



# **Portable Machines and Gas Equipment**Product Catalogue



















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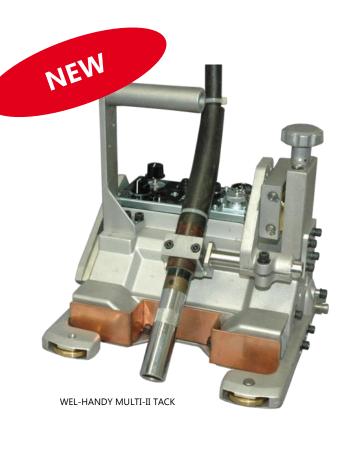
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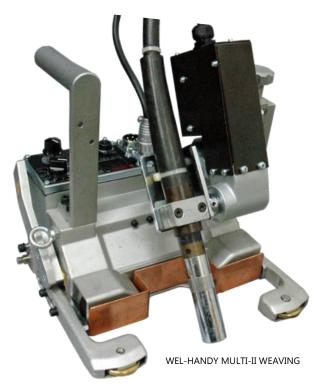
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# **WEL-HANDY MULTI II Series**

# Heavy-Duty Multi Purpose Mechanized Welding Carriage

# **Features and Benefits**

- Two models:
  - WEL-HANDY MULTI-II TACK: Tack welding
  - WEL-HANDY MULTI-II WEAVING: Tack and Weaving welding
- NEW Crater fill function

Automatically switches to crater amperage and travel backwards to process high quality crater filling.

NEW - Limit switch function

Limit switch has dry-run function, which makes positioning of the carriage possible without lifting. (Patent pending)

- NEW Encoder drive motor and control
   Ensures precise speed control during welding.
- NEW Weaving control (only for weaving model)
  Weaving parameter is adjustable during welding. Easy operation with dial control.
- NEW Tack welding and Weaving at the same time.
- UNCHANGED Reliability, Robustness and Durability.

Light, compact, all wheel drive, magnetic force traction and a low center of gravity allows the **Wel-Handy Multi**-**II** to achieve the highest pulling power and stability in the marketplace today. are improved for the welder by reducing fatigue, fumes and sparks.



# Designed and built for heavy duty working environment

# Durable design, reliable performance

### TACK welding is now standard

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

# Compact and lightweight

L259 x W259 x H264mm, at weight only 7.5kg.

# 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 detached from the plate by a lever.

### Low center of gravity

Provides stable performance even when climbing on a wall.

### Durable roller and arm

Guide roller is made of single-piece cast aluminum for higher durability. Roller is protected against spatters.

# Heat resistant rubber 4-Wheel drive system

Provides strong traction, ensuring high quality weld.

### Absolute dust measures

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

6mm stand off enables crossing over welding beads.

### Easy setup

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

### Limit switches at each end of the carriage

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



NEW: All-in-one Tack and Weaving controller



Dust resistant, single piece aluminium die cast body





Multiple Wel-Handy Multi's in simultaneous operation

# The NEW Advanced tack controller

# Controllable tack welding distance

- Tack and dry-run distance can be controlled during welding just by simple click on a toggle switch.
- Equipped with encoder motor. WEL-HANDY MULTI -II TACK calculates travel distance by counting motor rotation, enabling accurate distance control.
- All parameter values are shown on the digital display for easier parameter management and repeatability.

# Previous model - Tack and dry-run distances are fixed Overwrap Fixed welding and dry-run lengths WEL-HANDY MULTI - II TACK control - Controllable tack distance

Extra weld distance

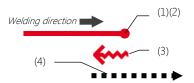
Avoid overwrap

# Crater filling function(\*)

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

Minimal weld with longer dry-run distance

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





- 1) At end of each weld, carriage gives signal to welding power source to switch to crater amperage.
- 2) 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 crater sequence, carriage dry-runs to starting point of next tack weld (in tack welding mode)

# WU-5R Weaving Unit (Option for TACK, Standard with WEAVING model)

A Option for WEL-HANDY MULTI-II TACK to perform weaving welding. Includes mounting bracket. Weaving is controlled by encoder motor.

- Weaving speed (\*): 400 1500 mm/min
- Weaving widths:(\*) : 0 100.0 mm/min
- Stop timer (left/center/right): 0.0 10.0 seconds





# **Optional Accessories**



### Twin torch option

- 2 torch fillet welding
- Upto 500mm fillet height
- Lightweight aluminum arms



# **Tandem torch option**

- Productivity improvement with tandem torch.
- Fan-shaped bracket suitable for delicate torch setting loaded.



