



NRTL



ISO9001



KOWELD

AUTO WELDING CARRIAGE

www.koweld.co.kr



CHUNG SONG INDUSTRY CO., LTD.

■ Fillet Carriage / Battery Powered Fillet Carriage

One Torch Fillet

- 4P CS-71 / CS-B71
- 5P CS-51 / CS-B51
- 6P CS-471 / CS-B471

Two Torches Fillet

- 7P CS-71B
- 8P CS-51B / CS-B51B
- 9P CS-31 / CS-B31
- 10P CS-81
- 11P CS-251

Wall Traveling Fillet

- 12P CS-41 / CS-B41
- 13P CS-41S / CS-B41S
- 14P CS-41B

Special Fillet

- 15P CS-BTS
- 16P CS-CORR

■ Oscillator

- 17P CS-R1
- 18P CS-S1

■ Railless Weaving / Battery Powered Railless Weaving

- 19P CS-61WE & CS-B61WE
- 20P CS-51WE
- 21P CS-61MW & CS-B61MW

- ※ To improve product quality, the specifications and Models and be changed without a prior notice or a consent for all the products.
- ※ Battery power can be applicable to all the models according to customers' request.

■ Rail Travelling Fillet / Battery Powered Rail Travelling Fillet Rail Mounted

- 22P CS-GW LCD
- 23P CS-SAW
- 24P CS-100C /CS-B100C
- 25P CS-201 / CS-B201
- 26P CS-100H
- 27P CS-V UP
- 28P CS-TB100C (TIG)

Rail Guided (Pipe Welding, Wind Power Substructure Welding)

- 29P CS-61WC & CS-B61WC
- 30P CS-61WO

Rail Pipe (Pipe 5G Butt Welding / Pipe 5G Fillet Welding)

- 31P CS-100CP LCD
- 32P CS-100P
- 33P CS-PW (Basic: Railless Type / Optional : Guide Rail Type)

■ E.G.W (Electro Gas Wedling Carriage)

Rail Type

- 34P CS-MEGW II
- 35P CS-EGWN
- 36P CS-HEGW

Railless Type

Customized product after specification discussion

■ Heating Carriage / Battery Powered Heating Carriage

- 37P Heating Carriage / Battery Powered Heating Carriage

■ ETC.

- 38P Rail List
- 40P Torch List
- 41P Major Customers
- 42P Welding Conditional Data



Driving method		Model	Weaving	Multi Layer	Battery powered	FILLET WELDS						GROOVE WELDS				PIPE FOR GROOVE WELDS				Special Welds
						1F	2F		3F	4F		1G	2G	3G	4G	1GR	2G	5G	6G	
																 Rotated		 Fixed		
Fillet	One Torch	CS-71			B71	●	●													
		CS-51			B51	●	●													
		CS-471		●	B471	●	●													
	Two torches Fillet	CS-71B				●	●													
		CS-51B			B51B	●	●													
		CS-31			B31	●	●													
		CS-81					●													
		CS-251					●													
		CS-41			B41		●													
	Wall Traveling	CS-41S			B41S		●													
		CS-41B					●													
		Special Fillet	CS-BTS																	●
	CS-CORR						●			●										
Ocillator	Pendulum	CS-R1	●												●					
	Liner	CS-S1	●												●					
Railles Weaving		CS-61WE	●		B61WE		●		●											
		CS-51WE	●				●		●											
		CS-61MW			B61MW	●	●		●		●									
Rail Travelling Fillet	Rail mounted	CS-GW LCD	●	●							●	●	●	●						
		CS-SAW	●	●							●									
		CS-100C	●		B100C		●		●		●		●							
		CS-201			B201		●			●		●	●							
		CS-100H	●								●									
		CS-VUP							●		●		●							
		CS-TB100C					●		●		●		●							
	Rail Guide	CS-61WC	●		B61WC		●		●		●		●			●				
		CS-61WO	●								●	●				●				
	Rail Pipe	CS-100CP	●	●														●		
		CS-100P		●														●		
		CS-PW	●								●				●	●	●	●		
E.G.W	Rail Type	CS-MEGW II											●							
		CS-EGWN	●	●								●								
		CS-HEGW	●	●							●									

*For any detailed information, please contact our sales team!

CS-71 & CS-B71 Fillet Stitch and Continuous Welder, Lightweight

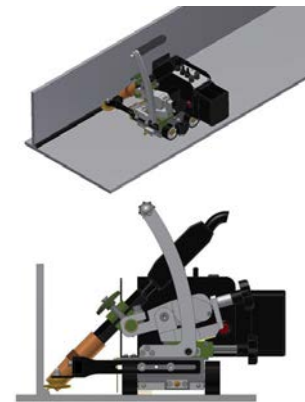
- It is a fillet welder with stitch function.
- It drives at a constant speed with the minimized gear backlash. Thus the high welding quality and the long life span of the welder is acquired.
- It can climb up to 75° of inclination, and the stop sensors of its both sides stop the welder automatically when a welding job is completed.
- The crater filling function provides excellent welding quality at the beginning and end of welding.
- Using magnet release handle, it can be easily mounted and dismounted.
- It is small and light, so it can be conveniently used and easily moved.

Welding Position	Fillet	Groove	PIPE
	1F, 2F		

DIVISION		CS-71		CS-B71
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC 48V	DC 18-72V(Option)	BOSCH BATTERY 18V 4.0Ah
	Dimensions	W:319 L:198 H:281		W:339 L:203 H:281
	Weight	5.5Kg		5.9Kg
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Traction Power	20Kg(angle of inclination 75°)		
	Magnetic Power	32Kg		
Torch	Up / Down Angle	45° ± 10°		
	Front / Back Distance	40mm		
	Running Angle	±5°		



CS-71



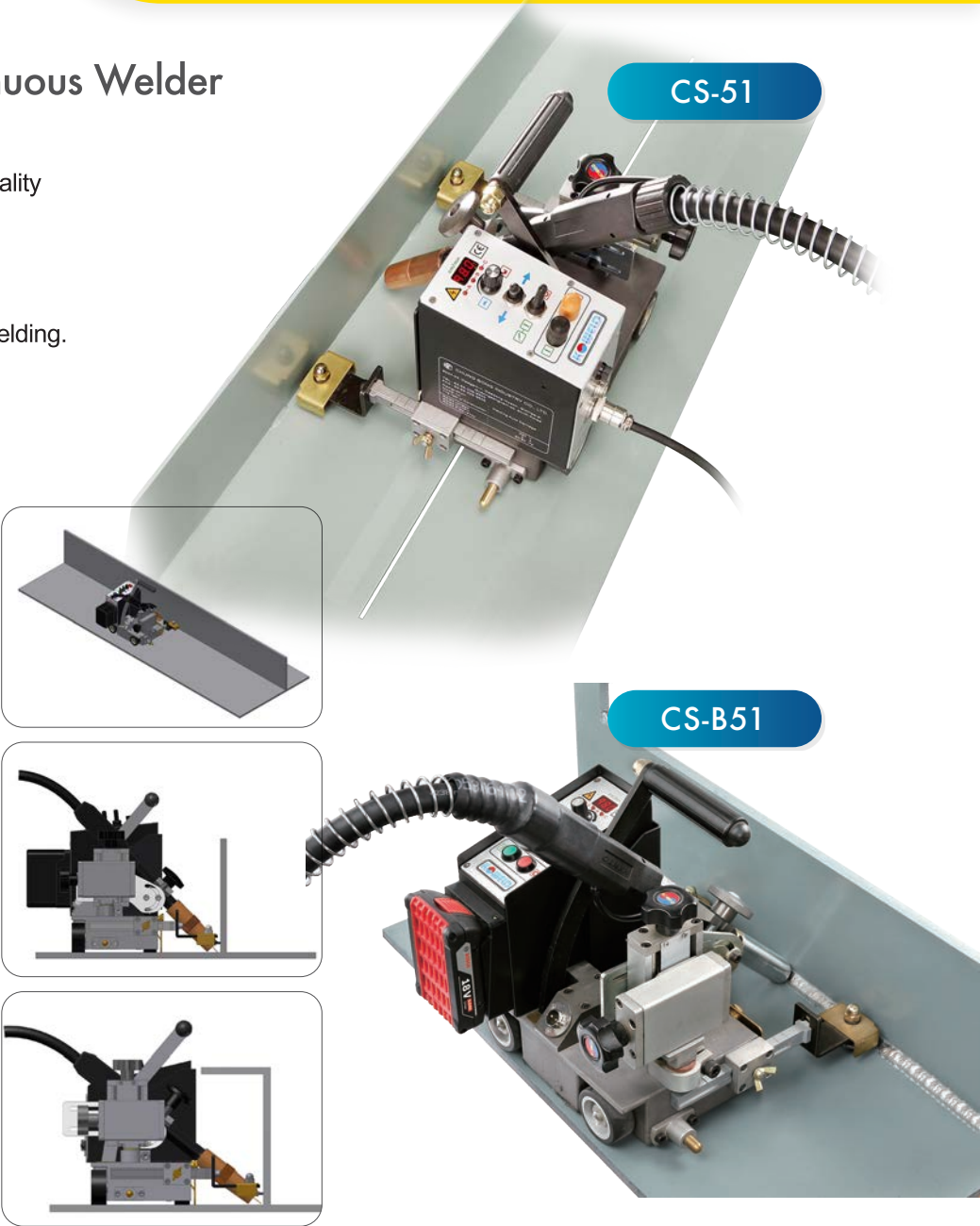
CS-B71

CS-51 & CS-B51 Fillet Stitch and Continuous Welder

- It is a fillet welder with stitch function.
- It drives at a constant speed with the minimized gear backlash. Thus the high welding quality and the long life span of the welder is acquired.
- It can climb up to 75° of inclination, and the stop sensors of its both sides stop the welder automatically when a welding job is completed.
- The crater filling function provides excellent welding quality at the beginning and end of welding.
- Using magnet release handle, it can be easily mounted and dismantled.

