



Intuitive Graphical User Interface

Cost-Effective, Friction Stir Welding Machine For Research and Development

The RM-1 from Manufacturing Technology, Inc. is our most popular Friction Stir Welding machine. The machine features high force and low spindle run-out and full data acquisition capabilities for FSW research.

APPLICATIONS:

- Designed for stiffness and low spindle runout for welding steels and high temperature alloys with PCBN tools
- Features a user-friendly operator interface which includes full data acquisition and display capability. Programmed and actual forces may be displayed along with position and velocity data
- Now in use by Spirit Aerosystems, Mitsubishi Heavy Industries and Idaho National Laboratory for advanced FSW research

Manufacturing Technology, Inc. offers consulting, design and build services for Friction Stir Welding machines and tooling. We are licensed and listed by The Welding Institute (TWI) as a Friction Stir Welding machine manufacturer.

SYSTEM SPECIFICATIONS:

- X axis:** 700mm Standard, 3000mm Available
3000mm/min velocity, servo controlled
- Y axis:** 300mm stroke (optional servo)
- Z axis:** 200mm stroke
67 kN (15,000lbf) axial force
- 3 Control Modes:**
 - Force Control
 - Position Control
 - Position with Deflection Compensation
- Tilt:** 0 to +6 degrees
- Spindle:** 15 kW (20 HP) Vector Drive
Up to 3000 RPM available
Up to 268 Nt-m (2360 lb-in) torque
NMTB 50 Mounting Taper
Ultra-low run out Spindle for PCBN Tools
- Weldable Materials Include:**
 - Carbon steels, HSLA,
 - 304 & 316 Stainless
 - Inconel 600, 718



Manufacturing Technology, Inc.
Solid-State Joining & Welding Solutions, Equipment & Services

1702 West Washington Street | South Bend, IN 46628 | www.mtiwelding.com | Phone: (574) 233-9490

DIRECT DRIVE - INERTIA - LINEAR - STIR - RADIAL - RESISTANCE



www.mtiwelding.co.uk



www.mtiwelding.com



www.mti-nash.com