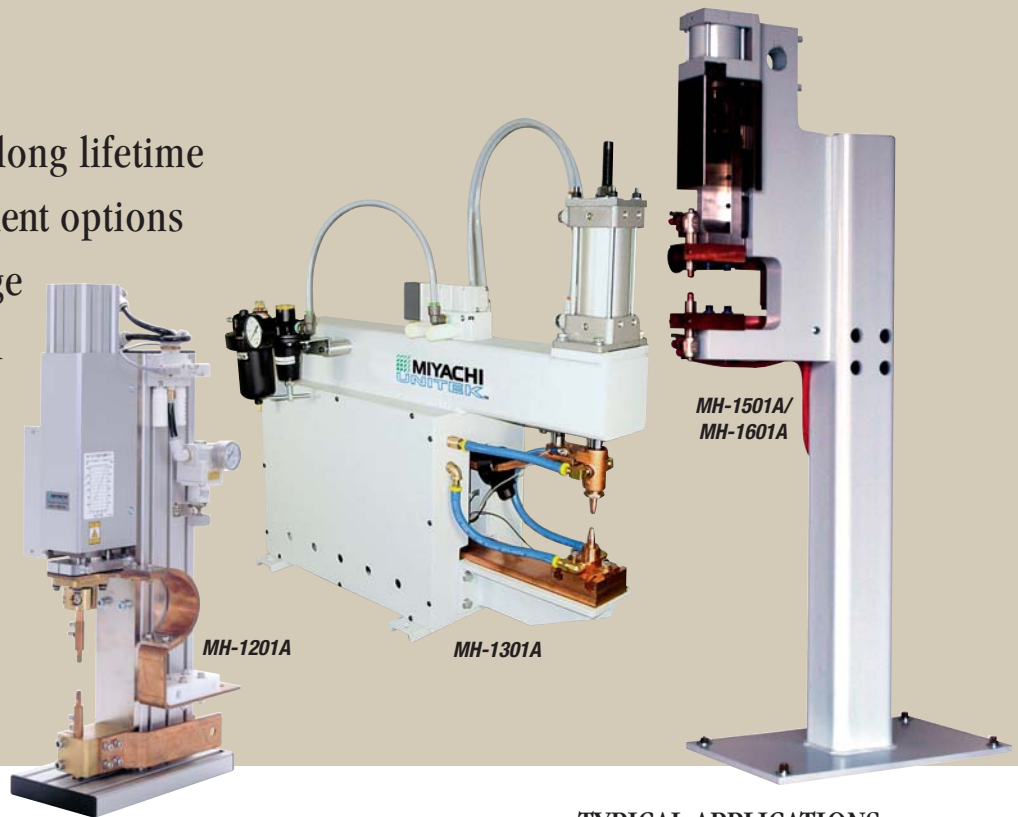


MH Weld Head Range

resistance welding

- Fast follow-up designs
- Precision bearings for long lifetime
- Load cell and displacement options
- 70-1600 lb. force range
- Benchtop and pedestal options



Fast follow-up designs

Improve weld consistency and reduce material expulsion

Rugged and hard wearing

Precision slides and solid construction provide long lifetimes

Load cell and displacement options

Measure force and weld displacement for complete process benchmarking

Force range optimization

Pre-selected cylinder sizing to optimize force range to application

Benchtop or Pedestal

Flexible mounting for manual or automated stations

TYPICAL APPLICATIONS



Welding automotive stamping



Terminal connections



Nut welding



Component frame construction



Magnet wire termination

Spirit Of Innovation™
MIYACHI
UNITEK™

MH-1201A

Force Range: 70 -265 lbs.
10kA Secondary

Key Features

- Integrated in-line spring for fast follow-up
- Precision linear bearings for long life
- Precision anti-rotation bearing ensures proper alignment of upper electrode assembly
- Optional displacement sensor mount
- Optional internal load cell
- Throat depth 2.9 inches

The MH-1201A head is an in-line weld head with spring follow-up, mounted to a rigid extrusion. Match to the IS-120B inverter for light-to-medium welding applications.