Welding Position	Fillet 1F, 2F	Groove	PIPE
------------------	------------------	--------	------

DIVISION		CS-51		CS-B51
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC 48V	DC 18-72V(Option)	BOSCH BATTERY 18V 4.0Ah
	Dimensions	272(W)X305(L) X269(H)		324(W)X305(L)X269(H)
	Weight	7.1Kg		8.5Kg
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Traction Power	20Kg(angle of inclination 75°)		
	Magnetic Power	32Kg		
Torch	Up / Down Angle	45° ± 10°		
	Front / Back Distance	0~32mm		
	Up / Down Distance	0~32mm		
	Running Angle	±5°		

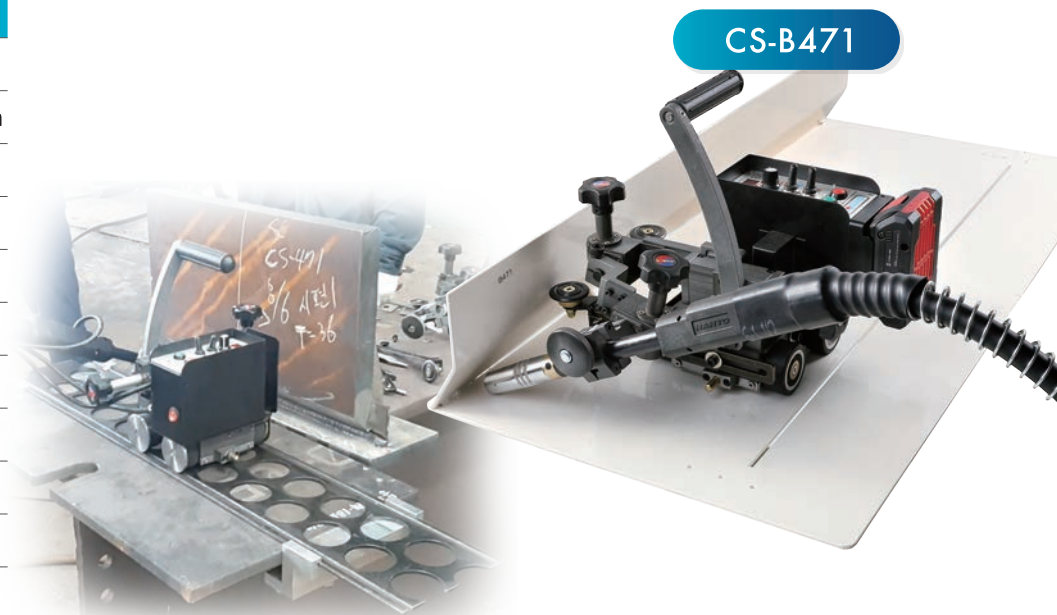


CS-471 & CS-B471 Fillet Multi-Pass Welder

- It is specialized in fillet multi-pass welding. Adjusting the angle slide of worm gears and the Y slide of forward and backward movement, the position of the torch can be set.
- Using a single machine, both of 2 welding (upper/lower) parts can be welded.
- The multi-pass welding is done when a bigger weld throat is needed.
- It can climb up to 75° of inclination, and the stop sensors of its both sides stop the welder automatically when a welding job is completed.
- The crater filling function provides excellent welding quality at the beginning and end of welding.
- Using magnet release handle, it can be easily mounted and dismantled.

Welding Position	Fillet 1F, 2F	Groove	PIPE
------------------	------------------	--------	------

DIVISION		CS-471		CS-B471
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC 48V	DC18-72V(Option)	BOSCH BATTERY 18V 4.0Ah
	Dimensions	258(W)X340(L)X281.5(H)		293(W)X353(L)X281.5(H)
	Weight	6.2Kg		6.5Kg
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Traction Power	25Kg(angle of inclination 75°)		
	Magnetic Power	30Kg		
Torch	Up / Down Angle	0°~ 75°		
	Front / Back Distance	0~32mm		
	Running Angle	±5°		



CS-71B Fillet Stitch and Continuous Dual Side Welder, Lightweight

- The dual side welding with 2 torches can save time and cost.
- It drives at a constant speed with the minimized gear backlash.
Thus the high welding quality and the long life span of the welder is acquired.
- It can climb up to 50° of inclination, and the stop sensors of its both sides stop the welder automatically when a welding job is completed.
- The crater filling function provides excellent welding quality at the beginning and end of welding.
- It is small and light, so it can be conveniently used and easily moved.

		Welding Position	Fillet 1F, 2F	Groove	PIPE
DIVISION		CS-71B		Remarks	
General	AC Input power	AC 100V-240V, 50 / 60Hz		-	
	DC Input Power(Option)	AC 48V	DC 18-72V (Option)		
	Dimension	576(W) X 236(L) X 413(H)		-	
	Weight	7.2Kg		-	
Body	Driving Method	4 WHEELS DRIVEN			
	Traveling Speed	0~98 cm/min			
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR	
	Traction Power	20Kg(angle of inclination 50°)			
	Magnetic Power	25Kg			
Torch	Up / Down Angle	45° ± 10°			
	Front / Back Distance	0~23mm			
	Running Angle	± 5°			
Extension Arm Torch Adjustment	Up / Down Angle	45° ±10°			
	Front / Back Distance	0~23mm			
	Up / Down Distance	0~23mm			
	Running Angle	±5°			
	Arm Up / Down Distance	0~65mm			
		Torch Clamp Slide Up/ Down Distance		±80mm	

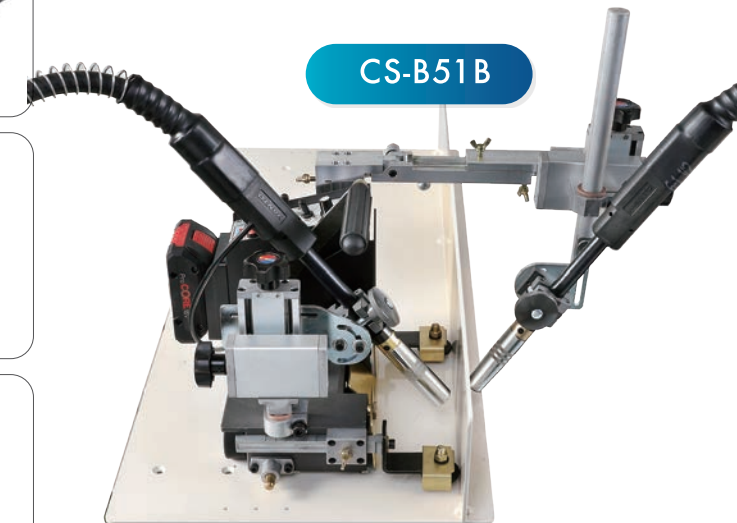
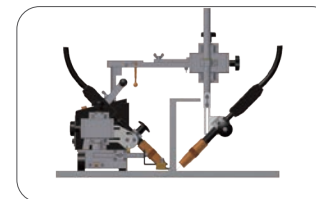
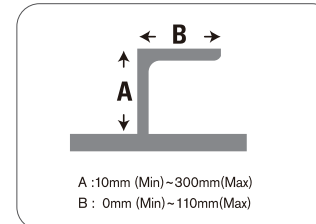
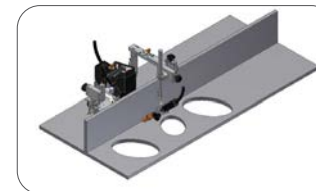


CS-51B & CS-B51B Fillet Stitch and Continuous Dual Side Welder

- The dual side welding with 2 torches can save time and cost.
- It drives at a constant speed with the minimized gear backlash.
Thus the high welding quality and the long life span of the welder is acquired.
- It can climb up to 50° of inclination, and the stop sensors of its both sides stop the welder automatically when a welding job is completed.
- The crater filling function provides excellent welding quality at the beginning and end of welding
- Using magnet release handle, it can be easily mounted and dismantled.

Welding Position	Fillet 1F, 2F	Groove	PIPE
------------------	------------------	--------	------

DIVISION		CS-51B		CS-B51B
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC 48V /	DC 18-72V (Option)	BOSCH BATTERY 18V 4.0Ah
	Dimensions	523(W)X359(L)X473(H)		502(W)X345(L)X472(H)
	Weight	10.3Kg		12Kg
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Traction Power	20Kg(angle of inclination 75°)		
	Magnetic Power	30Kg		
Torch	Up / Down Angle	45° ± 10°		
	Left / Right Distance	0~32mm		
	Up / Down Distance	0~32mm		
	Running Angle	±5°		
Extension Arm Torch	Up / Down Angle	45° ± 10°		
	Front / Back Distance	0~52mm		
	Up / Down Distance	0~52mm		
	Running Angle	±10°		
	ARM Up / Down Distance	0~200mm		
	CLAMP SLIDE Up / Dwon	0~80mm		

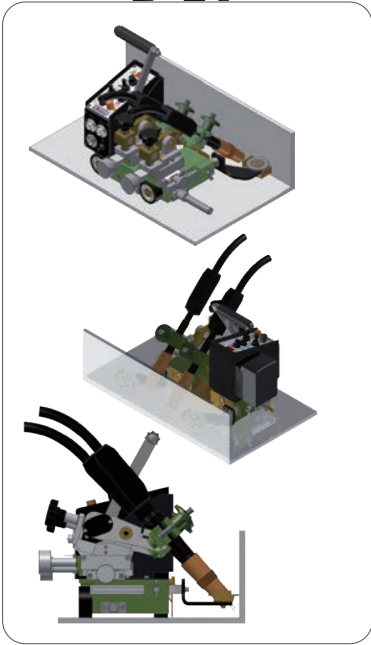


CS-31 & CS-B31 Fillet Tandem Welder

- Through the welding of 2 tandem torches, a bigger weld throat can be acquired.
- The distance between the torches can be readjustable.
- It drives at a constant speed with the minimized gear backlash. Thus the high welding quality and the long life span of the welder is acquired.
- Using magnet release handle, it can be easily mounted and dismounted.
- It is small and light, so it can be conveniently used and easily moved.

Welding Position	Fillet 1F, 2F	Groove	PIPE
------------------	------------------	--------	------

DIVISION		CS-31		CS-B31
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power (Option)	AC 48V	DC 18-72V(Optional)	BOSCH BATTERY 18V 4.0Ah
	Dimensions	321(W) X 359(L) X 300(H)		321(W) X 378(L) X 300(H)
	Weight	8.7Kg		10Kg
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Traction Power	25Kg(angle of inclination 75°)		
	Up / Down Angle	45° ±10°		
	Magnetic Power	30Kg		
Torch	Front / Back Distance	0~48mm ±5%		
	Left / Right Distance	0~40mm		
	Running Angle	±5°		
	Up / Down Angle	45° ±10°		
	Left / Right Distance	0~52mm		
	Running Angle	±5°		

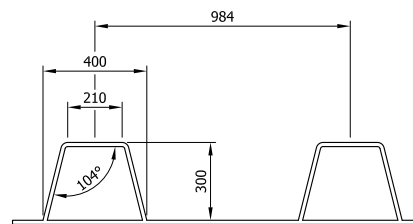
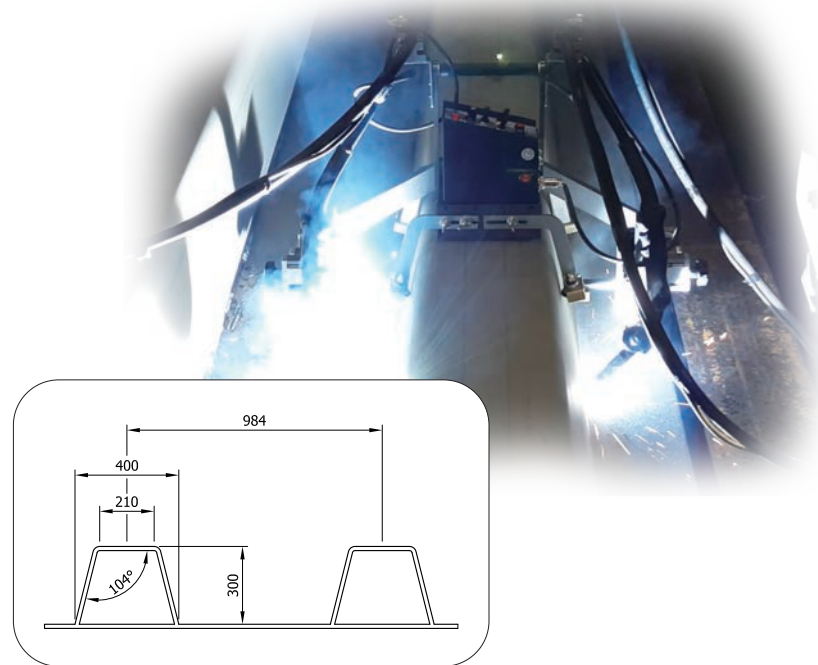


CS-81 U-Rib Fillet Welder

- It is a dual side fillet welder for U-Rib.
 - The single or dual side welding is selectable, and the arm height of the welder is adjustable according to the size of U-Rib.
 - The additionally equipped tension slide makes the welding tracing constant and the high welding quality.
 - While the welder travels on the U-Rib, the guide rollers of the tension slides move on the side plates and it makes the constant arc height in welding.
 - It drives at a constant speed with the minimized gear backlash.
- Thus the high welding quality and the long life span of the welder is acquired.

