

WELDYCAR NV

Self-propelled portable welding carriages for MIG/MAG welding operations in all positions

New version



WELDYCAR NV: autonomy, precision,



WELDYCAR NV carriages are portable and autonomous welding carriages with a 4-wheel drive and magnetic suction cup. They are intended to mechanize rail-less manual MIG/MAG welding operations.

WELDYCAR NV **4-wheel drive portable carriages** are specially designed for mechanizing semi-automatic welding operations in various positions (horizontal, inclined plane, vertical).

WELDYCAR NV carriages are **completely autonomous**, with a rechargeable battery (charge time: 65 minutes) allowing 6 hours of continuous operation. No external power supply is required. These carriages can be immediately integrated into all types of manual welding installations without additional connections.

They are **light and robust**, thus providing the **quality of automatic welding** while allowing **rapid implementation** and **ease of use**.

The magnetized base allows for vertical upward welding without additional tools and is easily activated by a lever mechanism.

The optimized microcontroller-based electronic architecture allows complete **open-endedness** (specific program upon request). Three different carriage versions are available, with various possible options.

1 Control panel

WELDYCAR NV carriages are simple and easy to use. A digital display is used to preset and indicate the carriage displacement velocity with cm/min. precision.

2 Carriability

Their low weight (11 kg), compact size and built-in carrying handle make WELDYCAR NV carriages easy to carry and implement in work sites.



Three versions are available to satisfy all types of applications and conditions of use.

WELDYCAR S NV: Cat. no: W 000 120 480

Equipped with a motor drive allowing a displacement velocity of 15 to 140 cm/min. Basic model for routine applications.

WELDYCAR SP NV: Cat. no: W 000 120 479

Basic model supplemented by a programming device allowing continuous or discontinuous welding (specific programming based on welded length and total length, in mm).

WELDYCAR NV: Cat. no: W 000 120 481

Equipped with a motor drive allowing a displacement velocity of 5 to 70 cm/min. Model specifically intended for vertical position welding operations with a torch oscillator.

robustness and ease of maintenance

WELDYCAR NV carriages are available in three versions to satisfy all types of applications and conditions of use.



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3 Simple and robust mechanism

WELDYCAR NV carriages are equipped with two cross slides (40-mm travel each) and a ball joint, allowing the torch to be positioned in a highly flexible manner.

4 14V DC battery

Rechargeable battery (charge time: 65 minutes) allowing 6 hours of continuous operation. No external power supply is required.

Battery and charger (supplied with carriage)

- The battery provides 6 hours of continuous operation. A display indicates low battery power to ensure correct operation.
- The charger is equipped with an indicator light showing charging progress and completion.



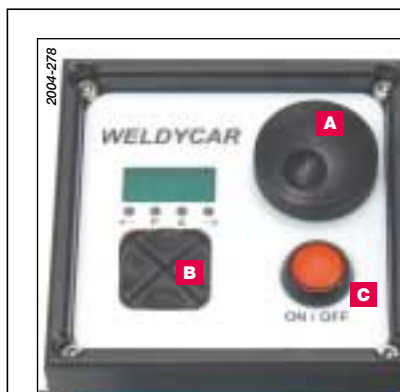
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5 Current sensor

Allows for synchronization (or non-synchronization) of the carriage's automatic displacement as soon as the arc has been struck.

6 Driving mechanism

The magnetic attraction system (25-kg force) and 4-wheel drive (rubber coated wheels) ensure perfect traction.



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Description of front panel:

- A** Speed adjusted by rotating a potentiometer button and shown on green display (0 to 140 cm/min)
- B** Displacement direction selected by pressing the corresponding key and then pressing the ON/OFF button. The ON/OFF button is also used to display the number of hours of operation (0 to 999 h)
- C** Carriage displacement ensured by pressing the ON/OFF button or according to welding arc displacement



Selection of displacement direction (left)



Selection of displacement direction (right)



Automatic mode (activated by arc sensor)



Manual mode (pushbutton activated)

WELDYCAR SP NV functions:

This carriage is equipped with a programmable EPROM allowing continuous or discontinuous welding.

- Possibility of performing resistance spot welding operations
- Simple programming using 4 keys
- Real preselection of welding distances (0 to 999 cm), possibility of performing a single weld with preselected dimensions
- Crater control (0 to 30 mm)
- Timing of carriage startup with respect to start of welding (0.1 to 3 sec)
- Timing of end-of-welding with respect to carriage stop (0.1 to 3 sec)

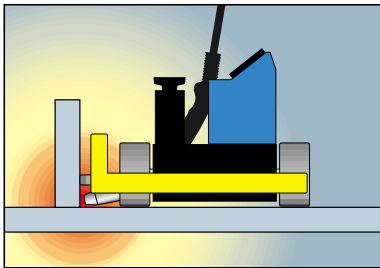
Guidance principles and applications



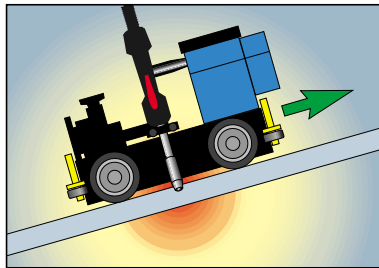
WELDYCAR NV carriages can satisfy or adapt to various types of applications, i.e., long seam welds (structural steelwork, transport equipment), shell interior or exterior (pressure vessels), stiffeners (shipbuilding)

Multi-surface welding

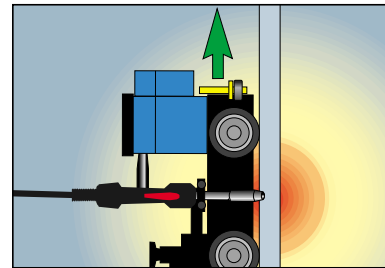
The WELDYCAR carriage's 4-wheel drive and magnetic attraction system (25-kg force) ensures perfect traction and enable welding in all positions.



