

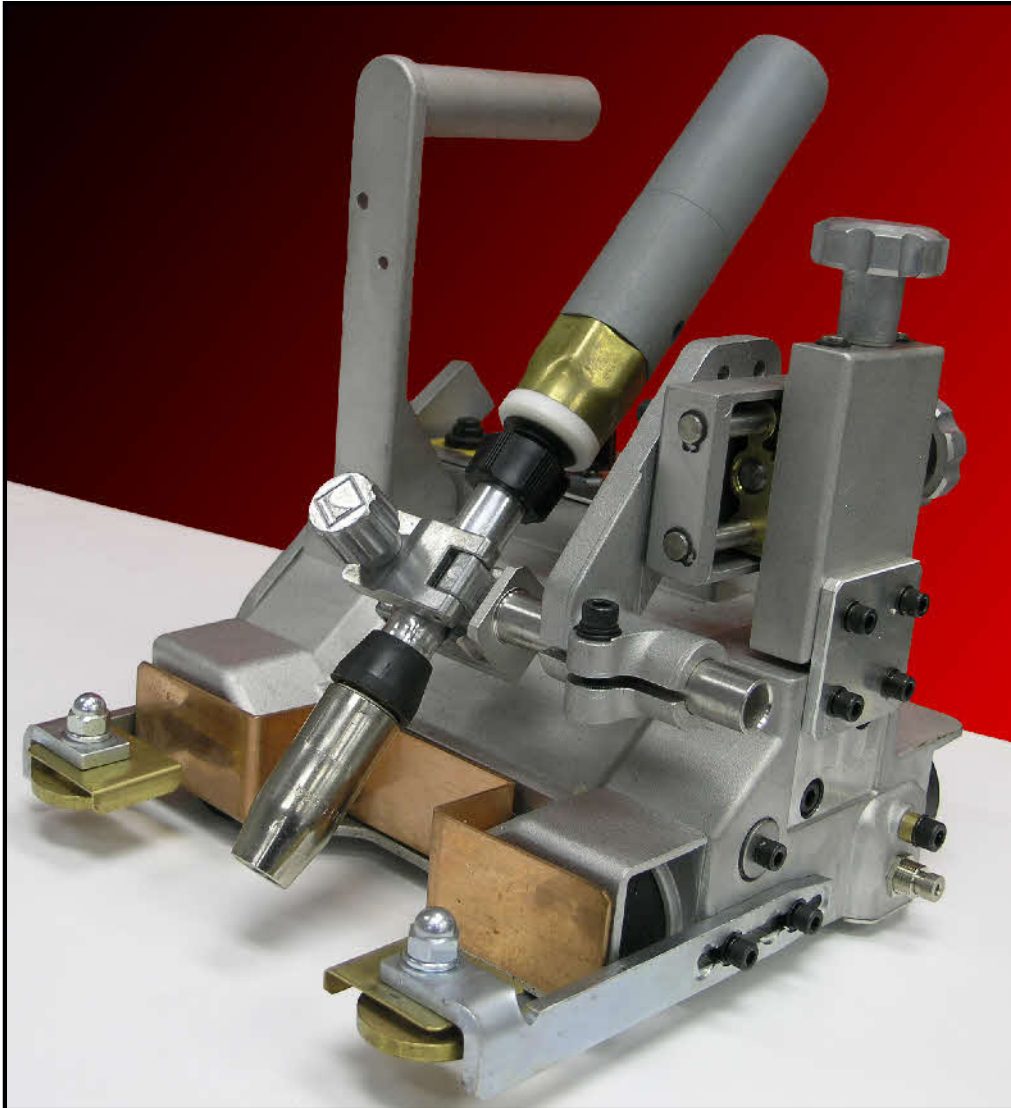
WEL-HANDY MULTI

Multi-Purpose Mechanized Welding Carriage



Feature & Benefits

- **Two Models Available**
Standard and Programmable
Stitch/Tack
- **Multi Weld Process**
Standard and Programmable
Stitch/Tack
- **Multiple Welding Options**
Twin-Torch, Weaver/ Oscillator,
Corner Welding
- **Horizontal and Vertical Use**
Base machines can be used for
out-of-position welds
- **Light Weight at 7kgs (15lbs)**
Makes transport and set-up easier
- **Pulling Power of 30kgs (66lbs)**
Provides stable welding even under
heavy loads
- **No Track Required**
Fillet welds and corner joints can
be done without the need for track.
Butt and Lap Joints are possible by
using angle iron as a guide
- **Permanent Magnet**
Rare earth magnet holds unit secure
to the work piece without the need
for electricity



Portable Welding Automation

Automation of welding not only improves quality and production times, it saves money in measurable ways that are very often overlooked. Welding wire and shield gas use are greatly reduced. Working conditions are improved for the welder by reducing fatigue, fumes and sparks. Wel-Handy Multi portable welding carriages are used by a wide range of customers, from one man mobile welding businesses to large shipyards with hundreds of welders.