Welding Position	Fillet	Groove	PIPE
	2F		

DIVISION		CS-81		Remarks
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input power(Option)	AC 48V	DC18-72V(Option)	
	Dimensions	689(W) X 338(L) X 660(H)		
	Weight	14Kg		
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
	Traction Power	20Kg		
	Magnetic Power	-		
Torch	Up / Down Angle	45° ± 10°		
	Front / Back Distance	0~70mm		
	Up / Down Distance	0~70mm		
	Running Angle	±5°		



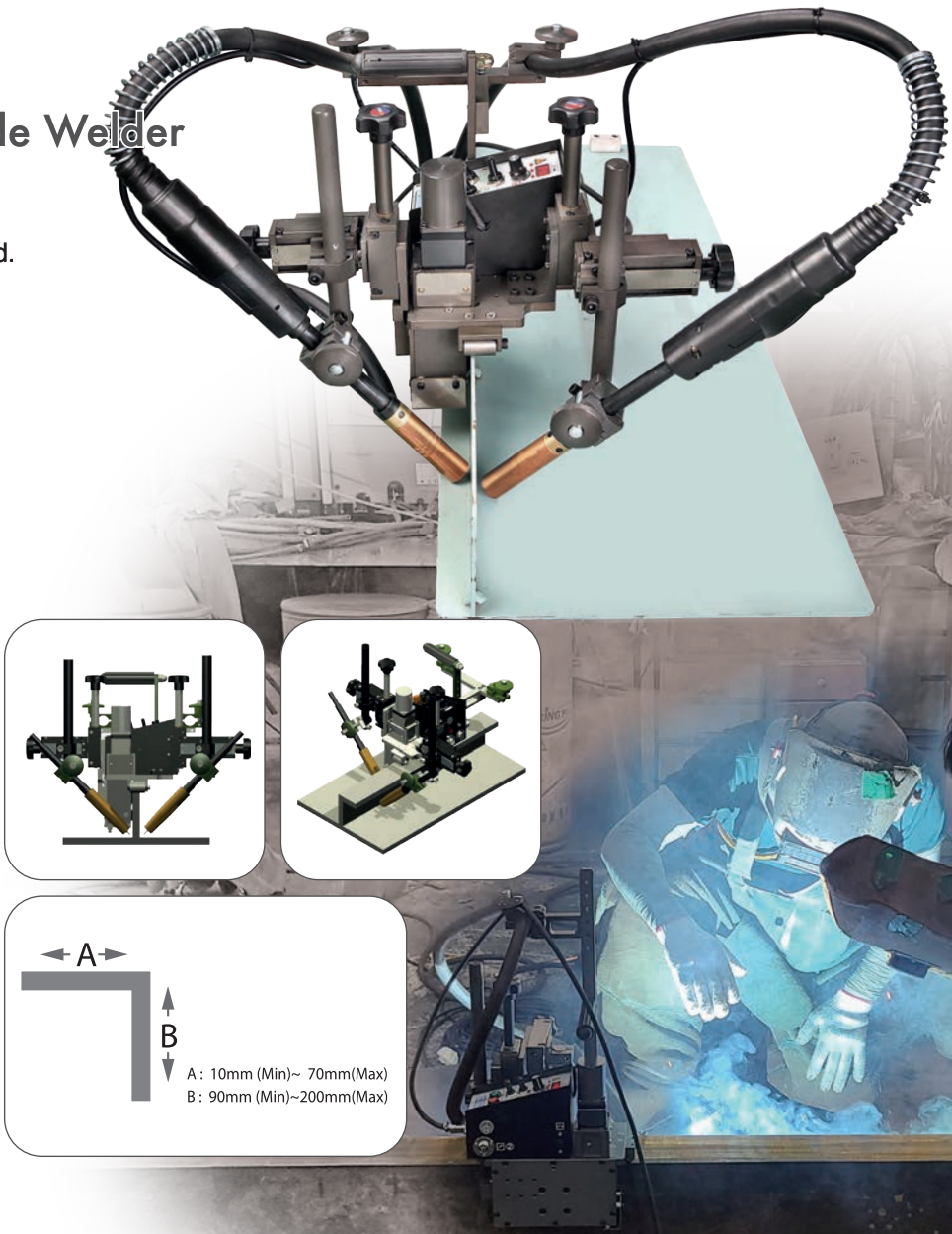
CS-251

I-BAR / ANGLE BAR Fillet Stitch and Continuous Dual Side Welder

- It drives at a constant speed with the minimized gear backlash.
Thus the high welding quality and the long life span of the welder is acquired.
- The stop sensors of its both sides stop the welder automatically when a welding job is completed.
- The crater filling function provides excellent welding quality at the beginning and end of welding.
- Using magnet release handle, it can be easily mounted and dismantled.
- It is small and light, so it can be conveniently used and easily moved.

Welding Position	Fillet 2F	Groove	PIPE
------------------	--------------	--------	------

DIVISION		CS-251		Remarks
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC 48V	DC 18-72V(Option)	
	Dimensions	442(W)X379(L)X363(H)		
	Weight	8.9Kg		
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
	Traction Power	20Kg(angle of inclination 75°)		
	Magnetic Power	32Kg		
Torch	Up / Down Angle	±45°		
	Front / Back Distance	0~72mm		
	Up / Down Distance	0~42mm		
	Running Angle	±3°		



CS-41 & CS-B41 Wall Travelling Fillet Stitch and Continuous Welder

- It is a wall travelling fillet welder for I and H Beam, and the Beam height should be more than 120mm.
- It drives at a constant speed with the minimized gear backlash. Thus the high welding quality and the long life span of the welder is acquired.
- The stop sensors of its both sides stop the welder automatically when a welding job is completed.
- The crater filling function provides excellent welding quality at the beginning and end of welding.
- It is small and light, so it can be conveniently used and easily moved.

Welding Position	Fillet 2F	Groove	PIPE
------------------	--------------	--------	------

DIVISION		CS-41		CS-B41
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC 48V	DC 18-72V(Option)	BOSH BATTERY 18V 4.0Ah
	Dimensions	234(W)X377(L)X262(H)		234(W) X 377(L) X 262(H)
	Weight	6.8Kg		7.2Kg
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Traction Power	14Kg		
	Magnetic Power	30Kg		
Torch	Up / Down Angle	45° ± 10°		
	Front/ Back Distance	0~32mm		
	Up / Down Distance	0~32mm		
	Running Angle	±5°		

CS-41



CS-B41

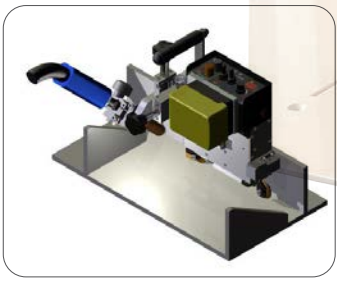
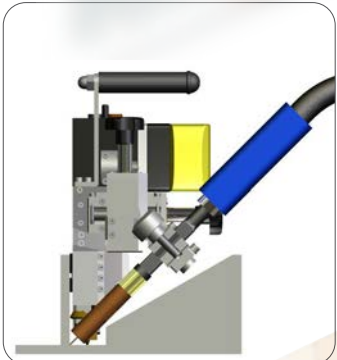


CS-41S & CS-B41S Wall Travelling Fillet Stitch and Continuous Welder

- It is a wall travelling fillet welder with stitch function for I & H Beam, and the Beam height should be more than 120mm.
- It drives at a constant speed with the minimized gear backlash.
Thus the high welding quality and the long life span of the welder is acquired.
- The stop sensors of its both sides stop the welder automatically when a welding job is completed.
- The crater filling function provides excellent welding quality at the beginning and end of welding.
- Using magnet release handle, it can be easily mounted and dismounted.
- It is small and light, so it can be conveniently used and easily moved.

Welding Position	Fillet 2F	Groove	PIPE
------------------	--------------	--------	------

DIVISION		CS-41S		CS-B41S
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC48V	DC18-72V(Option)	BOSCH BATTERY 18V 4.0Ah
	Dimensions	169(W) X 335(L) X 303(H)		169(W) X 335(L) X 303(H)
	Weight	5.9Kg		6.5Kg
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Traction Power	14Kg		
	Magnetic Power	30Kg		
Torch	Up / Down Angle	45° ± 10°		
	Front / Back Distance	0~32mm		
	Up / Down Distance	0~32mm		
	Running Angle	±5°		

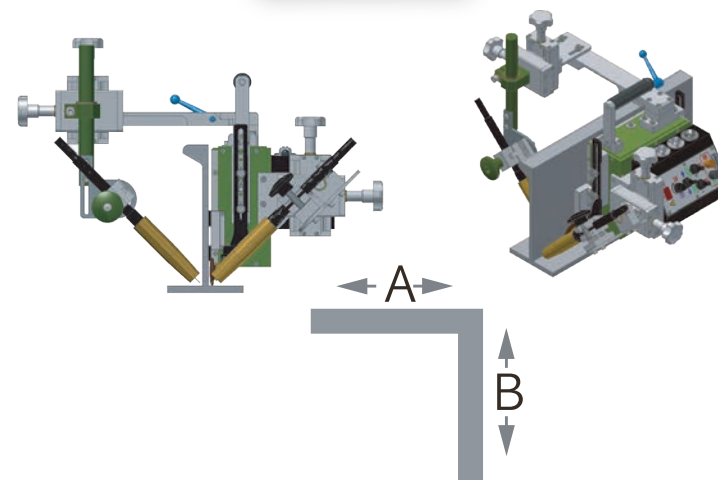
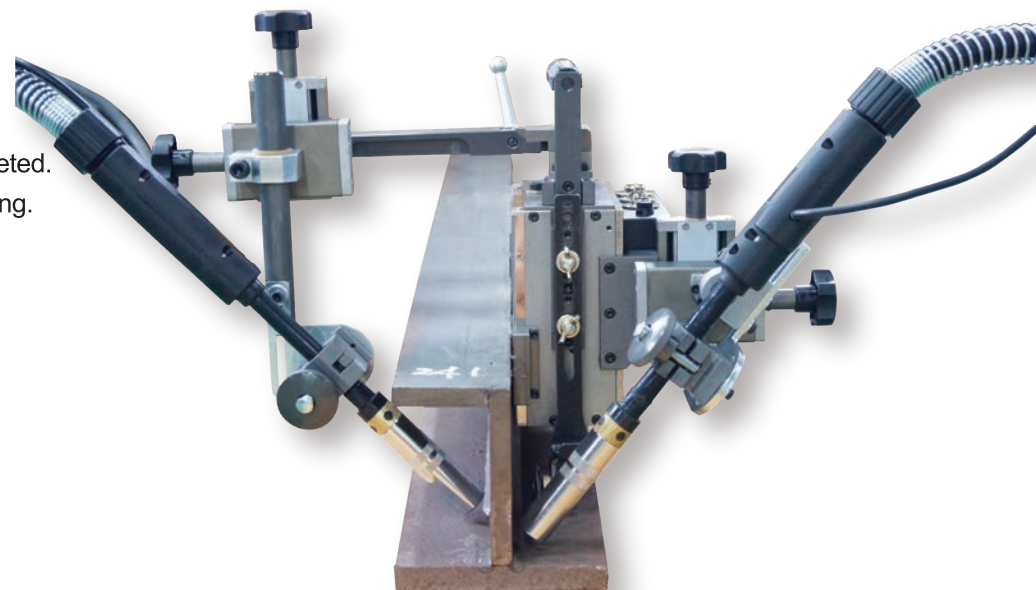


CS-41B Wall Travelling Fillet Stitch and Continuous Welder with 2 Torches

- It is a wall travelling fillet welder with stitch function and 2 torches.
- It drives at a constant speed with the minimized gear backlash.
Thus the high welding quality and the long life span of the welder is acquired.
- The stop sensors of its both sides stop the welder automatically when a welding job is completed.
- The crater filling function provides excellent welding quality at the beginning and end of welding.
- It is small and light, so it can be conveniently used and easily moved.

