

500-CLASS DOUBLE-PULSE MIG/MAG

MIG-500

500-class double-pulse MIG/MAG with air-cooled and water-cooled options.

MIG-500 is the standard 500A-class double-pulse MIG/MAG platform for distributors and industrial workshops that need a higher-current external-feeder system before moving to LCD or automation project routes.

COOLING CHOICE

Air / water

Air-cooled MIG-500 for standard high-current work, or MIG-500W when water-cooled torch support matters.



OUTPUT RANGE 30-500 A MIG/MAG welding current range	INPUT POWER AC380V +/-10%, 50 Hz, three phase	RATED DUTY CYCLE 60% rated duty-cycle value	COOLING CHOICE Air / water MIG-500 or MIG-500W
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BEST FIT Distributors, dealer showrooms, and industrial fabrication shops needing a standard 500A-class double-pulse MIG/MAG offer.	CORE REASON TO SELECT A 3-phase 380V external-feeder platform with pulse, double pulse, 10 program memory, and air / water cooling options.	BUYER SHORTCUT Choose MIG-500 for standard air-cooled work; choose MIG-500W when water-cooled torch support matters.
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SELECTION SHORTCUT

BUYER NEED	ROUTE	REASON
Need 350A-class standard pulse MIG	Use MIG-350	Lower output class and lighter standard platform.
Need standard 500A pulse MIG	Use MIG-500	Air-cooled 500A external-feeder system.
Need water-cooled 500A setup	Use MIG-500W	Integrated water cooling tank with external wire feeder.
Need LCD control workflow	Move to MIG-500X / MIG-500XW	LCD double-pulse upgrade path.
Need non-pulse CO2 MIG	Move to MIG-500 NBC	Dedicated NBC CO2 MIG/MAG route.

APPLICATION SCOPE

- External feeder**

Both options use external wire feeder handling for separate station layout.
- Cooling choice**

MIG-500 is air-cooled; MIG-500W adds water-cooled torch support through an integrated cooling tank.
- Application scope**

For LCD workflow, economy positioning, NBC CO2-only work, or automation projects, select the matching DEYUN platform.

BUYER DECISION 02

COOLING / FEEDER CHOICE



AIR-COOLED OPTION

MIG-500

FEEDER FORMAT

External wire feeder

DIMENSIONS

Main unit 970 x 475 x 685 mm; wire feeder 660 x 285 x 465 mm

WEIGHT

59 kg main unit + 22 kg wire feeder

Best for high-current 500A pulse MIG/MAG work where air-cooled torch setup is enough for the buyer's station.



WATER-COOLED OPTION

MIG-500W

FEEDER FORMAT

External wire feeder + integrated water cooling tank

DIMENSIONS

Main unit 970 x 475 x 925 mm; wire feeder 660 x 285 x 465 mm

WEIGHT

74 kg main unit + 23 kg wire feeder

Best when the buyer wants the same 500A platform with water-cooled torch support for longer duty work.

DIMENSIONS / PACKAGE REFERENCE

ITEM	MACHINE DIMENSIONS	PACKAGE DIMENSIONS	WEIGHT
MIG-500 main unit	970 x 475 x 685 mm	1030 x 550 x 850 mm	59 kg
MIG-500 wire feeder	660 x 285 x 465 mm	Package by order	22 kg
MIG-500W main unit	970 x 475 x 925 mm	1030 x 560 x 1100 mm	74 kg
MIG-500W wire feeder	660 x 285 x 465 mm	Package by order	23 kg

PRODUCT POINTS

- Digital ARM + MCU control**

Digital control platform for process selection and repeat setup.
- Compact no-LCD panel**

Standard digital panel route below the MIG-500X LCD workflow.
- IGBT inverter platform**

High-frequency soft-switching inverter design for 500A-class output.
- Closed-loop voltage control**

Helps stabilize welding voltage during grid fluctuation and arc-length changes.
- Program memory**

10 welding programs for recurring workshop setup.
- Water-cooled option**

MIG-500W adds an integrated water cooling tank for water-cooled torch setup.

COOLING / WORKSTATION DECISION

DECISION POINT	MIG-500	MIG-500W
Cooling route	Air-cooled setup for standard 500A pulse MIG/MAG work.	Water-cooled setup for longer-duty torch cooling needs.
System layout	Main unit plus external wire feeder.	Main unit with integrated cooling tank plus external wire feeder.
Footprint planning	Lower body height and lower main-unit weight.	Taller main body and heavier main unit due to cooling tank.
Shared capability	Same 30-500 A double-pulse MIG/MAG process path.	Same 30-500 A double-pulse MIG/MAG process path.

BUYER DECISION 03

PROCESS / MATERIAL FIT

PROCESS CAPABILITY

PROCESS / MODE	CUSTOMER MEANING
Common MIG/MAG	Carbon steel and general gas-shielded fabrication with external wire feeder.
Pulse MIG/MAG	Aluminum, copper alloy, stainless steel, and carbon-steel setup paths.
High-speed single pulse	Pulse route for production-oriented multi-material setup.
High-speed double pulse	Double-pulse route for aluminum, stainless, carbon steel, and appearance-sensitive work.
MMA / stick welding	Secondary maintenance and repair process.
Spot welding	Timed welding mode for spot weld setup.