KOIKE ARONSON, INC.

Lightweight, Compact, Welding Carriage

Easy Set Up

No guide rails means fast and easy setup. In most cases existing welding equipment can be used.

Automatic Height Control

The Wel-Handy Multi runs directly on the work piece. On a fillet weld weld this keeps the contact tube to work distance set without the need for a torch height control.

Automatic Shut Down at the end of the weld

Limit switches at each end of the carriage allow the operator to set up a pre-determined stop point using a magnetic block. Once the limit is tripped, the machine travel and welding Stops.

- Standard Features on All Carriages**
- A solid aluminum body design makes for a lightweight and durable machine
 - Use on steel, stainless steel and aluminum plate in horizontal position
 - Vertical weld position use, when steel base plate is min 25mm (1in) thick
 - Wide range of torch adjustment for flux core or solid wire use
 - Various welding attachments options available

Key Features Make Set Up Faster and Operation Simple



Standard Model Panel



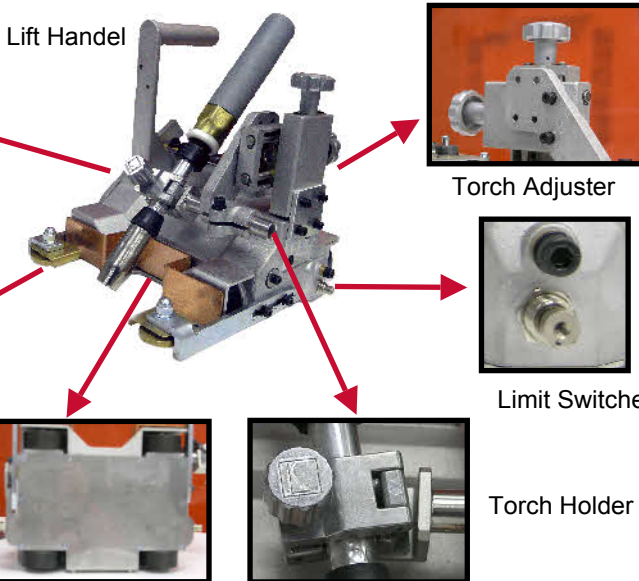
Stitch Model Panel



Magnet On/Off



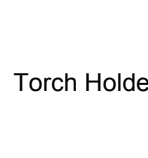
Guide Rollers



Bottom Stainless Heat Shield All Wheel Drive System



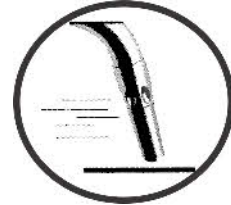
Limit Switches



Torch Holder

Welding automation provides precise control over the below welding parameters

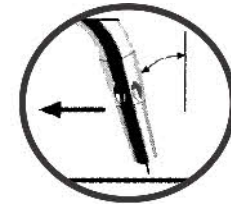
Travel Speed



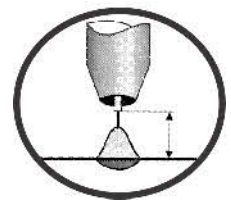
Transverse Gun Angle



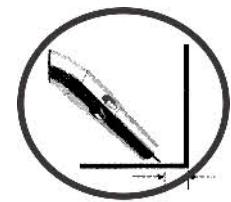
Gun Travel Angle



Contact Tube to Work Distance



Electrode Position



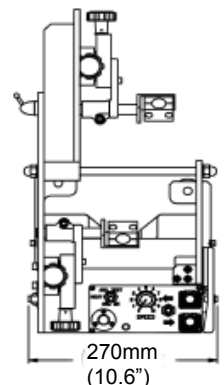
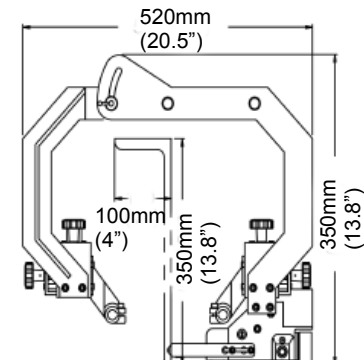
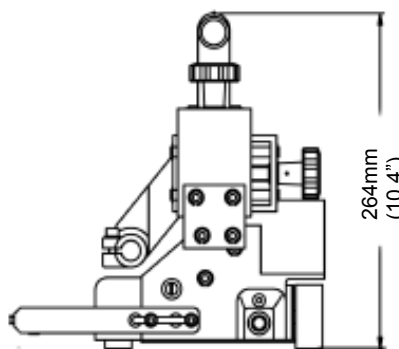
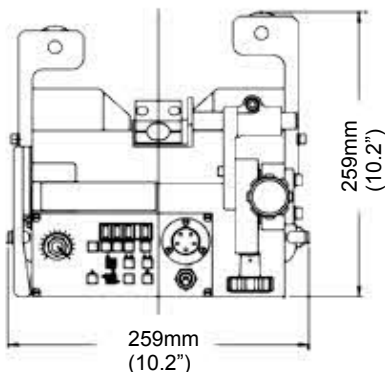
One of our many customers describes Koike's portable Wel-Handy Multi carriage:

"Basically, we were able to take the hand torch from the welder and mount it on the carriage. It was really that simple! We were able to use the same welding settings, only now the welder was able to concentrate on the actual weld without becoming fatigued. The most obvious increase in production was the amount of weld that was done in a day. The same welder that was producing 110 feet of weld a day was now able to produce 250 to 300 feet of weld a day." Miller Marine Inc.

WEL-HANDY MULTI WELDING CARRIAGE TYPES				WEL-HANDY MULTI OPTIONS			
SPECIFICATIONS	STANDARD		STITCH	SPECIFICATIONS	WU-1 WEAVER	TWIN TORCH OPTION	
Part Number	61000705	61002052	61001072	Part Number(s)	BUH21007 & BUH21008	61001071	61004784
Input Power	120 Volt	220 volt	120 ~ 220 Volt	Input Power	120 Volt	120 Volt	220 Volt