Welding Position	Fillet	Groove	PIPE
	2F		

DIVISION		CS-41B		Remarks
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC48V	DC 18-72V(Option)	
	Dimensions	512(W) X 362(L) X 348(H)		-
	Weight	9.8Kg		-
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~196cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
	Traction Power	14Kg		
	Magnetic Power	30Kg		
Torch Adjust ment Part	Torch	Torch1		Torch2
	Up / Down Angle	45° ± 10°		45° ± 10°
	Front / Back Distance	0~50mm		0~50mm
	Up / Down Distance	0~70mm		0~50mm
	Running Angle	±5°		±5°



A : 75mm (Min)~100mm(Max)
B : 125mm (Min)~400mm(Max)

CS-BTS

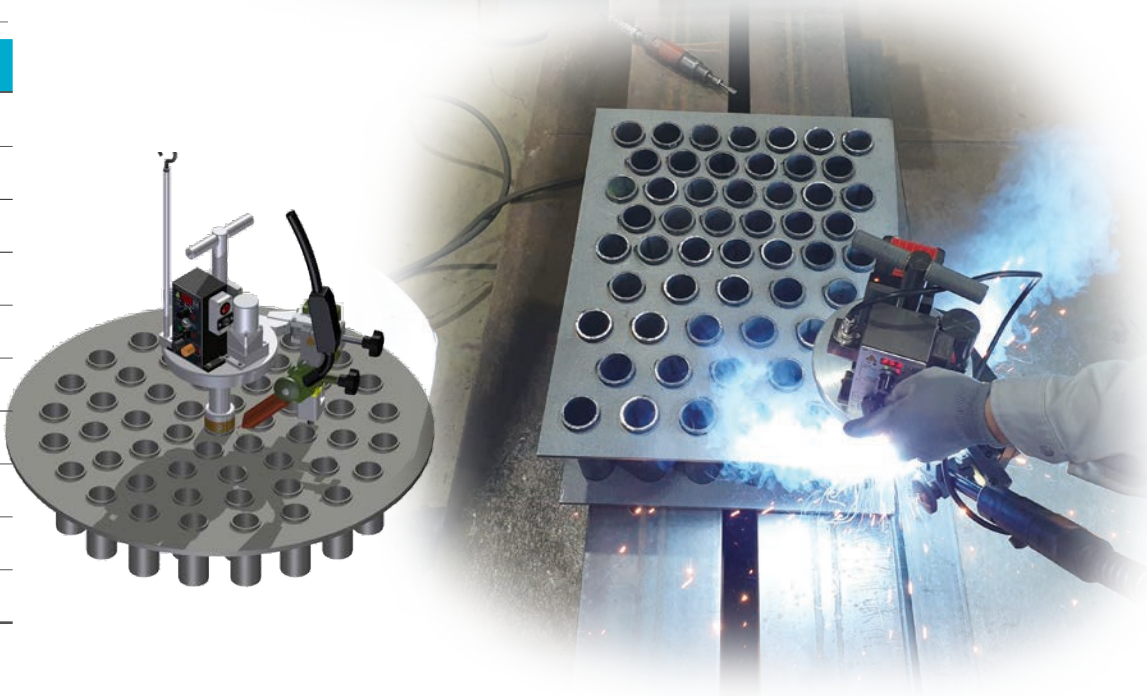
- It is an automatic welder for wind tower bracket and boiler tube sheet.
- The display screen shows the exact driving speed.
- The constant speed driving is controlled by a microcomputer to achieve precision driving, so the welding quality (leg length) is constant.
- When welding is stopped, the creater filling function improves the welding quality.
- It is convenient to set the working position with an easy torch adjustment device.
- After welding started, it welds one turn and stopes welding automatically.
- After 1 cycle automatic welding completed, it welds in the opposite direction to prevent cable twisting.
- It is a handle clutch type and can be conveniently installed on the base material.
- It uses rechargeable battery instead of power cable.

Welding Position	SPECIAL	
	Wind Tower Bracket	Boiler Tube Sheet

DIVISION		CS-BTS	REMARK
General	DC Input power	BOSCH BATTERY 18V, 4.0Ah	-
	Dimensions	218(W)X 339(L) X 433(H)	
	Weight	7.9Kg	
Body	Driving Method	Spur Gear Driving Rotation Method	
	Traveling Speed	0~471 cm/min	
	Traveling Motor	DC 24V, 12W, 5000RPM	Bldc Motor
Slide	Running Angle	45° ± 10°	
	Y Slide	0~55mm	
	Z Slide	0~85mm	
Welding Drive Rotation Angle		0~999°	



■ It is customized depending on the different sizes of Tubes (30ø ~100ø).

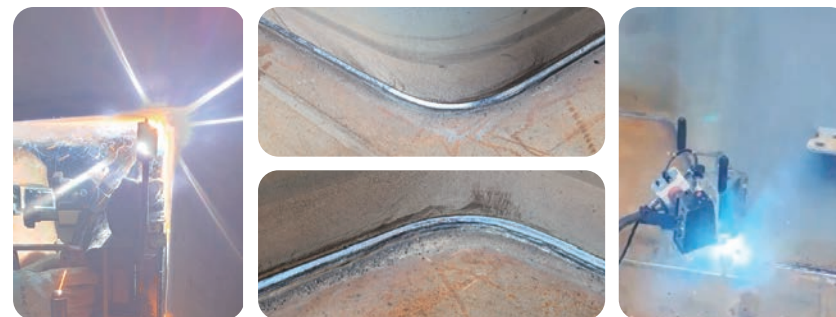


CS-CORR Corrugation Welder

- It is an optimized welder for the corrugation structure of Product Carrier.
- It drives and welds the wall surface with the built-in magnet of the Body and Side Guide Grip.
- It is compact and lightweight. And it is easily moved and installed.
It can be operated even by unskilled workers.
- Aligning the centers of the Torch and Wheels, the Torch deviation from the welding section on the curved surface is prevented.
- Even on curved surfaces, the welder does not deviate from the welding seam and a consistent bead is formed.
- It is applicable for 2F or 4F position.
- It can be used for the construction of large structures (overhead position) such as bridges and buildings also.

Welding Position	Fillet	Groove	PIPE
	2F, 4F		

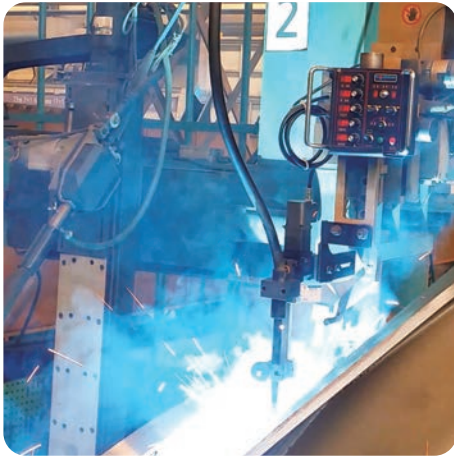
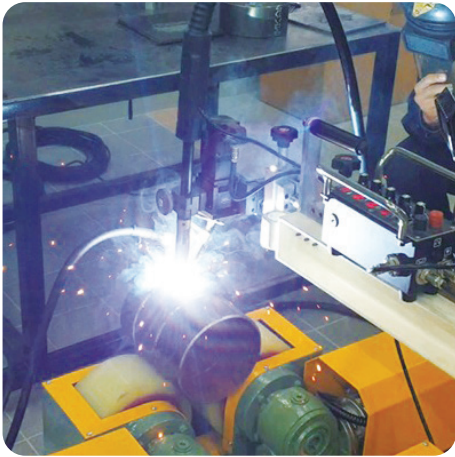
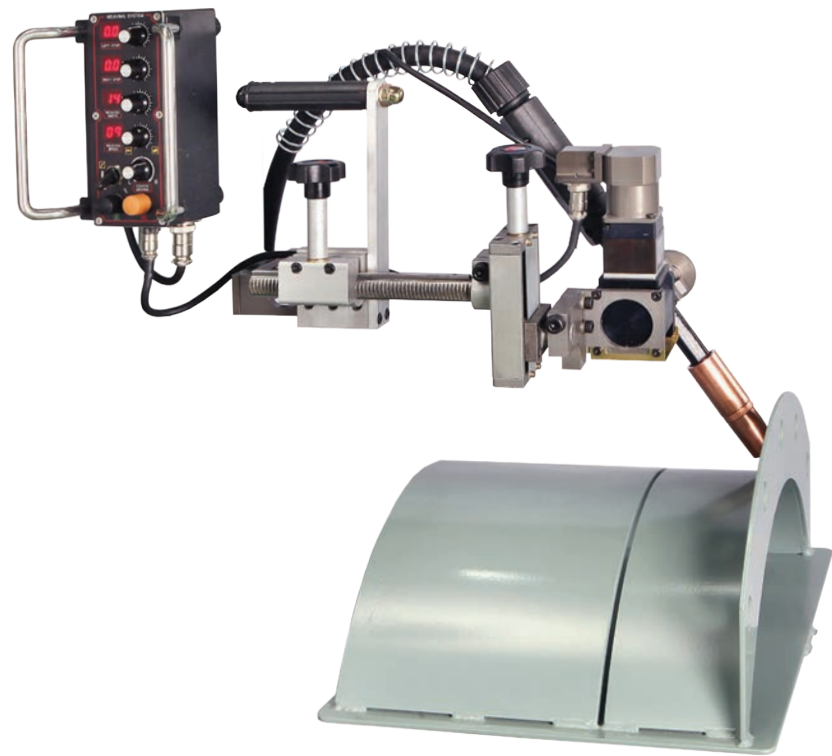
DIVISION		CS-CORR		Remarks
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC48V	DC 18-72V(Option)	
	Dimensions	278(W) X 386(L) X 279(H)		-
	Weight	7.5Kg		-
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
Torch	Up / Down Angle	20° ~ 45°		
	Running Angle	±5°		
	Y-SLIDE	0~42mm		
	Z-SLIDE	0~65mm		



CS-R1 Pendulum Weaving Welder

- It is a butt & fillet welder for circumference, and the column & boom, and the rotator is needed additionally.
- It makes pendulum movement, and the leg length of high quality as much as you want can be acquired.
- It drives at a constant speed with the minimized gear backlash. Thus the high welding quality and the long life span of the welder is acquired.

