



WEL-HANDY MULTI NEXT

Heavy-Duty Multi Purpose Mechanized Welding Carriage

Features and Benefits

- **One model with weaving option:**
Wel-Handy Multi NEXT: Straight/ Tack welding (default).
Wel-Handy Multi NEXT: Straight/ Tack + Weaving welding (option).
- **Crater fill function**
Automatically switches to crater amperage and travel backwards to process high quality crater filling.
- **Limit switch function**
Limit switch has dry-run function, which makes positioning of the carriage possible without lifting. (Patent pending)
- **Encoder drive motor and control**
Ensures precise speed control during welding.
- **Weaving control only available in combination with weaving set**
Weaving parameter is adjustable during welding.
Easy operation with dial control.
- **Straight, tack welding and weaving with the same carriage**
- **Reliability, robustness and durability**

The Wel-Handy Multi NEXT welding carriage is a robust machine designed for heavy duty working environments. The 8.8 kg lightweight aluminium die cast body is easy to handle. The strong traction power from the 50 kg magnet provides stable movement to achieve high quality vertical welds.



Welding Machines



All-in-one tack and weaving controller



Multiple Wel-Handy Multi's in simultaneous operation

Durable design, reliable performance

■ Straight and tack welding is standard

The advanced controller is easy to use and provides flexible welding experience with high quality results.

■ Compact and lightweight

L280 x W280 x H250 mm, at weight only 8.8kg.

■ Excellent durability

Maintenance free, single piece aluminium die cast body provides excellent protection against spatter, fume and dust.

■ 50kg Permanent magnet

Ensures strong pulling power during horizontal and vertical welding. The magnet can easily be manually disengaged from the plate by a lever.

■ Low center of gravity

Provides stable performance even when climbing vertically.

■ Durable roller and arm

The guide rollers are made of a single-piece cast aluminium for higher durability. The rollers are protected against spatters.

■ Heat resistant rubber 4-Wheel drive system

Provides strong traction, ensuring high quality welds.

■ Maintenance-friendly by dustproof structure

Mono-design die-cast body casing with stainless steel bottom plate provides complete dustproof structure.

■ 4-Wheel drive system

Provides stable traction and transmits the power to the plate efficiently.

■ High stand off

6 mm Stand off enables crossing over any possible welding beads.

■ Easy setup

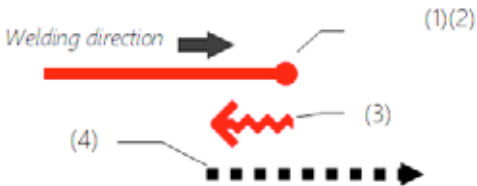
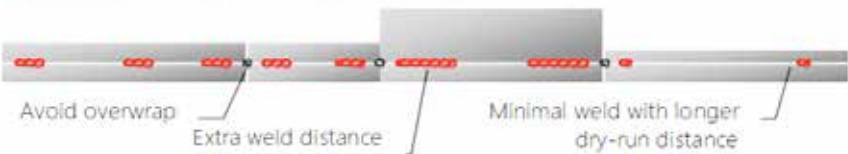
No guide rails required, the Wel-Handy Multi NEXT guides itself along the fillet plate.

■ Limit switches

Automatic Shutdown at the end of the weld. Limit switches can be used to adjust machine starting position.

The advanced tack controller

WEL-HANDY MULTI NEXT TACK control - Controllable tack distance



Controllable tack welding distance

- Tack and dry-run distance can be controlled during welding just by simple click on a toggle switch.
- Equipped with an encoder motor, the Wel-Handy Multi NEXT calculates travel distance by counting motor rotations, ensuring accurate distance control.
- All parameter values are shown on the digital display for easier parameter management and repeatability.

Crater filling function (*)

(*) requires welding machine with crater function with matching control.

Automatically switches to crater amperage at the end of each weld for crater fill sequence.

- 1) At the end of each weld, the carriage gives a signal to the welding power source to switch to a crater amperage.
- 2) The carriage stops for a set period of time.
- 3) With crater amperage, carriage welds backwards at a set speed for a set distance.
- 4) After a crater sequence, the carriage dry-runs to the starting point of the next tack weld (in tack welding mode).



WU-3R Weaving Unit and mounting kit (Option: weaving)

This is an option for the Wel-Handy Multi NEXT to perform weaving welding. The weaving function is possible after mounting the weaving unit (WU-3R) together with the mounting kit. Weaving is controlled by a motor with an encoder.

- Weaving speed (*): 400 - 1500 mm/min
- Weaving widths (*): 0 - 100.0 mm/min
- Stop timer (left/center/right): 0.0 - 10.0 seconds
(*) at radius= 100 +mm from the center of rotation control.



Welding Machines



Optional accessories

Twin torch option

- 2 Torch fillet welding.
- Upto 500 mm fillet height.
- Lightweight aluminium arms.

Tubular follower guide

- Traverse by vertical guidance of curved plate using bearings on both sides of plate.
- Suitable for welding short pipes onto a plate.

Plate edge guide roller

- Roller adjustable by 50 mm forward/backward.
- Plate need to be 10 mm thickness.

Straight guide rail

- For butt welding in straight line.
- 2m long, 2x magnets included.

Two-point torch holder (curved)

- Secures the torch tightly with 2 clamps.
- Torch compatibility need to be checked.

Torch holder extension bar

- Extends the torch by 140-220mm.
- Suitable for butt welding using guide rail.