# **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.



### **Compact Submerged Arc option**

- Makes Wel-Handy Multi an ultra compact carriage for submerged welding.
- Contact Koike for details.



### Plate edge guide roller

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



# Magnet lifting handle

Makes magnet release much easier



# Straight guide rail

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



### **Guide roller extension plate**

Extends guide roller by 45mm.



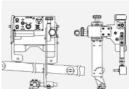
## Two-point torch holder (curved)

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



# Weaving Unit WU-5R

- Add to WEL-HANDY MULTI-II TACK to enable weaving welding.
- Tack and weaving can be performed simultaneously with WEL-HANDY MULTI-II controller.



### Torch holder extension bar

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



### **Clamp lever**

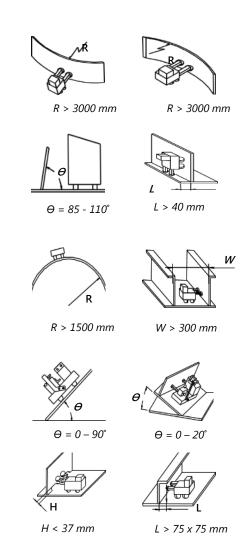
Faster torch angle and position adjustment

Accessory	Stock #
Twin torch option	90216
Tubular follower guide	1115109100
Plate edge guide roller	T61004332
Straight guide rail	61002282
Two-point torch holder (curved)	61000865
Torch holder extension bar	T61001223

Accessory	Stock #	
Tandem torch option	on request	
Compact Submerged Arc option	on request	
Magnet lifting handle	T61001636	
Guide roller extension plate	T61002102	
Weaving unit WU-5R	90255	
Clamp lever	T64000044	
Transformer PR 100-240V-SEC 24V 65W	222.002.256	

# **Application guide**

Model		TACK	TACK+WEAVING
Stock No.		90245	90246
Fillet weld		•	•
Butt weld		Guide rail option	Guide rail option
Tack / Stich weld		-	•
Vertical weld		•	•
Horizontal position		Guide rail option	Guide rail option
1 run 2 pass		Tandem torch option	Tandem torch option
Contour weld	Do	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







Vertical up butt welding using guide rail





Twin torch option



# **Type and Specification**

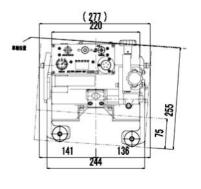
# Specifications

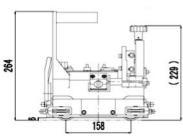
		WEL-HANDY MULTI-II TACK	WEL-HANDY MULTI-II WEAVING	
Machine weight		7.5 kg	9.1 kg	
Traction Force		16 kg 12 kg		
Travel speed		50 ~ 1500 mm/min		
Tracking system		Fillet tracking guide roller		
Standoff (plate to base plate)		6 mm		
Magnet up/down mechanism		Magnet release lever		
Driving method		4-wheel Driving Rubber Roller (Chain Transmission)		
Magnet type		50 kg Permanent Magnet		
	Torch angle	40 ~ 55°		
Torch adjustment	Up/down	45 mm		
	Forward/backward	45 mm		
Torch holder diamet	ter	16 ~ 20 mm		
Automatic stop fund	ction	Limit switch on each end of carriage		
Unwelded lengths (start & end total)		approx. 270 mm approx. 305 mm		
Weaving unit		-	included	
	Continuous	Yes	Yes	
Welding method	Tack / Stitch	Yes	Yes	
	Weaving / Oscillation	Optional	Standard	
Power & signal cabl	e	Power and Signal integ (Carriage-branch: 6 m, Branch-Po		
Torch holder diameter		16 ~ 20 mm		
Position adjustment by limit switch		Yes		
Encoder motor for precise speed control		Yes		
Digital display		Yes		
Crater fill function		Yes		
Input power		DC 24V		

# Types

Carriage Model		Stock #
WEL-HANDY MULTI-II TACK	DC24V	90245
WEL-HANDY MULTI-II WEAVING	DC 24V	90256

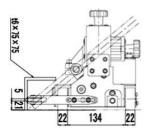
# Dimension: WEL-HANDY MULTI-II TACK





# Scope of delivery

Scope of delivery
Machine body
Weaving unit (WEAVING model only)
Power & signal cable
Allen keys (2pcs)
Operation manual







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