		Welding Position		Fillet	Groove	PIPE 1GR
DIVISION		CS-R1 WEAVER		Remark		
Genreal	AC Input power	AC100V~240V 50/60Hz				
	DC Input power(Option)	AC 48V	DC 18-72V(Option)			
	Dimensions	214(W) X 319(L) X232(H)				
	Weight	3.5Kg				
Torch	Left / Right Distance	0~120mm				
	Up / Down Distanc	0~70mm				
	Running Angle	±5°				
Weaver	Weaving Motor	DC24V, 12W, 5000 RPM		BLDC MOTOR		
	Readucer	1000 : 1				
	Weaving Width	±16°				
	Weaving Speed	0~5rpm / min				
	Left / Right Stop	0.0~9.9(sec)				
	Center Shit	0°~360°				



CS-S1 Linear Weaving Welder

- It is a butt & fillet welder for circumference, and the column & boom, and the rotator is needed additionally.
- It makes linear movement, is the leg length of high quality as much as you want can be acquired.
- It drives at a constant speed with the minimized gear backlash. Thus the high welding quality and the long life span of the welder is acquired.

Welding Position	Fillet	Groove	PIPE
			1GR

DIVISION		CS-S1 WEAVER		Remark
General	Input power	AC100V~240V 50/60Hz		
	DC Input power (Option)	AC48V	DC 18-72V(OPtion)	
	Dimensions	418(W) X 232(L) X222(H)		
	Weight	3.8Kg		
Torch	Left / Right Distance	0~120mm		
	Up / Down Distanc	0~70mm		
	Running Angle	±5°		
Weaver	Weaving Motor	DC24V, 12W, 5000 RPM		BLDC MOTOR
	Readucer	1000 : 1		
	Weaving Width	0~50mm / ±5%		
	Weaving Speed	26Times / min		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shit	50.8mm		

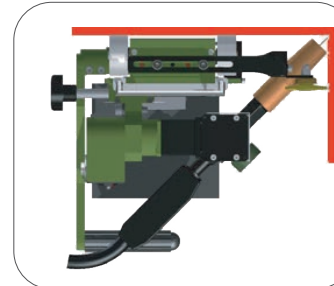
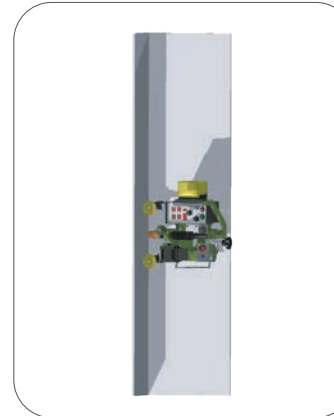
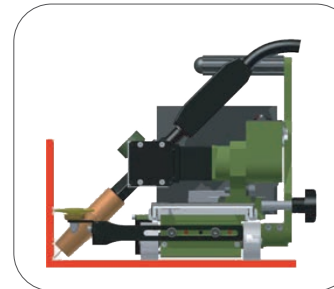


CS-61WE & CS-B61WE Vertical-Up, Fillet Weaving Welder

- It is a vertical-up, fillet weaving welder, and controlled by the panel controller and the remote controller.
 - It drives at a constant speed with the minimized gear backlash.
- Thus the high welding quality and the long life span of the welder is acquired.
- Controlling the weaving width, the desired leg length can be acquired through a travel.
 - Using magnet release handle, it can be easily mounted and dismounted.

Welding Position	Fillet 2F, 3F, 4F	Groove	PIPE
------------------	----------------------	--------	------

DIVISION		CS-61WE		CS-B61WE
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC48V	DC18-72V(Option)	BOSCH BATTERY 18V 4.0Ah
	Dimensions	325(W)X247(L)X254(H)		325(W) X 299(L) X 254(H)
	Weight	8.1Kg		8.5Kg
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
Torch	Up / Down Angle	0~40mm ±5%		
	Front / Back Distance	0~30mm ±5%		
Weaver	Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Reducer	1000 : 1		
	Weaving Width	±4°		
	Weaving Speed	0~5 rpm/min		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shift	0~360°		
	Operating Distance of RC	10m		



CS-61WE



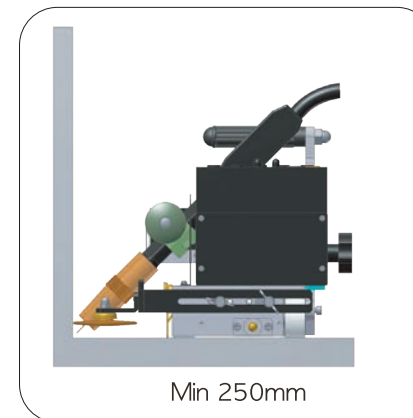
CS-B61WE

CS-51WE Vertical-Up, Fillet Weaving Welder

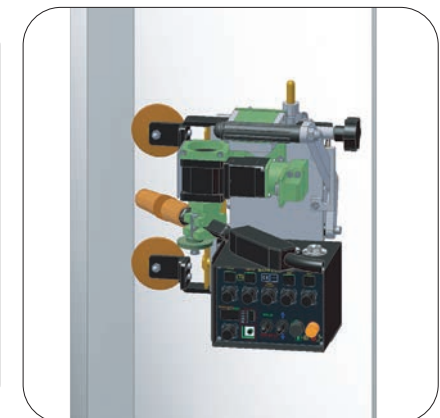
- It is a vertical-up, fillet weaving welder, and controlled by the panel controller and the remote controller.
- It drives at a constant speed with the minimized gear backlash.
Thus the high welding quality and the long life span of the welder is acquired.
- Controlling the weaving width, the desired leg length can be acquired through a travel.
- Using magnet release handle, it can be easily mounted and dismounted.

Welding Position	Fillet	Groove	PIPE
	2F, 3F, 4F		

DIVISION		CS-51WE		Remark
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input power(Option)	AC48V	DC V18-72V(Option)	
	Dimensions	329(W) X 321(L) X 237(H)		-
	Weight	8.4Kg		-
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
Torch	Up / Down Angle	45° ± 10°		
	Front / Back Distance	0~32mm		
Weaver	Motor	DC24V, 12W, 5000 RPM		
	Reducer	1000 : 1		
	Weaving Width	±16°		
	Weaving Speed	0~5rpm / min		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shift	0°~360°		
	Operating Distance of RC	10m		



Min 250mm



CS-61MW & CS-B61MW Lightweight Multipurpose Weaving Welder

- It is a multipurpose weaving welder capable of bottom view, vertical position fillet and butt welding.
- The seam is traced by the guide rollers, and the strong magnets are built in the welder.
- Controlling the weaving width, the desired leg length can be acquired through a travel.
- The weaving width, left stop, right stop and center movement can be electronically controlled.
- It can be controlled by the panel controller and the remote controller.
- It drives at a constant speed with the minimized gear backlash.
- Thus the high welding quality and the long life span of the welder is acquired.
- Using magnet release handle, it can be easily mounted and dismounted.

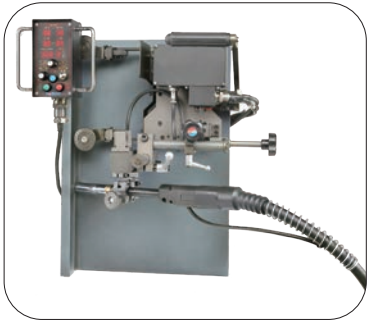
Welding Position	Fillet 1F, 2F, 3F, 4F	Groove 1G	PIPE
------------------	--------------------------	--------------	------

DIVISION		CS-61MW		CS-B61MW
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC 48V	DC18-72V(Option)	BOSCH BATTERY 18V 4.0Ah
	Dimensions	295(W)X327(L)X256(H)		295(W)X378(L)X256(H)
	Weight	8Kg		8.4Kg
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
Torch	Up / Down angle	0~40mm ±5%		
	Front / Back Distance	0~30mm ±5%		
Weaver	Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Reducer	1000 : 1		
	Weaving Width	±4°		
	Weaving Speed	0~5 rpm/min		
	Left / Right Stop	0.0~9.9(sec)		
	0.0~9.9(sec)	0~360°		
	Operating Distance of RC	10m		

CS-61MW



CS-B61MW

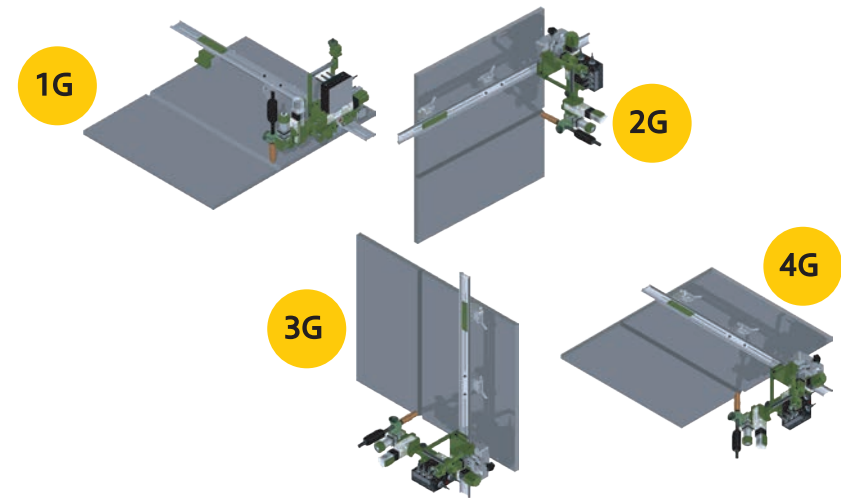


CS-GW LCD Automatic Multi-Layers Welder

- The starting position and angle value of the torch for each multi-layer PASS.
 - [Semi-automatic mode]** Torch is automatically moved to the memorized starting position with the angle value of the next work PASS when ongoing PASS welding is completed
 - [Manual mode]** The origin return button is pressed, and torch is moved to the memorized starting position with angle value of the next work PASS
- Up to 15 PASS, working condition values can be set and saved.
 - The thickness of base material : 15T ~ 30T (21 species)
 - The groove angle : 30°, 35°, 40° (3 species)
 - The number of layers : Up to 15 layers
- Mechanical downsizing and simplification of equipment enables welding in narrow spaces and short sections.
- By adjusting the position of the magnets on the rail, the rail can be easily installed on site.