Standard Machine Connection	Lincoln Electric ® Connection Standard Miller Electric ® Connection Adapter Available			Weight	2.2kgs (5.0 lbs)	16.0kgs (35.3lbs)	
Weight	6.9kgs (15.2 lbs)		6.8kgs (15.0lbs)	Dimensions L x W x H	175 x 85 x 230mm (7.0 x 3.4 x 9.0in)	518 x 269 x 485mm (10.2 x 10.2 x 10.4in)	
Dimensions L x W x H	259 x 259 x 264mm (10.2 x 10.2 x 10.4in)			Operating Panel Controls	1. Start / Stop 2. Direction 3. Travel Speed 4. Arc Test/ Jog / Run	N/A	
Pulling Power	30kg (66lbs)			SPECIFICATIONS	CORNER WELDING KIT	Miller Electric ® Connector Adapter	
Drive System	All Wheel Drive, attached by permanent rare earth magnet			Part Number	1115992901	0868583600	
Travel Speed	152~1524mm/min (6~60in/min)			Dimensions L x W x H	254 x 357x 152mm (10 x 14 x 6in)	457mm long (18 in long)	
Tracking Method	Automatically follows rib of fillet joint using guide rollers or optional attachments			Description	Add on kit allows tracking and positioning torch on edge of plate or box type weld. Perform fillet, lapp and butt joint welds.	Wire feeder control connector adapter. Change from Lincoln to Miller connector	
Guide Roller Height	Adjustable 10mm ~ 25mm (.39 ~ 1 in)			SPECIFICATIONS	Large Torch Holder Adapter	7" Guide Wheel Extensions	
Torch Angle	0 ~ 90 °			Part Number	1115992900	K115976300	
Torch Up/Down	45mm (1.77in)			Dimensions L x W x H	Torch Dia from 30 ~ 45mm (1.187 ~ 1.75in)	Qty (2) 178 x 19 x13mm(7 x .75 x .5in)	
Torch Fwd/Bwd				Description	Allows larger torch diameters to be used for welding or cutting. Sub Arc torch holder	Allows positioning the carriage farther from the weld. May be used with Corner Welding kit.	
Un-Welded Area	Start 124mm (5in) / End 140mm (5.5in)			SPECIFICATIONS	SUB Arc Kit Option		
Automatic Stop	Limit switch on both ends of carriage - shuts off welding and machine travel			Part Number	WHMSUBM15	WHMSUBL15	
Operating Panel Controls	1. Start / Stop 2. Direction 3. Travel Speed 4. Arc Test/ Jog / Run	1. Start / Stop 2. Direction 3. Travel Speed 4. Arc Test/ Jog/ Run 5. Digital Display (high intensity display) 6. Programing Buttons		Description	Wel-Handy Multi Miller ® style connector Sub Arc Option, 550A @60% Duty 15' leads. Specify Wire Size when ordering (3/32, 5/64, 1/16)	Wel-Handy Multi Lincoln® style connector Sub Arc Option, 550A @60% Duty 15' leads. Specify Wire Size when ordering (3/32, 5/64, 1/16)	
Stitch Model Parameters							
1. Welding Length 10 ~ 1000mm (.4 ~ 40in)							
2. Skip Length 10 ~ 1000mm (.4 ~ 40in)							
3. Crater Fill Time 0.1 ~ 9.9 sec							
4. Puddle Fill Time 0.1 ~ 9.9 sec							
WU-1 Weaving Option Parameters							
1. Welding Width 3 ~ 25mm (.12~ 1.0in)							
2. Weaving Cycle 3 ~ 120 / min							
3. Dwell Time -(Left, Center and Right) 0 ~ 3 sec							
4. Adjust Mid Point of Weld 0 ~ 360 degree							
5. Save parameters in Memory							

