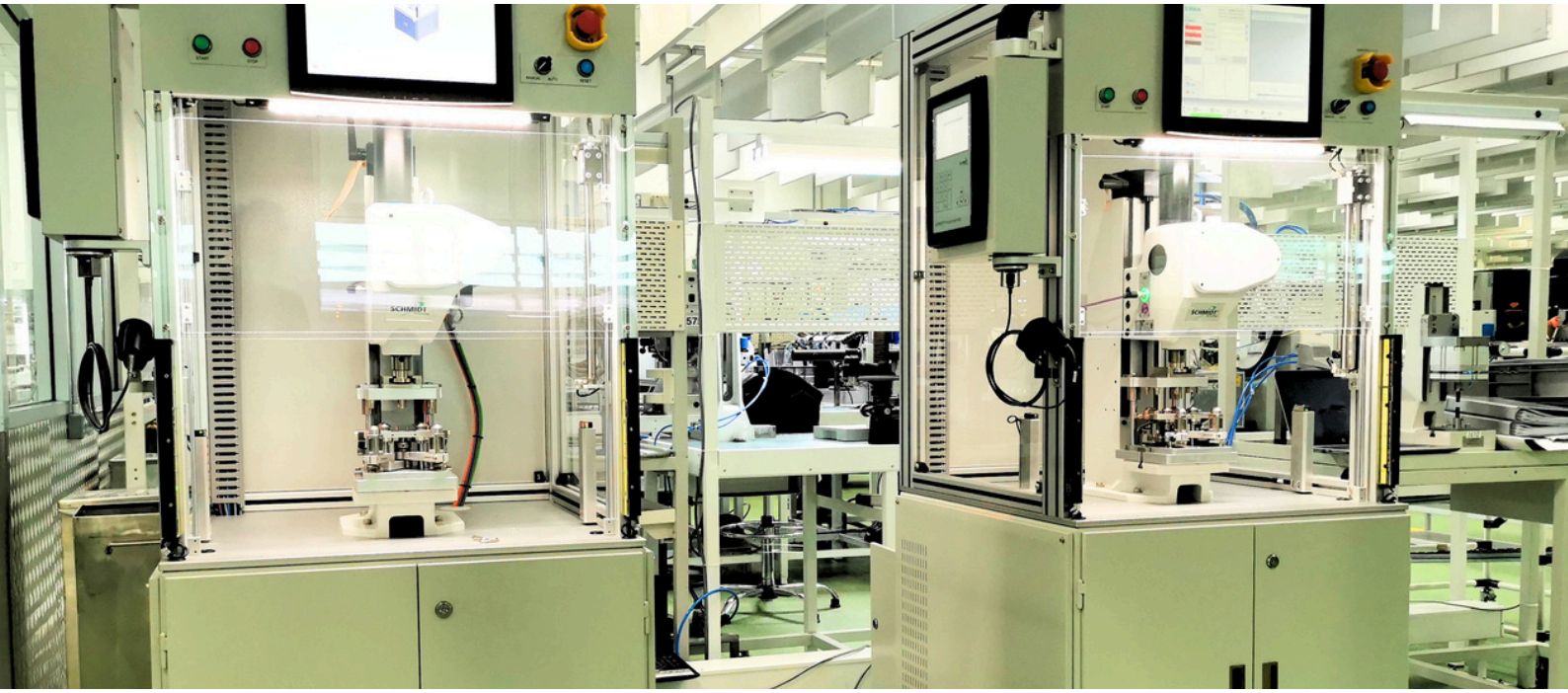
Capture force, stroke, and result data to verify every press cycle against defined process limits.

## **Manual to Automated Pressing**

Scalable press solutions from manual workstations to semi-automatic systems and automated assembly cells.

## **Custom Tooling & Workholding**

Punches, dies, fixtures, and part-support concepts designed around the product, process, and production requirement.



# PRESSING

Every stroke is measured.  
Every result is documented.



*Preston brings SCHMIDT Technology GmbH press technology into production through local tooling, system integration, and technical service.*

## **Press-Fit, Joining & Forming**

Controlled insertion, joining, riveting, staking, and forming operations for quality-critical components and assemblies.

## **Tooling & Workholding Support**

Punches, dies, fixtures, and part-support concepts designed around the product, process, and production requirement.

## **Process Data & Result Verification**

Capture force, stroke, and result data to verify each press cycle against defined process limits.

# WHERE TORQUE, ANGLE & JOINT DATA COME TOGETHER

# SMART

Preston helps manufacturers select the right fastening platform based on joint requirement, operator workflow, quality control, and data needs.