WHERE IT BELONGS

Good-fit buyer
Distributor, dealer demo station, or fabrication workshop needing the 500A step above MIG-350.

Cooling decision
Air-cooled for general work; water-cooled when torch cooling is part of the buyer's requirement.

Product ladder role
Standard no-LCD 500A platform below MIG-500X LCD and alongside 500A economy / NBC routes.

Not the right fit
LCD workflow, economy-only positioning, automation-cell projects, or non-pulse CO2-only work.



MIG-500 current product view with material, method, wire diameter, program memory, gas check, wire inching, trigger, and pulse setup.

PANEL WORKFLOW

- 01 Material
- 02 Welding method
- 03 Wire diameter
- 04 Program memory
- 05 Synergic adjustment
- 06 Gas check / wire inching

MATERIAL / WIRE / GAS REFERENCE

MATERIAL PATH	WIRE / ALLOY	DIAMETER	GAS	USE NOTE
Al-Si aluminum	4043 / 4047	0.8 / 1.0 / 1.2 / 1.6 mm	>=99.99% Ar	Pulse and double-pulse aluminum route
Al-Mg aluminum	5356 / 5183 / MgAl5	0.8 / 1.0 / 1.2 / 1.6 mm	>=99.99% Ar	Aluminum-magnesium route
Pure aluminum	1070 / 1100	0.8 / 1.0 / 1.2 / 1.6 mm	>=99.99% Ar	Pure aluminum pulse route
Copper alloy	Cu18 / Cu19 / CuSi3 / CuAl9	0.8 / 1.0 / 1.2 / 1.6 mm	>=99.99% Ar	Pulse MIG/MAG setup
Stainless steel	304 / 316 / 312 / 308	0.8 / 1.0 / 1.2 / 1.6 mm	98% Ar + 2% CO2	Stainless pulse route
Carbon steel pulse	Carbon-steel wire	0.8 / 1.0 / 1.2 / 1.6 mm	80% Ar + 20% CO2	Pulse MIG/MAG route
Carbon steel common	Carbon-steel wire	0.8 / 1.0 / 1.2 / 1.6 mm	100% CO2	Synergic / common MIG route

SPECS / PACKAGE

RATED SPECIFICATION TABLE

PARAMETER	SPECIFICATION
Product type	500-class double-pulse MIG/MAG welding platform
Models	MIG-500 / MIG-500W
Feeder format	External wire feeder
Cooling formats	Air-cooled / water-cooled
Input power	AC380V +/-10%, 50 Hz, 3PH
Rated input power	24.4 kVA
Rated input current	37 A
Output current range	30-500 A
Rated duty cycle	60%
Open-circuit voltage	65 V
Power factor	>=0.93
Efficiency	>=85%
Protection class	IP21
Insulation class	F
Wire feed speed	1-22 m/min
Wire diameter	0.8 / 1.0 / 1.2 / 1.6 mm
Gas flow rate	15-20 L/min
Welding methods	Common MIG/MAG, pulse MIG/MAG, double pulse, high-speed single pulse, high-speed double pulse, MMA/stick
Operation modes	2T, 4T, special trigger mode, spot welding
Program memory	10 welding programs

SITE REQUIREMENTS

Power class	380V three-phase workshop supply
Rated input power	24.4 kVA
Rated input current	37 A
Generator reference	30 kVA minimum generator reference
Ventilation clearance	20 cm front/back and 10 cm left/right
Environment	Indoor, dry, ventilated workshop station

Order note

Accessory contents, plug type, certificate package, and market documents can vary by destination and order package.

OUTPUT COMPARISON

30-500 A

500A class is the high-current standard step above MIG-350 before LCD, NBC, or project routes.

INCLUDED / OPTIONAL ITEMS

ITEM	STATUS	DETAIL
Welding torch	Included	Standard MIG package item; torch setup differs by air-cooled or water-cooled order.
Earth wire / earth clamp	Included	Standard MIG package item for workpiece return connection.
Wire liner	Included	Match liner to wire material and diameter.
Wire feed roll	Included	Match groove type to wire material and diameter.
Contact tips / M8 wrench	Package-specific	Setup items can be supplied according to order package.
Gas meter / air meter	Paid optional	Match regulator and gas setup to the order destination.
Integrated cooling tank	MIG-500W only	Included in the water-cooled option.
Shielding gas and welding wire	External consumables	Material-specific gas and wire are required for MIG/MAG work.

ORDER NOTES

Voltage setup	Listed input is AC380V +/-10%, 50 Hz, 3PH. Other input options depend on order configuration.
Model selection	Use MIG-500 for air-cooled setup; use MIG-500W for water-cooled setup with integrated cooling tank.
Gas setup	Gas meter / air meter is paid optional; shielding gas selection depends on material and local gas supply.
Package details	Plug type, cable length, package dimensions, and accessory quantities can vary by order.
Documents	Certificates and market documents are provided according to destination and model scope.