Guide roller extension plate

- Extends guide roller by 45 mm.

Clamp lever

- Faster torch angle and position adjustment.

Transformer












- Primary AC 100 - 240V / Secondary DC24V.

Accessories

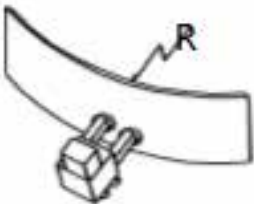
Accessory	Stock #
Twin torch option	90216
Tubular follower guide	1115-1095-00
Plate edge guide roller	T61004332
Straight guide rail	61002282
Two-point torch holder (curved)	61000865
Torch holder extension bar	T61001223

Accessory	Stock #
Compact submerged arc option	WHMSUB15
Magnet lifting handle	T61001636
Guide roller extension plate	T61002102
Weaving unit WU-3R	20508486
WHM NEXT Weaving Mounting Kit	20505397
Clamp lever	T64000044
Transformer PR 100-240V - SEC 24V 65W	222002256

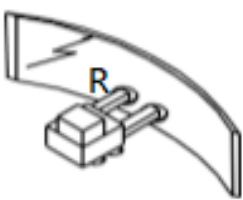
Application guide

Model Stock #		STRAIGHT + TACK 90224	STRAIGHT + TACK + WEAVING 90224 + Weaving kit
Fillet weld		●	●
Butt weld		Guide rail option	Guide rail option
Tack / Stich weld		●	●
Vertical weld		●	●
Horizontal weld		Guide rail option	Guide rail option
1 Run 2 pass		Tandem torch option	Tandem torch option
Contour weld		Tubular follower guide option	Tubular follower guide option
Pendulum oscillation		-	●
Dual pass		Twin torch option	Twin torch option
Overhanging weld		●	-
Sub-arc		Compact SAW option	Compact SAW option

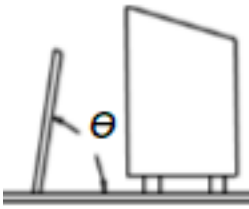
● : Possible



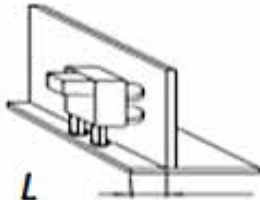
$R > 3000 \text{ mm}$



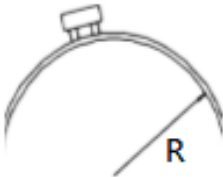
$R > 3000 \text{ mm}$



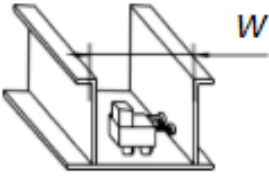
$\theta = 85 - 110^\circ$



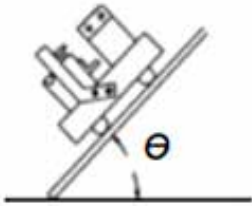
$L > 40 \text{ mm}$



$R > 1500 \text{ mm}$



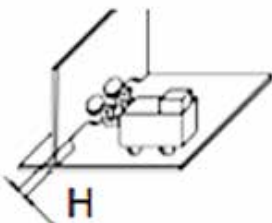
$W > 300 \text{ mm}$



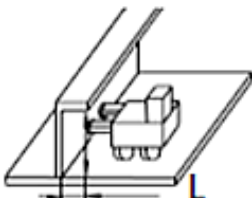
$\theta = 0 - 90^\circ$



$\theta = 0 - 20^\circ$



$H < 37 \text{ mm}$



$L > 75 \times 75 \text{ mm}$

Welding Machines

Specifications			
Model name		Wel-Handy Multi NEXT Tack	Wel-Handy Multi NEXT Weaving Welding
Driving system		4 Wheel driving	
Gap (floor - bottom)		5.5 mm	
Magnet up and down mechanism		Magnet release / light action lever at body side	
Magnet type		Permanent magnet (strong 50 kg)	
Travel speed		50 - 1500 mm/min	
Tracking method		Vertical tracking by guide roller / edge tracking by guide roller	
Applicable posture		Horizontal fillet & inferior fillet	
Start interlocking welding		●	
Automatic stop by limit switch		●	
Arc test		●	
Arc stabilization time (sec)		0 - 10.0	
Crater current correspondence		●	
Tack		●	
Weaving	Weaving speed (mm/min)	-	400 - 1500
	Weaving width (mm)	-	0.0 - 100.0
	Stop time on left, middle, right	-	0.0 - 10.0
Body weight (kg)		8.8	10.8
External dimensions W x D x H (mm)		280 x 280 x 250	310 x 280 x 250
Input power supply		DC 24V	
● : Possible			

Types	WHM NEXT Straight/ Tack Set	
Description	Stock #	
WHM NEXT tack 50kg MG with signal cable	90224	
Transformer PR 100-240V-SEC 24V 50W	222.002.256	

Types	WHM NEXT Weaving Set	
Description	Stock #	
WHM NEXT tack 50kg MG with signal cable	90224	
WHM NEXT weaving mounting kit	20505397	
Weaving unit WU-3R (without holder) for WHM NEXT	20508486	
Transformer PR 100-240V-SEC 24V 50W	222.002.256	

Scope of delivery
Wel-Handy Multi NEXT
Machine body
Power & signal cable
Allen keys (2 pcs)
Operation manual