## **Torque & Angle Control**

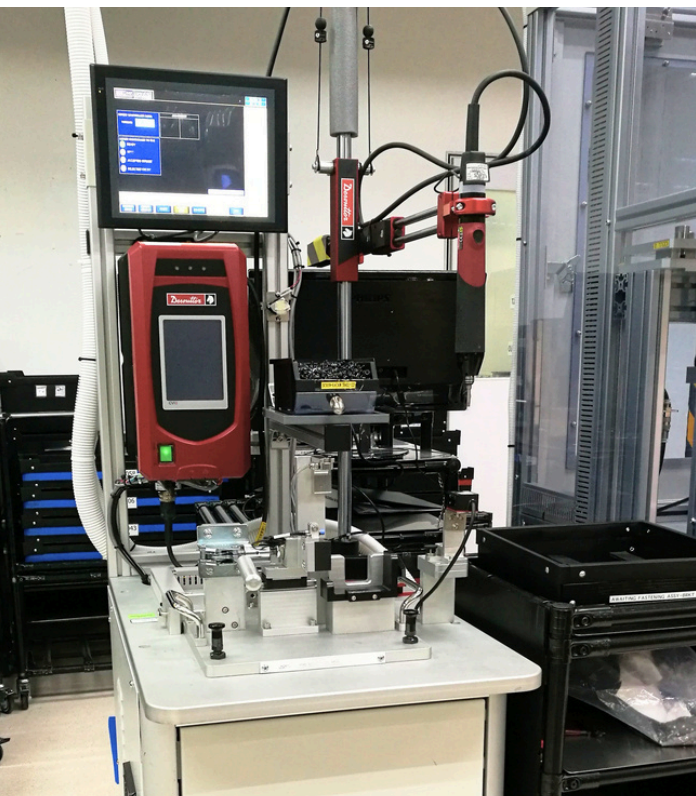
Control tightening parameters for consistent fastening results.

## **Error-Proofing & Verification**

Detect fastening errors through controlled process limits and pass/fail checking.

## **Guided Joint Traceability**

Guide fastening sequence and capture tightening data for every joint, part, station, operator, and batch.





# FASTENING

Every joint matters.

*Preston supports fastening applications where joint quality, control, and reliability matter.*

## **Safety-Critical Fastening**

Support fastening applications where joint quality, consistency, and assembly reliability are critical.

## **Flexible Workstation Setup**

Integrate fastening tools into manual, semi-automatic, or guided assembly workstations based on process and operator flow.

## **Fastening Technology Integration**

Preston integrates suitable torque tools and fastening technologies, including **ASG**, **Sumake**, and **Tohnichi**, for controlled assembly applications.

# FROM PROCESS DATA TO PRODUCTION RECORDS

## Press & Fastening Data Capture

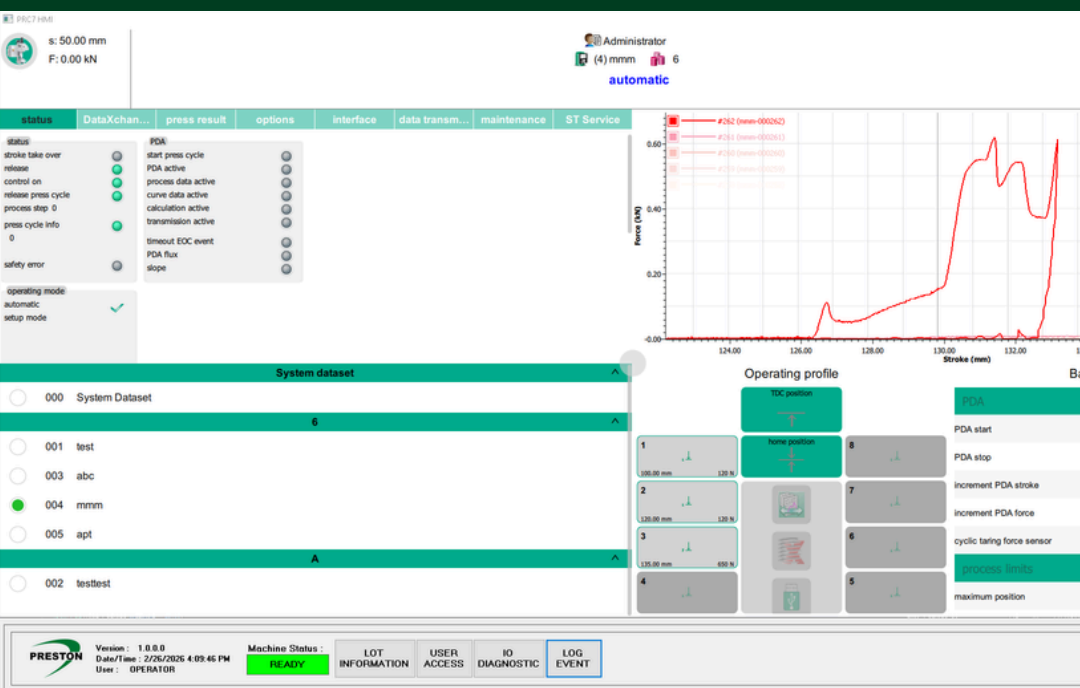
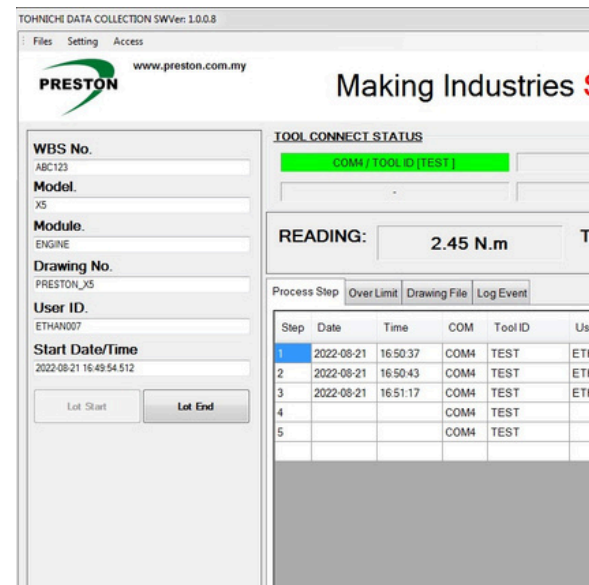
Record key process values such as force, stroke, torque, angle, cycle result, operator ID, and batch information during operation.