MH-1301A

Force Range: 97-393 lbs.
10kA Secondary

Key Features

Integrated transformer inside head

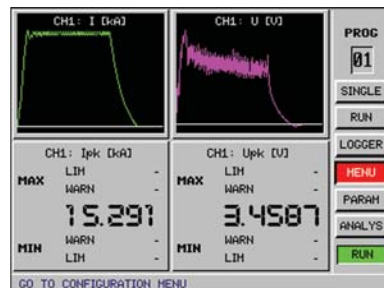
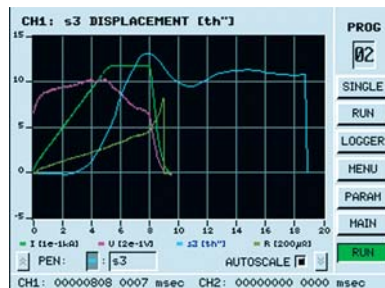
- Low friction cylinder for fast follow-up
- 3-inch stroke for easy part loading
- Lower T-slot platen for custom tooling
- Throat depth 8 inches

The MH-1301A head has a solid welded frame with provision for an internal mounted transformer. The head features a cup style cylinder for fast follow-up, and has an optional lower electrode holder.

MG3 Digital Process Monitor

Key Features

- Monitor current, voltage, displacement, and force
- Set limits and process envelope for all parameters
- Time stamped data logging
- Full on-screen SPC capability
- Can be used on any welder



The MG3 provides an invaluable window into the welding process. Being able to see overlaid current, voltage and displacement traces provides a key understanding of the weld. Once a weld is optimized, the MG3 can be used to envelope a waveform, program warning and out-of-process limits, as well as provide full SPC data logging and analysis.

Miyachi Inverters Matched to

Inverter Key Features

- 1 kHz feedback frequency
- Secondary and primary RMS or peak constant current, voltage, power control modes
- Built-in monitor and limit setting for current, voltage, power and time
- Matched plug-and-play transformers
- Optional programmable force control weld-to-displacement interrupt

STA-100 AC Key Features

- Percent heat and primary RMS control modes
- Monitor RMS current and conduction angle
- Optional voltage monitoring and electronic pressure regulation
- Differential pressure monitoring



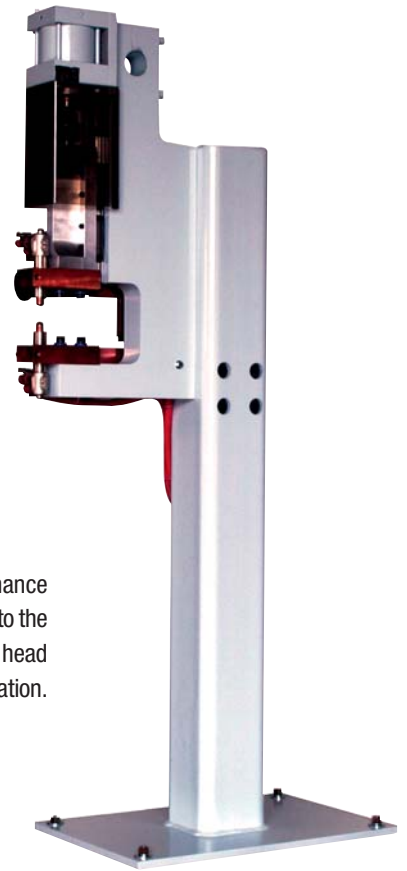
MH-1501A/MH-1601A

Force Range: 250-1570 lbs.
24/40kA Secondary

Key Features

- Benchtop or pedestal options
- Low inertia ram with integrated accelerator for fast follow-up
- Ram mounted to slide with zero clearance ball bearings to ensure precise movement
- Many cylinder options for different force ranges
- Throat depth 8 inches

The MH-1501A and larger MH-1601A are high performance weld heads with the flexibility to optimize the force range to the application. Five different cylinder options mean that the head is always working in the best force and follow-up combination.



