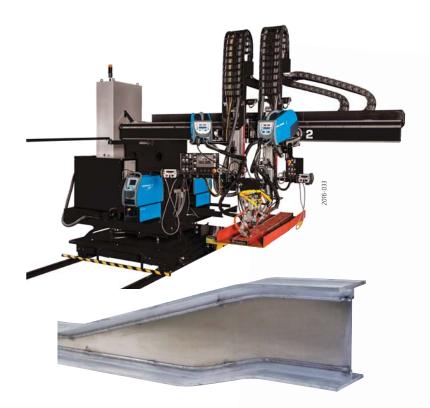
MIG/MAG MACHINE RANGE

The **MIG/MAG** applications are used in various domains from the simple carriage for shipyard industry to large gantry for train manufacturing.

The choice of the machine depends mainly on the size of the piece to weld.

Lincoln Electric propose solutions according your need.





The Straightener/cooler MIG/MAG application

is often combined to the food tanks manufacturing with plasma process.



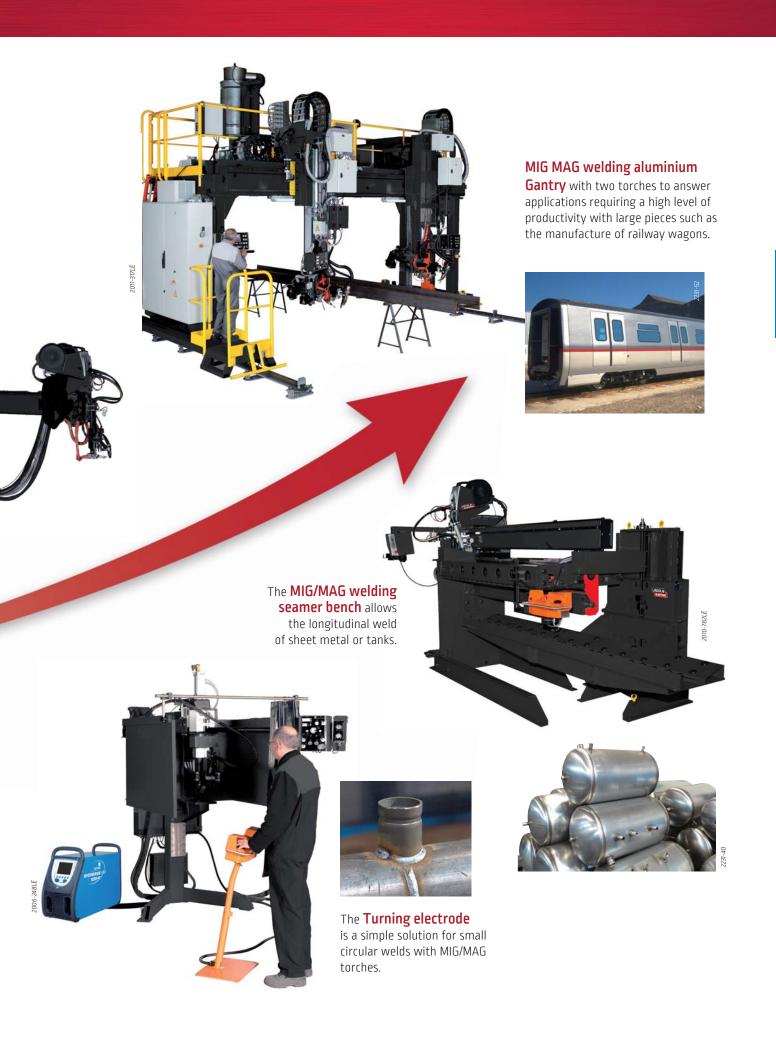
The MIG/MAG
Autonomous
welding head
installation







The **Autonomous carriages** allow the
longitudinal and circular
welding of large vessels.
They are also often used
in the shipyard industry.



37

MIG/MAG EQUIPMENT

DIGIWAVE III 520-R

DIGIWAVE III 520 A or R versions and wire feed unit DVU-R500

A for automation: level 1 (start/stop cycle; analogic settings for U and I) R for robotic: fieldbus communication

With its smart design, its color screen and its innovative communication interfaces, the **DIGIWAVE III** concretizes the most recent technologic breakthroughs and positions itself at the cutting edge of the welding techniques.