Welding Position	Fillet	Groove	PIPE
		1G, 2G, 3G, 4G	

DIVISION		CS-GW LCD		REMARK
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power (Option)	AC 48V	DC 18-72V (Option)	
	Dimensions	566(W) X 254(L) X 337.5(H)		
	Weight	9.3Kg		
Body (X)	Driving Method	RACK-PINION DRIVEN		
	Traveling Speed	0~88 cm/min		
	Traveling Motor	DC 24V, 24W, 5000RPM		BLDC
R	Motor	DC 24V, 24W, 5000RPM		BLDC
	Worm Auto Slide	0~360°		
Weaver (Y)	Motor	DC 24V, 24W, 5000RPM		BLDC
	Weaving Width	0~90mm (±30mm)		
	Weaving Speed	0~2000 mm/min (±5%)		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shift	0~360°		
Z	Operating Distance of RC	10m		
	Motor	DC 24V, 10W, 5000RPM		BLDC
	In Out Auto Slide	±25mm		
Rail	Fixing	Magnet ON/OFF type		
	Material / Size	AL6N01 / 1.5M / 5.4Kg		

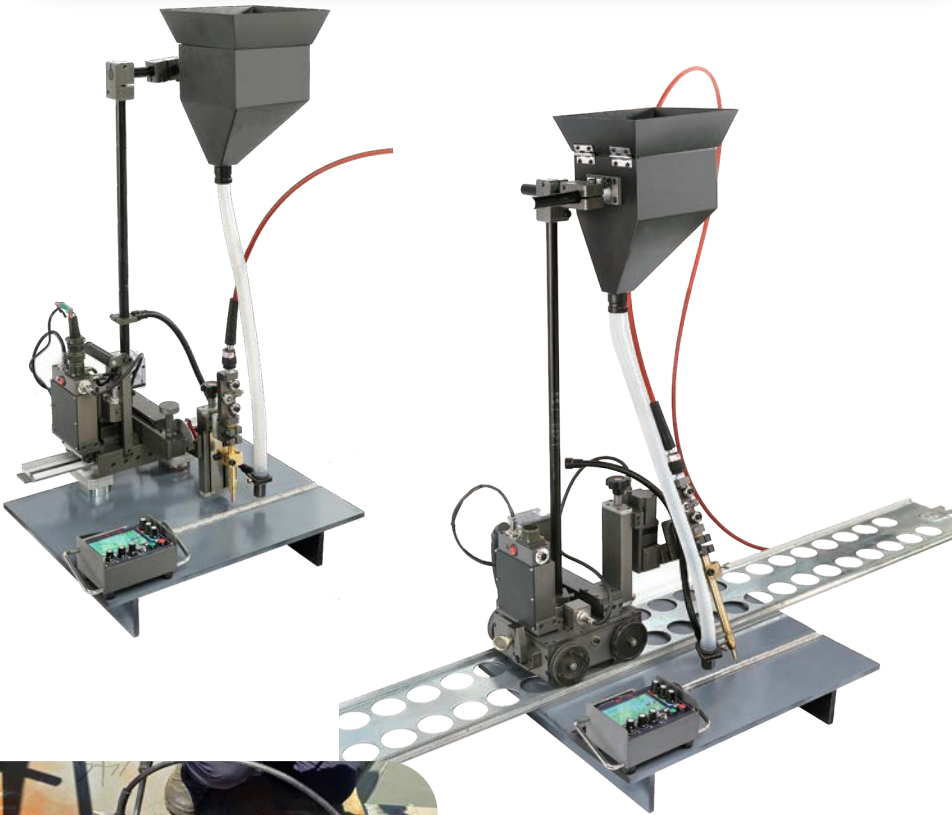


CS-SAW Submerged Arc Welding Welder

- It is a rail traveling welder with the Rack & Pinion driving method.
- The welder is compact and lightweight, so it can be moved easily and conveniently.
- Productivity can be improved and welding cost can be reduced in flat position.
- A weaving device is installed so that even thick base materials can be welded, and the weaving width can be adjusted according to the thickness.
- There is a left and right stop function to prevent insufficient penetration and undercut during weaving welding
- It is possible to do precise control digitally such as running speed, weaving width, weaving speed, left stop, right stop and etc.
- Using the lightweight rail with magswitch, the welder can be conveniently moved and easily installed.

Welding Position	Fillet	Groove	PIPE
		1G	

DIVISION		CS-SAW		REMARK
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power (Option)	AC 48V	DC18-72V(Optional)	
	Dimensions	364(L) X300(W) X 542(H)		
	Weight	18Kg (with rails)		
Body	Driving Method	RACK-PINION DRIVEN		
	Traveling Speed	0~88 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
Y Slide	Stroke	100mm ±5%		
Z Slide	Stroke	145mm ±5%		
Weaver	Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
	Weaving Width	0~360°		
	Weaving Speed	0~5 rpm		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shift	0~360°		
Rail (Basic)	Fixing	Magnet ON/OFF switch		
	Material / Size	AL / 1.5M / 9.4Kg		
Rail (Option)	Fixing	Cutting track		
	Material / Size	AL / 1.8M / (1816*215)		



CS-100C & CS-B100C But & Fillet Weaving Welder

- It is a weaving welder of multi-positions driving on the aluminum rigid rail, and it can be easily controlled by the panel controller and the remote controller.
 - The stop sensors of its both sides stop the welder automatically when a welding job is completed.
 - Controlling the weaving width, the desired leg length can be acquired through a travel.
 - It drives at a constant speed with the minimized gear backlash.
- Thus the high welding quality and the long life span of the welder is acquired.
- The position of the rail can be easily readjusted by the on-off magswitches.

Welding Position	Fillet	Groove	PIPE
	2F, 3F, 4F	1G, 3G	

DIVISION		CS-100C		CS-B100C
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power (Option)	AC 48V	DC 18-72V (Option)	BOSCH BATTERY 18V 4.0Ah
	Dimensions	340(W)X210(L)X239(H)		340(W)X210(L)X239(H)
	Weight	6.4Kg		7.5Kg
Body	Driving Method	RACK-PINION DRIVEN		
	Traveling Speed	0~88 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
Torch	Up / Down Angle	0~40mm ±5%		
	Front / Back Distance	0~60mm ±5%		
	Running Angle	±5°		
Weaver	Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Reducer	1000 : 1		
	Weaving Width	±16°		
	Weaving Speed	0~5 rpm/min		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shift	0~360°		
	Operating Distance of RC	10M		
Rail	Fixing	Magnet ON/OFF type		
	Material / Size	AL / 1.5M / 5.4Kg		

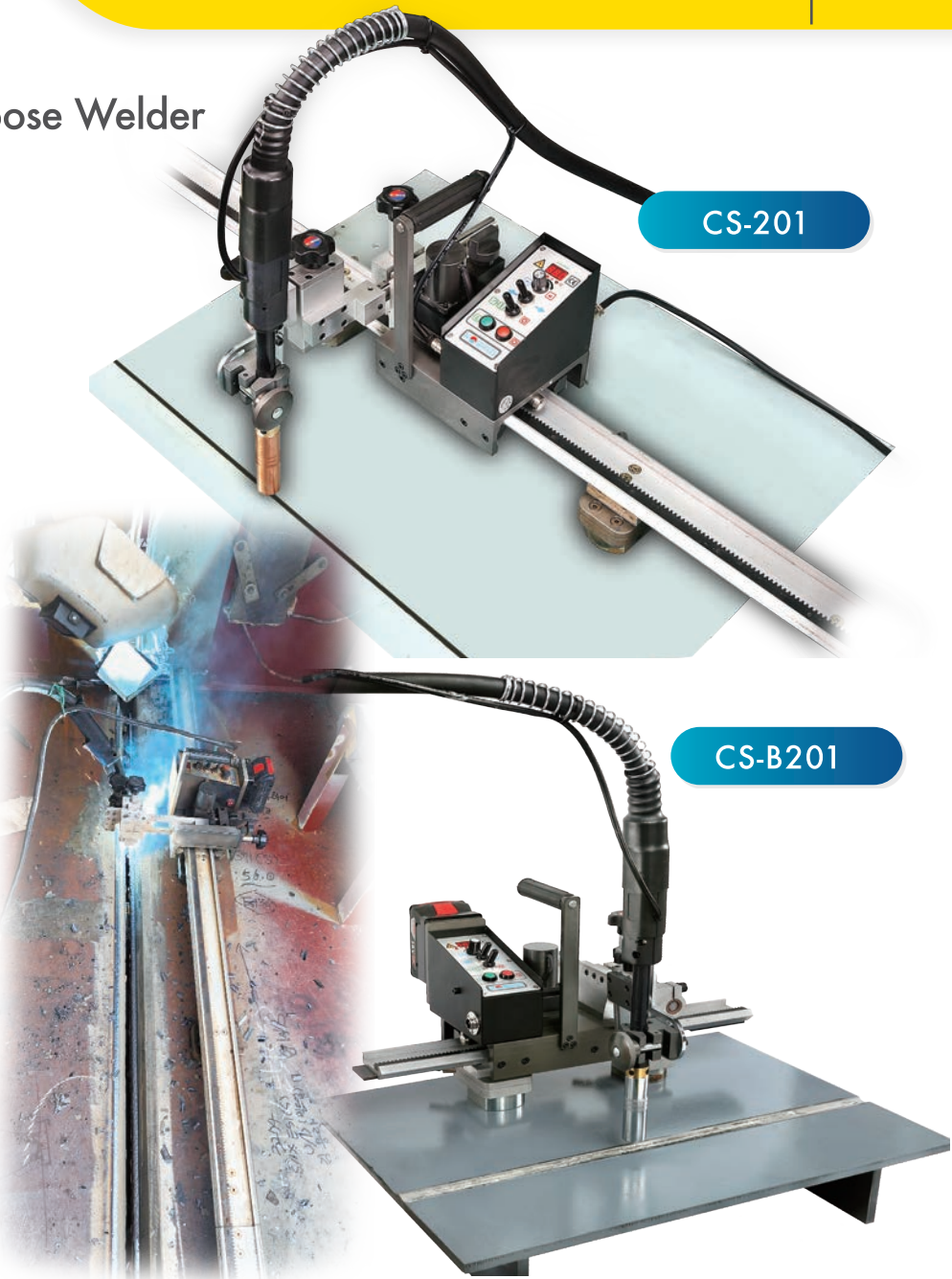


CS-201 & CS-B201 Butt & Fillet Multipurpose Welder

- It is a butt & fillet welder of multi-positions driving on the aluminum rigid rail.
- The position of the rail can be easily readjusted by the on-off magswitches.
- It drives at a constant speed with the minimized gear backlash.
Thus the high welding quality and the long life span of the welder is acquired.
- The crater filling function provides excellent welding quality at the beginning and end of welding.

Welding Position	Fillet 2F, 4F	Groove 1G, 2G	PIPE
------------------	------------------	------------------	------

DIVISION		CS-201		CS-B201
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC48V	DC 18-72V(Option)	BOSCH BATTERY 18V 4.0Ah
	Dimensions	384(W)X246(L)X239(H)		408(W)X246(L)X239(H)
	Weight	5.6Kg		6.4Kg
Body	Driving Method	RACK-PINION DRIVEN		
	Traveling Speed	0~98 cm/min ±5%		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
Torch	Up / Down Angle	0~45mm ±10		
	Front / Back Distance	0~32mm		
	Up / Down Distance	0~32mm		
	Running Angle	±5°		
	Front / Back Distance	0~120mm		
Rail	Fixing	Magnet On/Off type		
	Material / Size	AL / 1.5M / 5.4Kg		