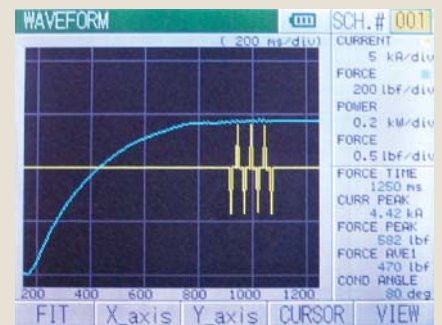
MH Range



MM-380A Handheld Weld Checker

Key Features

- Measure current, voltage and force
- Weld-through sensor measures current and force between the weld electrodes
- Easy screen navigation with thumb wheel and intuitive on-screen analysis
- RS232 output
- Auto shut-off promotes long battery life



Force and current trace provides optimization tool for timing.

GENERAL SPECIFICATIONS

	MH-1201A	MH-1301A	MH-1501A	MH-1601A
Electrode Force at 20psi, lbs (kg)	97 (44)	98 (44)	See Below	See Below
Electrode Force at 60psi, lbs (kg)	265 (120)	—	See Below	See Below
Electrode Force at 80psi, lbs (kg)	N/A	393 (178)	See Below	See Below
Air Cylinder Size, inches (mm)	2.48 (63.0)	2.50 (63.5)	2, 3.25, 4 (51, 83, 102)	4, 5 (102, 127)
Electrode Holders	4RW, (#1 MT)	4RW, (#1 MT)	5RW, (#2 MT)	5RW, (#2 MT)
Valve Voltage	115VAC, 24VDC Optional	115VAC, 24VDC Optional	115VAC	115VAC
Electrode Stroke, inches (mm)	1.4 (36)	3 (76)	1.25 (32)	3 (76)
Throat Depth, inches (mm)	2.9 (74)	8 (203)	8 (203)	8 (203)
Max. Secondary Current	10kA	10kA	See Below	See Below

FORCE RANGES OF MH-1501A AND 1601-A HEADS

	MH-1501A	MH-1601A
Force, 2-inch Cylinder at 20psi, lbs, (kg)	63 (29)	N/A
Force, 2-inch Cylinder at 80psi, lbs, (kg)	251 (114)	N/A
Force, 3.25-inch Cylinder at 20psi, lbs, (kg)	166 (75)	N/A
Force, 3.25-inch Cylinder at 80psi, lbs, (kg)	664 (301)	N/A
Force, 4-inch Cylinder at 20psi, lbs, (kg)	251 (114)	251 (114)
Force, 4-inch Cylinder at 80psi, lbs, (kg)	1005 (456)	1005 (456)
Force, 5-inch Cylinder at 20psi, lbs, (kg)	N/A	393 (178)
Force, 5-inch Cylinder at 80psi, lbs, (kg)	N/A	1570 (712)

CURRENT RANGES OF MH-1501A AND 1601-A HEADS

	MH-1501A	MH-1601A
Light Duty Secondary, kA	12.3	12.3
Heavy Duty Secondary, kA	24	40

PHYSICAL CHARACTERISTICS

Dimensions	Dimensions will be different for options ordered. Call Miyachi Unitek.
Weight	Weights will be different for options ordered. Call Miyachi Unitek.

Your Local Representative



Corporate Office: 1820 S. Myrtle Ave. • P.O. Box 5033 • Monrovia, CA 91017-7133 USA
 Tel: (626) 303-5676 • FAX: (626) 358-8048 • E-Mail: info@miyachiunitek.com
 Internet <http://www.miyachiunitek.com> • ISO 9001 Certified Company

EASTERN (USA) Sales Office:
 170 Cross Street
 Boylston, MA 01505
 Tel: (508) 869-0583
 FAX: (508) 869-0585
 E-Mail: eastsales@miyachiunitek.com

ASIA Sales Office:
 Unit D, 20/F, Infotech Centre
 21 Hung To Road
 Kwun Tong, Hong Kong
 Tel: +852 2833-6998
 FAX: +852 2833-6672
 E-Mail: asiapacific@miyachiunitek.com

UNITEK EAPRO:
 Schootense Dreef 21
 NL-5708 HZ Helmond
 The Netherlands
 Tel: +31 492-54-22-25
 FAX: +31 492-53-62-22
 E-Mail: info@unitekeapro.com

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