Main characteristics and advantages:

- Digital precision and outstanding welding performances,
- Full range of processes for all applications: Speed Short Arc, Pure Controlled Metal, Pulse, Soft Silence Pulse, Spray Modal, High Penetration Speed, Advanced Sequencer, MMA coated electrodes, Gouging up to 8 mm,
- More than 200 synergic curves with possibility to realize yourselves up to 50 customizable curves,
- Storage up to 100 welding programs,
- Traceability of the welding parameters,
- Control process: you set yourselves the control thresholds of the welding parameters not to go above, and you are warned in real time as soon as a fault is detected,
- User management and locking mode,
- Monitoring with USB, Ethernet,
- RC JOB II for remote control,
- DVU-R500 is only 6,1 kg and 4 rollers drive.





	DIGIWAVE III 520-R	
Duty cycle at 100%	450 A (at 40°c)	
Primary power supply	3 x 320 - 480 V / 50-60 Hz	
Max primary consumption	28.5 A	
Current range	15 to 500 A	
Weight	40 kg	
Dimensions (W x L x H)	273 x 736 x 1 521 mm	

DIGIWAVE III Software solutions

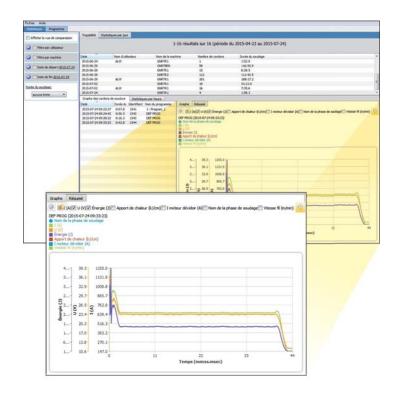


Supervising Welding Administrating Network

A software solution to allow better traceability to ensure quality level:

- Follow the production,
- · Compare weld beads,
- Get curves and statistic on welding parameters,
- Heat input,
- Identification of the bead by unit number.





POWER WAVE® S500 CE

Powerful Multi-Process Capability.

The multi-process Power Wave® S500 CE is packed with Lincoln Electric performance technology for welding on thicker materials. It provides an extremely fast arc response, includes over 65 standard welding waveforms for optimized performance on almost any application and efficiently converts input power to reduce operational costs.

Power Wave® S500 CE proposes advances MIG-MAG welding process as:

- Pulse-on-Pulse[®]
- Power Mode®,
- RapidArc®,
- Rapid X[™] (With STT® Module),
- Rapid Z[™].

AUTODRIVE®

4R100 wire drive

• Upgradable for additional processes to be developed in the future.



User interface

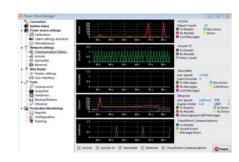


	POWER WAVE® S500 CE	
Duty cycle at 100%	450A / 36,5V	
Primary power supply	200/208/220/230/380/ 400/415/460/575V 3/50/60Hz	
Max primary consumption	n 60/54/30/27/21 A	
Current range	5 to 550 A	
Weight	68 kg	
Dimensions (W x L x H)	355 x 630 x 571 mm	

Power Wave® Software Solutions

Power Wave Manager

- Check the status of every component in your welding system.
- View and easily adjust the information associated with your welding operation.
- Setup the configuration of the differents components of the welding installation.
- Display of all real-time measurement values like voltage, ampere, wire feed speed, torque.





CheckPoint™: Welding Production Monitoring

CheckPoint's secure, cloud-based access allows key stakeholders to view and track welding operations anywhere in the world, on any device:

- Track real-time weld production data 24/7.
- Create custom custom alerts and notifications.
- Operator Arc on Time.
- Material Consumption.
- Weld and Assembly Information.

Production monitoring™

Production monitoring monitors a lot of information for the management of the customer production.

- Current status and shift analysis.
- Weld listing and downtime analysis.
- Monitoring by Weld ID, Employee ID or Consumable Lot ID.

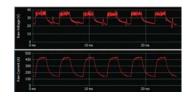
Weldscore™

Allows you to score each weld based on a trained sample of acceptable welds.