Main Carriage

Twin Torch Option



WEL-HANDY MULTI DIMENSIONS

WEL-HANDY MULTI APPLICATIONS

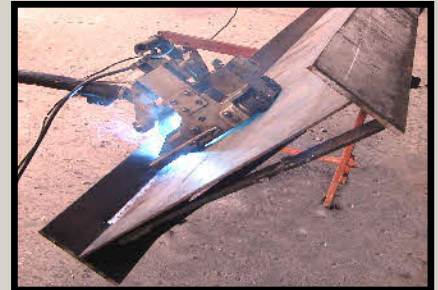
Below Picture:

Box beam fabrication lapp joint weld using corner welding kit and guide wheel extensions



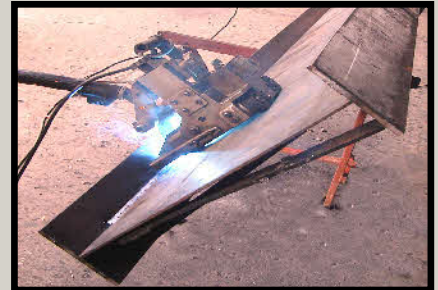
Below Picture:

Wide flange beam fabrication fillet weld in an incline position



Above Picture:

Double H- beam for bridge Fabrication. Butt joint weld using WU-1 Wevaer option and angle iron as a guide



Below Picture:

Trailer fabrication. Stitch model used to tack or skip weld a fillet weld



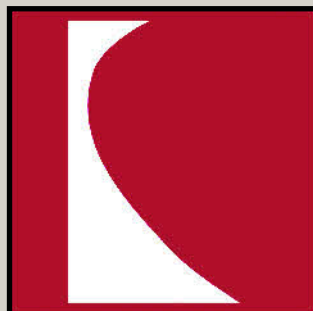
Below Picture:

Shipyards using WU-1 weaver in a vertical up fillet weld



Above Picture:

Truck manufacturer using a Wel-Handy Multi plus an Aronson head and tail stock positioner to weld a box bed



Welding Application Options

WU-1 Weaver (torch oscillator)

The WU-1 weaver option can be used with the Standard or Stitch models. The WU-1 can also be used as a stand alone weaver (oscillator) or on a welding manipulator . Weaving functions include: weave width, oscillator frequency, torch dwell (left, center and right) and torch origin control. Settings can be stored in memory and can be changed during operation.



WU-1 Weaver

Twin Torch

The Twin Torch option features dual torch holders for welding both sides of a vertical plate (rib or stiffener). May be used with the Wel-Handy Multi Standard or Stitch model. Easy to set up with two welding guns. Torch slide are designed to allow optimum torch positioning.



Twin Torch

Corner Welding Kit

The corner welding kit option is designed for building custom box beams or can be used in any application where an edge of a plate can be followed. Lapp joints and butt joints can be accomplished by using the plate edge as the guide. Therefore the need for track is eliminated. The included welding arm set allows a wide range of welding torch positions to be archived.



Corner Welding Kit

Sub Arc Torch Kit

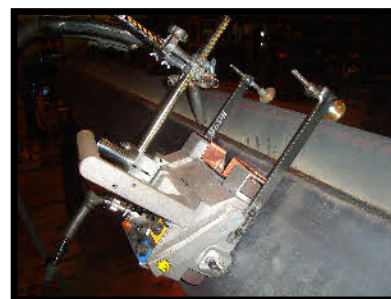
Several options are available for a sub arc use with wire sizes ranging from 1/16" to 3/32" . Applications that previously may have been unachievable using larger and heavier mechanized system can now be accomplished with this compact sub arc welding option. The Sub Arc Torch Option can be used together with the Corner Welding Kit.