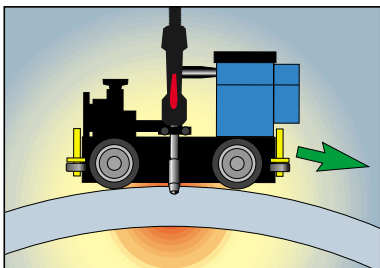
Flat welding.



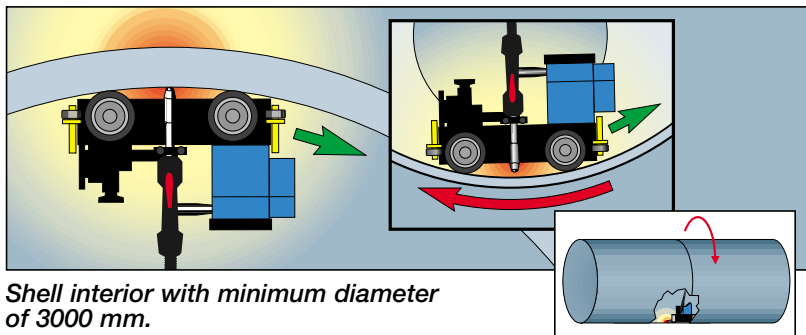
Inclined plane.



Vertical welding.



Shell exterior with minimum diameter of 2000 mm.



Shell interior with minimum diameter of 3000 mm.

Guidance principles and applications.

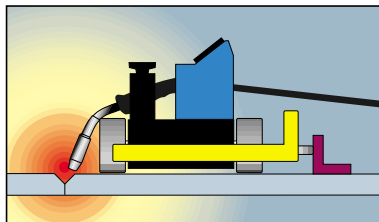
Autonomous rail-less displacement in all spatial positions on metal surface.

The carriage easily and quickly positions itself with respect to the joint to be welded.

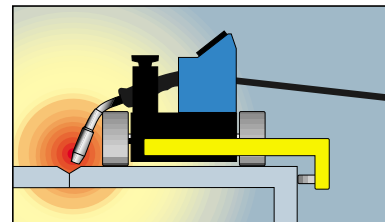
It then moves by pushing its two roller bearings (mounted on adjustable arms) against the surface.

These carriages are light and robust, thus providing the quality of automatic welding while allowing rapid implementation and ease of use.

Butt assembly.

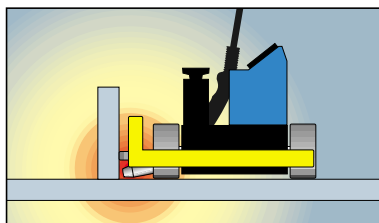


Guidance on angle or rail.

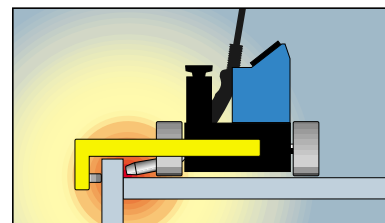


Guidance on vertical surface.

Angle assembly.



Guidance on vertical surface.



Guidance on exterior of vertical surface.

Technical characteristics



WELDYCAR NV carriages are available in three versions to satisfy all types of applications and conditions of use.

	WELDYCAR SP NV	WELDYCAR S NV	WELDYCAR NV
Weight	11 kg	11 kg	11 kg
Power supply	14 V battery		
Autonomy without oscillator	6 hours of continuous operation		
with oscillator	4 hours of continuous operation		
Drive wheels	Diameter: 75 mm, Width: 30 mm		
Vertical slide	40-mm travel		
Horizontal slide	40-mm travel		
Programming device	yes	no	no
Travel speed	15 to 140 cm/min	15 to 140 cm/min	5 to 70 cm/min
Magnetic force	25 kg		
Protection class	IP 235		
Trigger control	One 1T/1A contact		
Operating temperature	-5 to +50 °C		
Storage temperature	-10 to +70 °C		
Relative humidity	< 90 %		
Overall dimensions (L x w x h)	250 x 300 x 260 mm		
Part Number	W 000 120 479	W 000 120 480	W 000 120 481

Main options:

Protection kit: W 000 140 682

- Ocular protection against arc light
- Tube for connection to welding fume suction device

Oscillator: W 000 140 678

Ensures torch oscillation at adjustable speed and amplitude.
 Powered by the carriage's 14V battery
 (carriage autonomy reduced to 4 hours of continuous operation).

- Oscillation frequency: 0 to 100 strokes/min
- Weight: 2 kg



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