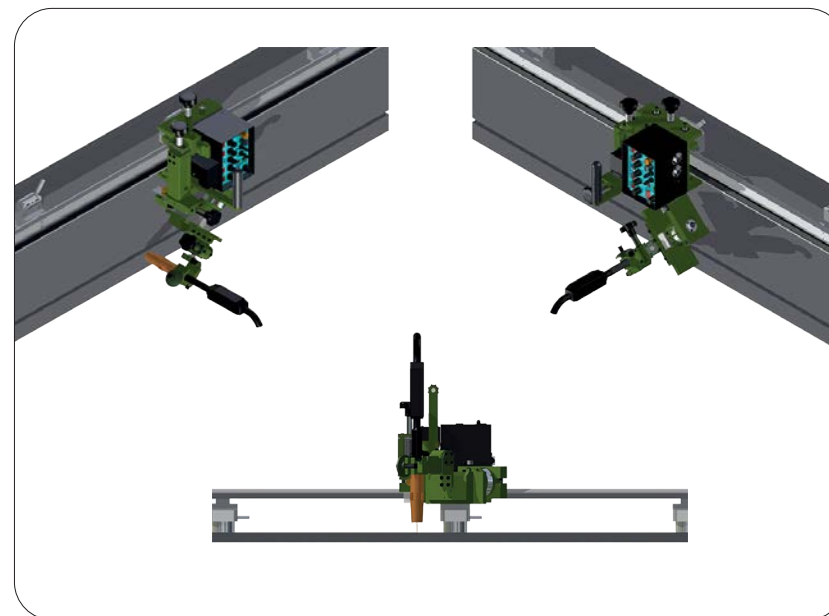
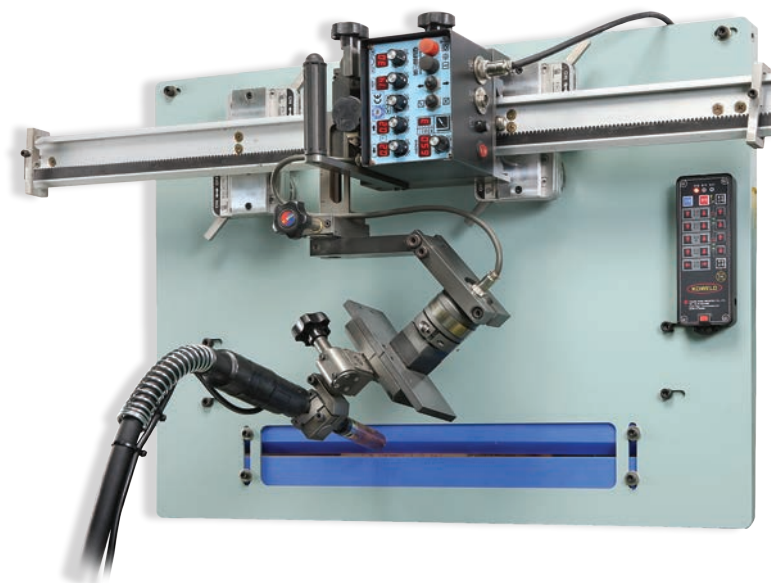


CS-100H Horizontal Weaving Welder

- It is a horizontal weaving welder of multi-positions driving on the aluminum rigid rail, and it can be easily controlled by the panel controller and the remote controller.
- The stop sensors of its both sides stop the welder automatically when a welding job is completed.
- Controlling the weaving width, the desired leg length can be acquired through a travel.
- It drives at a constant speed with the minimized gear backlash. Thus the high welding quality and the long life span of the welder is acquired.
- The position of the rail can be easily readjusted by the on-off magswitches.

Welding Position	Fillet	Groove	PIPE
		2G	

DIVISION		CS-100H		Remark
General	AC Input power	AC100V~240V 50/60Hz		
	DC Input power(Option)	AC 48V	DC 18-72V(Option)	
	Dimensions	467(W) X 243(L) X 240(H)		
	Weight	7.5Kg		
Body	Driving Method	RACK-PINION DRIVEN		
	Traveling Speed	0~88cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
Torch	Up / Down angle	0~40mm ±5%		
	Front / Back Distance	0~65mm ±5%		
	Running Angle	±5°		
Weaver	Weaving Motor	DC24V, 12W, 5,000RPM		BLDC MOTOR
	Reducer	100 : 1		
	Weaving Width	0~50mm		
	Weaving Speed	0~5rpm / min		
	Left Stop / Right Stop	0.0~9.9(sec)		
	Center Shift	0~360°		
	Operating Distance of RC	10m		
Rail	Fixing	Magnet ON/OFF Type		
	Material / Size	AL / 1.5M / 5.4kg		

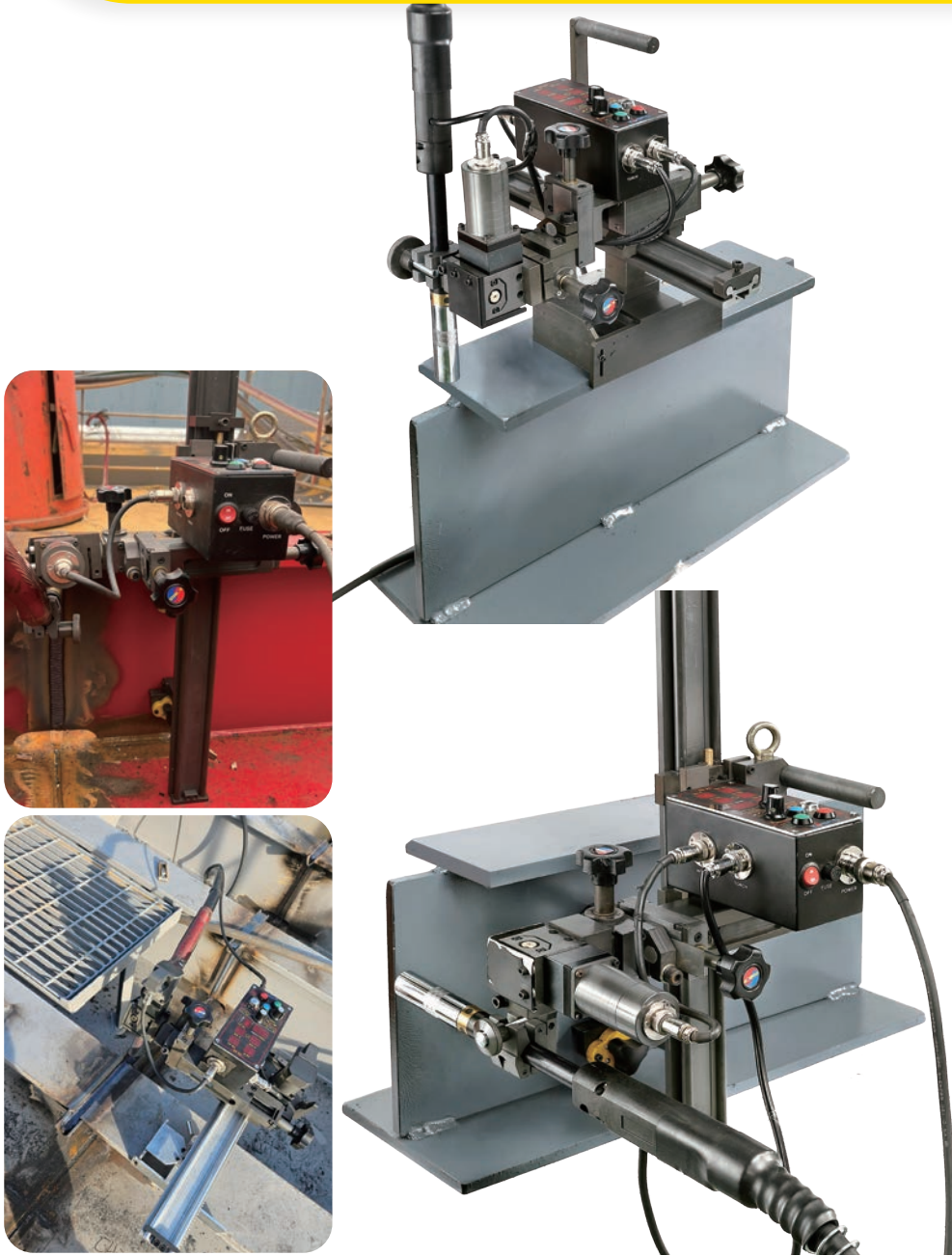


CS-V UP Vertical-Up, Multiposition Weaving Welder

- The non-welding section of the T-Bar is minimized.
- The position of the rail can be easily readjusted by the on-off magswitches.
- 1 machine can be used for both of left and right welding.
- It is specialized for Corner and T-Bar welding.

Welding Position	Fillet	Groove	PIPE
	3F	1G, 3G	

DIVISION		CS-V UP		Remarks
General	AC Input power	AC100V~240V 50/60Hz		
	DC Input power(Option)	AC 48V	DC 18-72V(Option)	
	TYPE	Butt Type	Vertical Fillet Type	
	Dimensions	211(W)X360(L)X351(H)	258(W)X382(L)X3101(H)	
	Weight	4.9Kg	4.9Kg	
Body	Driving Method	Rack Pinion Driven		
	Traveling Speed	0~220 mm/min	0~980mm/min	
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
Torch	Front / Back Distance	0~65mm ±5%		
	Up / Down Distance	0~40mm ±5%		
Weaver	Motor	DC24V, 12W, 5000 RPM		BLDC MOTOR
	Reducer	400 : 1		
	Weaving Width	±4° ±5%		
	Weaving Speed	0~5rpm		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shift	0°~360°		
Rail	Fixing	Magnet On/Off Type		
	Material / Size	350mm / 2.5kg	750mm / 4.5kg	



CS-TB100C Battery powered Butt / Fillet weaving welder for Tig

- It is a weaving welder of multi-positions driving on the aluminum rigid rail, and it can be easily controlled by the panel controller and the remote controller.
 - The stop sensors of its both sides stop the welder automatically when a welding job is completed.
 - Controlling the weaving width, the desired leg length can be acquired in a travel.
 - It drives at a constant speed with the minimized gear backlash.
- Thus the high welding quality and the long life span of the welder is acquired.
- The position of the rail can be easily readjusted by the on-off magswitches.
 - It is specialized in TIG weaving welding(installed with high frequency dedicated TIG PCB).

Welding Position	Fillet	Groove	PIPE
	2F, 3F	1G, 3G	

DIVISION		CS-TB100C	Remarks
General	AC Input power		
	DC Input power(Option)	BOSCH BATTERY 18V 4.0Ah	
	Dimensions	352(W)X209(L)X258(H)	
	Weight	7Kg	
Body	Driving Method	Rack Pinion Driven	
	Traveling Speed	0~880 mm/min	
	Traveling Motor	DC 24V, 12W, 5000RPM	BLDC MOTOR
Torch	Up / Down Angle	0~40mm ±5%	
	Front / Back Distance	0~40mm ±5%	
	X-Slide	±20mm	
	Running Angle	±20mm	
Weaver	Motor	DC24V, 12W, 5000 RPM	BLDC MOTOR
	Reducer	1000 : 1	
	Weaving Width	±16°	
	Weaving Speed	0~5rpm	
	Left / Right Stop	0.0~9.9(sec)	
	Center Shift	0°~360°	
Rail	Fixing	Magnet On/Off Type	
	Material / Size	AL / 1.5M / 5.4Kg	