Large Torch Holder Kit

The large torch holder option allows the use of larger diameter torches such as a machine torch, water cooled torch or models with fume extraction capabilities. A machine plasma torch can also be added to the machine for gouging or cutting. Allows 30 ~ 45mm (1 3/16" ~ 1 3/4") torch diameter use.

Guide Wheel Extensions

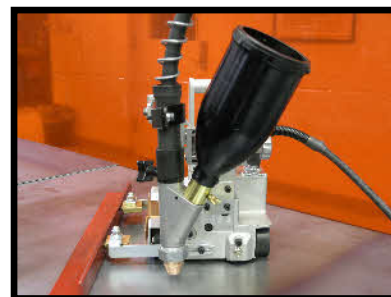
Guide wheel extensions allow moving the guide rollers further away from the machine. These extensions position the machine and torch further away from the edge of the plate. They are useful for performing lapp joints and butt joints. These extension can be extremely useful when combined with the Corner Welding Kit to reach into difficult welding positions.



Guide Wheel Extension

Complete Welding Turnkey Package

Complete ready to weld automation set. Perfectly matched system designed to meet the most demanding applications. The welding package including the Wel-Handy Multi, welding machine, running gear, welding gun, sample flux core welding wire and gas regulator.



Sub Arc Option

WEL-HANDY MULTI AUTOMATION PACKAGE

SPECIFICATIONS	STANDARD PACKAGE	STITCH PACKAGE
Part Number	WHMX500	WHMT500
Included in Package	<ul style="list-style-type: none"> Wel-Handy Multi Standard PowerMaster 500 Running Gear Wire Feeder Accuflow Gas Regulator Koblecoco Flux Core Wire 	<ul style="list-style-type: none"> Wel-Handy Multi Stitch PowerMaster 500 Running Gear Wire Feeder Accuflow Gas Regulator Koblecoco Flux Core Wire
Wel-Handy Multi Voltage PowerMaster Voltage	120 Volt 50/60Hz 208~460,3Ph 50/60Hz	120 ~ 220 Volt 50/60Hz 208~460,3Ph 50/60Hz
Total Weight	91kgs (200 lbs)	91kgs (200lbs)
Dimensions L x W x H Power Master	679 x 379 x 597mm (26.75 x 15 x 23.5in)	
Thermal Arc Professional PowerMaster 500 <i>Rated Output</i> 500 Amp @ 40V 60% Duty Cycle 450 Amp @ 38V 100% Duty Cycle <i>Max . Open Circuit Voltage</i> 75V DC <i>Amperage Range</i> 5 - 560 Amp <i>Inverter Design</i> Heavy Duty Compact Energy Efficient	<p>Multi process</p> <ul style="list-style-type: none"> Standard set up for GMAW and FCAW. Electronic control ensures extremely smooth arc characteristics across welding processes. Other processes include: Lift TIG (GTAW), Stick (SMAW) and CAG (Carbon Arc Gouging) <p>Tweco Spay Master Mig Gun</p> <ul style="list-style-type: none"> Designed for Wel-Handy Multi Machine and hand use. <p>Portable Running Gear</p> <ul style="list-style-type: none"> Easy to load cylinder rack, cable storage, robust handle easily moves welding system on large 8in (200mm) front and rear wheels <p>Ultrafeed VA 4000 wire feeder</p> <ul style="list-style-type: none"> Heavy-Duty 4 roll drive system Digital Display of welding parameters Timed control of pre flow/post flow, wire burn back and spot weld timer. Wire feed set up includes : inch, purge and gun trigger hold Standard wire set up of .045" wire with a range of .024 ~ .125" (0.6 ~ 3.2mm) Wire Speed Range 50 ~ 875 IPM (1.25 ~ 22.1m/min) 	
Accuflow Mix 30D Gas Regulator	Argon/Co2 mix gas regulator. One touch precise gas flow control system allows accurate gas flow control by simply adjusting the dial, saving both time and gas.	
Kobelco Welding Wire Sample Spool	Frontiarc - 711 .045. All position flux core welding wire with less spatter and good slag removal.	



Power Master 500 Set



Wel-Handy Multi In Vertical Use



Heavy Duty 4 - Roll Drive



Accuflow Mix 30 Regulator



Kobelco Frontiarc -711 Flux core sample spool

Koike Aronson, Inc.

635 W. Main St., P.O. Box 307
 Arcade, NY 14009
 Phone (585) 492-2400 Fax (585) 457-3517

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