

Industrial Ready-to-Weld Mig Package

- PSD™ Technology - excellent welding performance for single phase machines
- Easy change of polarity - it may be used with both conventional solid wire and self-shielding cored wire
- Easy setting of welding parameters - welding machines for light industrial shops
- Spot Time – Built-in standard
- Burn-Back – Built-in standard
- ESAB MX Torches™ - designed to provide the utmost in convenience and versatility
- Spool Gun Control - Standard on the Migmaster 203 & 253 with gun-on-demand



The ideal welding machine for every light industrial shop that wants rugged, simple equipment to do welding jobs of high quality. The Migmaster® 173/203/253 are step regulated welding power sources for MIG/MAG welding. Designed for medium and light-duty applications. A built-in wire feeder makes them perfect, practical solutions for fabricators, vehicle repair shops and light production users.

MIG/MAG welding

Migmaster can be used with both conventional solid wire, cored wire and self-shielding (Gasless) cored wire. It is designed for welding steel, stainless steel and aluminum.

Wire diameters from .030" (.6mm) up to .045" 1.2mm) can be used depending on model.

Easy to use

The PSD™ Technology improves welding when CO₂ or Ar/CO₂ gas mixture is used. The units are each equipped with a multi-step voltage switch and wire speed control for easy setting of welding parameters.

Units are fan-cooled and equipped with thermal over-load protection.

The Migmaster 173/203/253 can also be fitted with optional digital meter kit for precise measurement of welding parameters.

PSD™ Technology

Although the Migmaster 173/203/253 are single phase units, Power Smoothing Device™ gives them excellent welding performance in straight CO₂ as well as mixed gas. PSD™ Technology provides the same smooth welding current normally only experienced on 3-phase machines.

ESAB MXL™ Torches

Equipped with ESAB MXL torches featuring enhanced gas-cooling and ergonomic handles. Features spring loaded contact pins in the central connector to eliminate any possibility of pin misalignment.

Optimum cooling of the torches gives extended life time of the goose necks and the wear parts. You can choose gas nozzles in 3 different versions - standard, straight and conical. This provides maximum flexibility and optimum life.

Instruction Manual0349301083
 Service Manual.....0349300050
 Sales Literature (12-01-2006) ARC-23180

Technical data	Migmaster 173	Migmaster 203	Migmaster 253
Mains voltage , V, Hz	(208)230Vac 1ph 50/60 Hz.	208/230Vac 1ph 50/60 Hz.	208/230Vac 1ph 50/60 Hz.
Primary input voltage and current at 20% rated load	28A	41.0/37.0A	53.1/48.0A
Rated load at 20% duty cycle, A	170	200	250
30% duty cycle, A	139	163	200
60% duty cycle, A	98	115	140
Setting range (DC) , A/V	30 - 170	30 - 200	40 - 250
Open circuit voltage , V	19.5 - 35.5	17.5 - 33	19.5 - 42.5
Power factor at maximum current	0.9	0.83	0.92
Efficiency at maximum current, %	60	60	60
Wire feed speed, IPM (m/min)	39 - 670 (1.0 - 17)	39 - 670 (1.0 - 17)	74 - 748 (1.9 - 19)
Wire diameter, Fe, Ss	.023" - .030" (0.6 - 0.8 mm)	.023" - .040" (0.6 - 1.0 mm)	.023" - .045" (0.6 - 1.2 mm)
C	.030" (0.8 mm)	.030" - .040" (0.8 - 1.0 mm)	.030" - .045" (0.8 - 1.2 mm)
Al	.040" (1.0 mm)	.040" - 3/64" (1.0 mm - 1.2)	.040" - 3/64" (1.0mm - 1.2)
Burnback time, sec. (adj.on PCB)	0.02 - 0.25	0.02 - 0.25	0.02 - 0.25
Spot welding, sec.	0.2 - 2.5	0.2 - 2.5	0.2 - 2.5
Voltage steps	8	12	12
Dimensions LxWxH, Inches (mm)	34x17x29 (860x420x730)	34x17x29 (860x420x730)	34x17x29 (860x420x730)
Weight, Lbs. (kg)	130 lbs. (59kg)	159 lbs. (68kg)	208 lbs. (94kg)
Operating temperature, °C	-10 to +40	-10 to +40	-10 to +40
Enclosure class	IP 23	IP 23	IP 23
Application classification	S	S	S

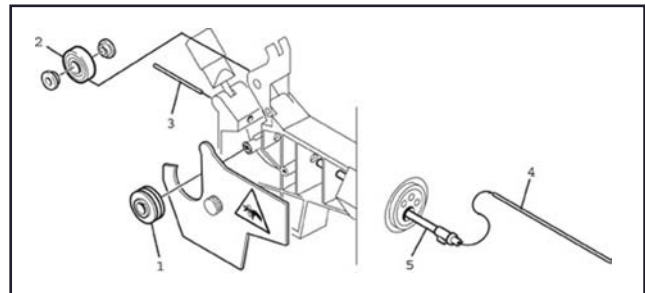
Wear Parts

Wire Dia.	Wire type	Item 1 Drive roll	Item 2 Pressure roll	Item 3 Inlet nozzle	Item 4 Insert tube	Item 5 Outlet nozzle	Groove type
.023/.030 (0.6/0.8)	Fe, Ss, C	0367556001	0455907001	0466074001	0455889001	0455886001	V
.030/.040 (0.8/1.0)	Fe, Ss, C	0367556002	0455907001	0466074001	0455889001	0455886001	V
.040/.045 (1.0/1.2)	Fe, Ss, C	0367556003	0455907001	0466074001	0455889001	0455886001	V
.040/.045 (1.0/1.2)	Al	0367556004	0455907001	0466074001	0455894001	0455885001	U

C=cored wire

Ordering Information

- Migmaster 173**, MXL 200 10 ft. Package* 0558005173
- Migmaster 203**, MXL 200 13 ft. Package*0558005174
- Migmaster 203**, MXL 200 13 ft., MT-250SG
Pool Gun Package*0558005368
- Migmaster 253**, MXL 270 13 ft. Package**0558005370
- Migmaster 253**, MXL 270 13 ft., MT-250SG
Pool Gun Package** 0558005371



Wear Parts - Migmaster 173, 203 & 253

Optional Accessories

- Digital Meter Kit** 0349307620
- Spool Spacer** - use for 8 in. (20.3 cm) diameter spools 17511
- Spool Spacer** - use for 10 in. (25.4 cm) diameter spools 34330
- Primary Extension Cord** (25 ft.) 50 amp 37833
- Gas Meter** (measures gas flow at the gun) 19043
- Output Power "Tee" connector** - 1 male, 2 female 13792804

Delivery Content

* **Migmaster 173/203; MXL 200** - .030 in. (0.8mm), .023 in. -.030 in. (0.6-0.8) drive roll, 10ft. mains cable with plug, 10ft. work cable with clamp, R-33-FM580-HB regulator/flowmeter, 5ft. gas hose, undercarriage, cylinder tray and chain, instruction manual.

** **Migmaster 253; MXL 270** - .030 in. (0.8mm), .023 in. -.030/.035 in. (0.6-0.8/0.9) drive roll, 10ft. mains cable with plug, 10ft. work cable with clamp, R-33-FM580-HB regulator/flowmeter, 5ft. gas hose, undercarriage, cylinder tray and chain, instruction manual.