## Batch & Operator Reports

Organize production results into structured reports by operator session, batch, part, or production run.

## MES-Ready Data Output

Prepare process records for export or connection to the customer's MES, OEE, database, or Industry 4.0 systems.



*Data captured.  
Records structured.  
Output ready.*

## Tooling is where process stability begins.

Preston designs tooling and fixtures around the part, process, force direction, operator flow, and quality requirement.

### **Part Positioning & Stability**

Locate, support, and secure components accurately while managing alignment, pressing force, and fastening reaction during operation.

### **Repeatable Process Flow**

Standardize how parts are loaded, held, assembled, and released to reduce operator variation and support consistent cycle-to-cycle results.

### **Error-Proofed Handling**

Poka-yoke features help prevent wrong orientation, incorrect placement, missed steps, and process variation.



*The right fixture does not only hold the part.  
It controls the process.*

# DESIGNED FOR CONSISTENT OUTPUT



# FROM APPLICATION TO DEPLOYMENT



*A structured path from application review to production readiness.*

## **01 Involve**

Work closely with the customer to understand the product, process, quality requirements, KPIs, operator flow, and data needs.

## **02 Resolve**

Design the workstation, select the right technology, develop tooling, validate the process, and prepare the system for production.

## **03 Evolve**

Support commissioning, training, technical support, performance improvement, and future upgrades.

# OPERATE WITH CONFIDENCE



Preston provides training and technical support to help customer teams operate, maintain, and understand their assembly systems with confidence after handover.

### **Operator Training**

Structured guidance on system operation, safe handling, process flow, and daily production use.

### **Process Understanding**

Training on key process parameters, quality checks, pass/fail results, and data interpretation.

### **Maintenance Training**

Basic maintenance practices, inspection points, troubleshooting steps, and care routines for long-term reliability.

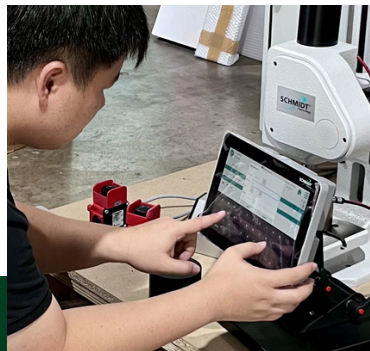
### **System Handover**

Support during commissioning and production handover to help the team transition smoothly into operation.

# LOCAL SUPPORT ACROSS SOUTHEAST ASIA

Preston stays connected after installation, supporting customers across Southeast Asia with the service structure needed to keep production moving.

- **Corrective & Remote Support**
- **On-Site Technical Support**
- **Spare Parts Coordination**
- **System Improvement & Upgrades**



Malaysia • Singapore • Thailand • Vietnam • Philippines

# MORE THAN EQUIPMENT.



## A COMPLETE ASSEMBLY SOLUTION PARTNER.

### **Process-Driven Engineering**

Designed around the product, process, quality requirement, operator flow, and production goal.

### **Controlled Assembly Solutions**

Pressing, fastening, tooling, and data-ready workstations for quality-critical manufacturing.

### **Training & Regional Support**

Training, commissioning, and regional technical support for long-term production confidence.



Controlled. Connected. Ready for the future.



LET'S BUILD  
YOUR NEXT  
ASSEMBLY SOLUTION



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