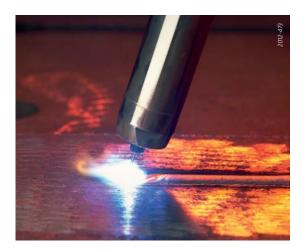
Great for:

- Expanding quality control capabilities,
- Trade school monitoring, grading and final examinations,
- Critical welds with specific quality control requirements,
- Operator testing and certification programs or Consumable Lot ID.





MIG/MAG EQUIPMENT

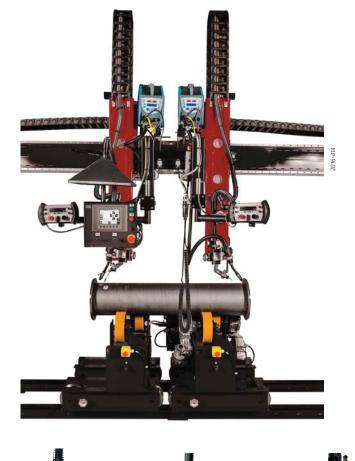


Options for all types of installation

Torches

Water cooled torches dedicated for automatic welding MIG/MAG installations.

- Excellent cooling up to the nozzle holder,
- Good gas protection with the long shape of the nozzle.



Characteristics	TM 501W	2011-446	TR 600	TM 700	
Duty cycle	500 A at 100%		400 A at 100%	700 A at 100%	
Wire diameter (mm)	1 to 2.4		0.8 to 1.6	1.2 to 3.2	
Harness length (m)	1 to 2.5		1 to 4	Without - direct connection	
Version	Straight or curved 22 or 45°		Straight or curved 22 or 45°	Straight	
Option	-		-	Additional gas protection for light metal alloy	

Seam tracking

TRACKMATIC device guarantees the good positioning of the torch in the joint to be welded without operator intervention. A sensing probe finger or an inductive sensor allows joint tracking (height or alignement) and commands the necessary corrections required to the torch trajectory. It ensures a constant weld quality, an increase of productivity, a reduction in repair operation and easier use for the operator.

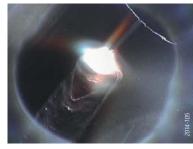


Video camera

The video system **VISIOARC VA2** including protection against spatters and fumes, can be easily integrated. It uses a greatly enlarged image which enables the precise position of the welding torch to be viewed thus making the operator's work easier and improving the quality of the welding operation.

System with large color screen 15", miniaturised camera and additional lighting.





MIG/MAG CARRIAGES

Carriages for MIG/MAG welding









WELDYPOCKET

WELDYCAR

WELDYSTIFFENER

WELDY-RAIL

Autonomous carriage with rechargeable battery. MIG/MAG welding with manual equipment.

Flat position welding, small footprint. Basic application, easy implementation. All positions welding (permanent magnet).

Exists in 2 models:

- · WELDYCAR speed 5 - 140 cm/min,
- WELDYCAR PRO speed 5 - 140 cm/min, with programmation (continuous welding or not).

Welding with 2 manual welding torches.
Programmable carriage.

Exists in 2 models:

- for height: 60-160 mm,
- for height: 120-320 mm.

All positions welding of carbon steels, stainless steels and aluminium.

Exists in 2 models:

- WELDY-RAIL manual,
- WELDY-RAIL with linear oscillating.

2 rail models:

- Magnetic rail,
- Pneumatic rail.

Applications

This carriage is used to facilitate the implementation of a regular welding. Boiler making in carbon steel.

Angle, butt, overhead and vertical welding with guidance by crabbing arm. Welding of stiffeners in ship yards.



Angle, butt, overhead and vertical welding. The carriage is travelling on a magnetic or pneumatic rail according the piece to be welded.

Main features

Carriage speed	15 - 120 cm/min	5 - 140 cm/min	15 - 180 cm/min	5 - 80 cm/min
Di mensions (L x l x h)	140 x 240 x 220 mm	250 x 300 x 260 mm	500 x 500 x 600 mm	220 x 270 x 230 mm
Weight (netto)	5 kg	11 kg	16 kg	7 kg
Options	Arc protection	Pendular oscillating unit. Linear oscillating unit. Magnetic crabbing rails, aluminium wheels many other options on request.	-	Linear oscillating unit for WELDY-RAIL manual.

Thanks to a modular design, the carriages can be used in different configurations.