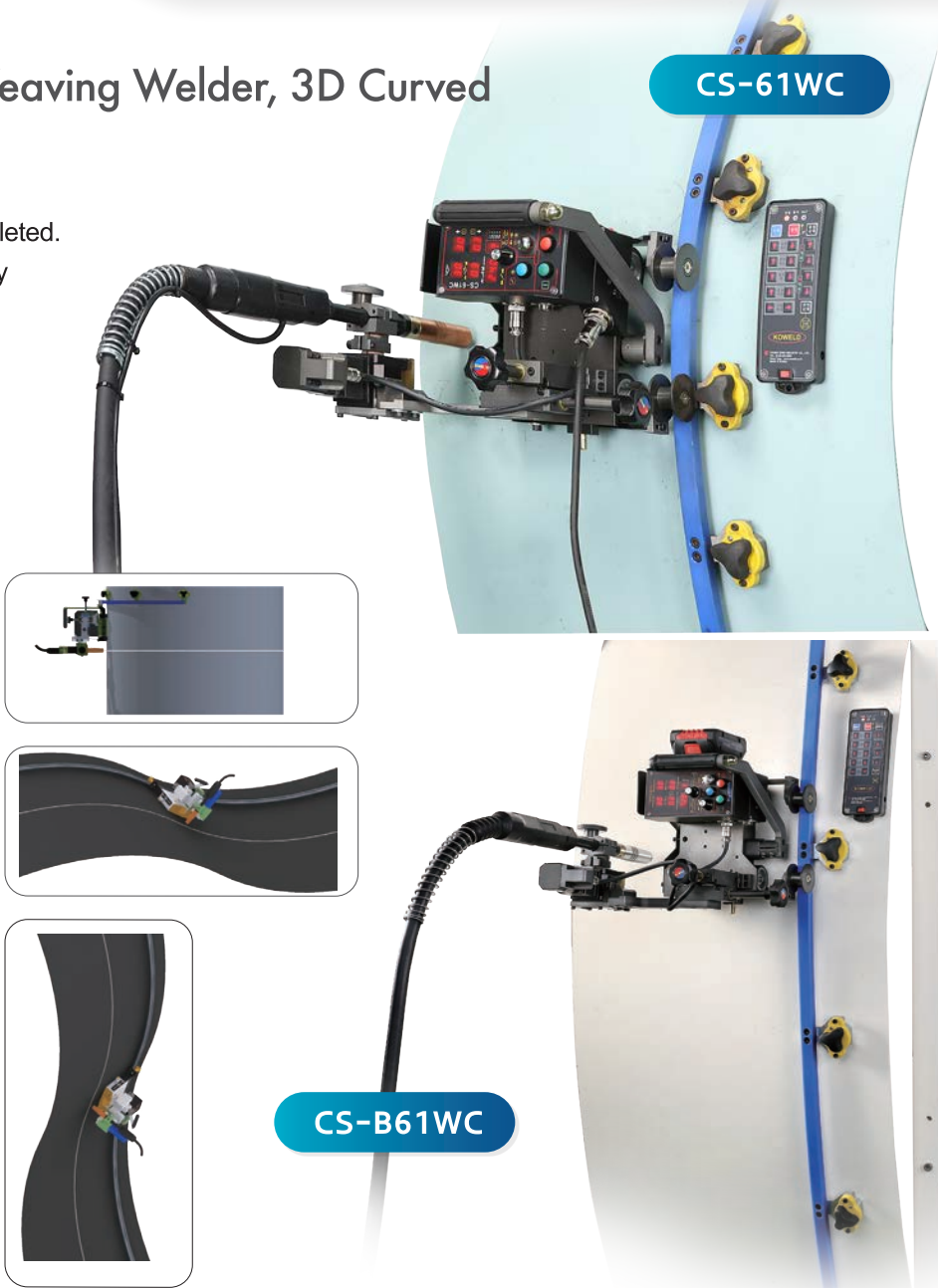


CS-61WC & CS-B61WC But & Fillet Weaving Welder, 3D Curved

- The welder drives on the wheels with the guide rollers moving on the flexible rail, and it is controlled by the panel controller and the remote controller.
- The stop sensors of its both sides stop the welder automatically when a welding job is completed.
- It drives at a constant speed with the minimized gear backlash. Thus the high welding quality and the long life span of the welder is acquired.
- Controlling the weaving width, the desired leg length can be acquired Through a travel.
- The position of the rail can be easily readjusted by the on-off magswitches.

Welding Position	Fillet 2F, 3F	Groove 1G, 3G	PIPE 2G
------------------	------------------	------------------	------------

DIVISION		CS-61WC		CS-B61WC
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC 48V	DC 18-72V(Option)	BOSCH BATTERY 18V4.0Ah
	Dimensions	344(W)X246(L)X255(H)		344(W)X297(L)X255(H)
	Weight	7.9Kg		8.5Kg
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
Torch	Up / Down Distance	0~35mm ±5%		
	Front / Back Distance	0~35mm ±5%		
Weaver	Motor	DC 24V, 12W, 5000RPM BLDC MOTOR		
	Reducer	1000 : 1		
	Weaving Width	4°		
	Weaving Speed	0~5 rpm/min		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shift	0~360°		
	Operating Distance of RC	10m		
Rail	Fixing	Magneet ON/OFF type		
	Material / Size	MC NYLON / 1.5M / 3.4Kg		

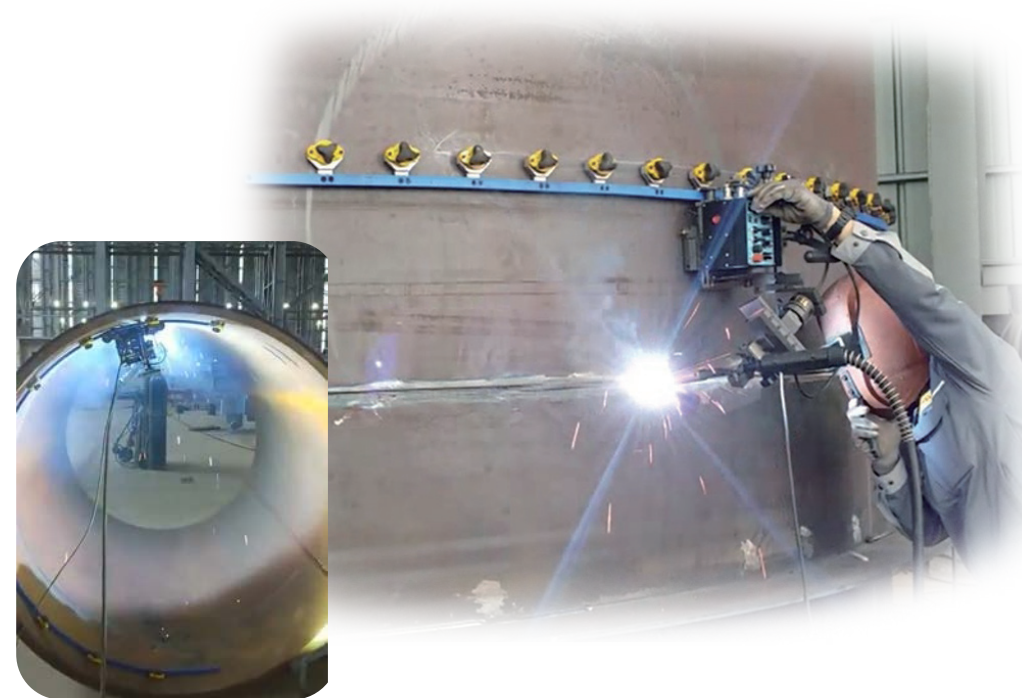


CS-61WO Butt Multi-Layers Welder for Pipe and Vessel

- It is a butt multi-layers welder for the outer surface of pipe and vessel, and the diameter should be more than 3000mm.
 - The welder drives on the wheels with the guide rollers moving on the flexible rail, and it is controlled by the panel controller and the remote controller.
 - The stop sensors of its both sides stop the welder automatically when a welding job is completed.
 - It drives at a constant speed with the minimized gear backlash.
- Thus the high welding quality and the long life span of the welder is acquired.
- Controlling the weaving width, the desired leg length can be acquired through a travel.
 - Using magnet release handle, it can be easily mounted and dismantled.

Welding Position	Fillet	Groove	PIPE
		1G, 2G	2G

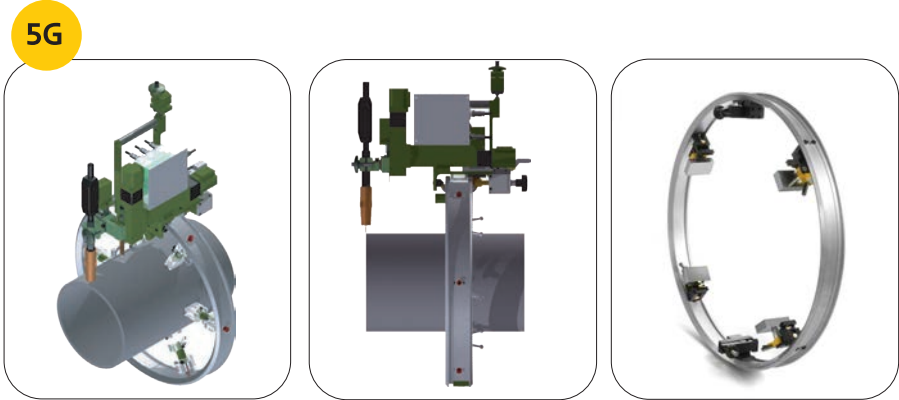
DIVISION		CS-71WO		Remark
General	AC Input power	AC100V~240V 50/60Hz		
	DC Input power(Option)	AC 48V	DC 18-72V (Option)	
	Dimension	446(W) X 256(L) X 267(H)		
	Weight	8.5Kg		
Body	Driving Method	4 WHEELS DRIVEN		
	Traveling Speed	0~98 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
Torch	Up / Down Angle	±45°		
	Running Angle	±5°		
	Y-SLIDE	0~100mm ±5%		
	BAR-SLIDE	0~60mm ±5%		
Weaver	Z-SLIDE	0~35mm ±5%		
	Motor	DC24V, 12W, 5,000RPM		BLDC MOTOR
	Reducer	1000 : 1		
	Weaving Width	0~75mm ±16°		
	Weaving Speed	0~5rpm		
	Left Stop / Right Stop	0.0~9.9(sec)		
Rail	Center Shift	0°~360°		
	Fixing	Magnet ON/OFF Type		
	Material / Size	MC NYLON / 1.5m		



CS-100CP LCD Automatic Multi-Layers Welder for Pipe

- It is possible to control the motor by memorizing the start position and angle of the torch for each multi-layer PASS.
- The welder weldes pipes.
- It searches for welding points along the rail and is suitable for horizontal welding position.
- By controlling the location and angle of the torch with a motor, the operator's fatigue can be reduced through the convenience of operation and the reduced setting time of the equipment.
- The fixing device for the pipe rail is manufactured as a unit, so it is possible to apply transformation up to $\pm 50\varnothing$ of the pipe size.

		Welding Position	Fillet	Groove	PIPE
					5G
DIVISION		CS-100CP LCD		REMARK	
General	AC Input power	AC100V~240V 50/60Hz		-	
	DC Input Power(Option)	AC 48V	DC 18-72V(Option)		
	Dimensions	206(L) X 452(W) X330(H)			
	Weight	8.5Kg			
Body (X)	Driving Method	RACK-PINION DRIVEN			
	Traveling Speed	0~88 cm/min			
	Traveling Motor	DC 24V, 10W, 5000RPM		BLDC	
R	Motor	DC 24V, 10W, 5000RPM		BLDC	
	Worm Auto Slide	0~360°			
Weaver (Y)	Motor	DC 24V, 12W, 5000RPM		BLDC	
	Weaving Width	0~90 mm/min (±30mm)			
	Weaving Speed	0~2000 mm/min (±5%)			
	Left / Right Stop	0.0~9.9(sec)			
	Center Shift	0~360°			
	Operating Distance of RC	10m			
Z	Motor	DC 24V, 12W, 5000RPM		BLDC	
	In Out Auto Slide	±25mm			
Rail	Fixing	Magnet ON / OFF Type			
	Material / Size	AL 6N01 / 1.2M / 9.4Kg			



CS-100P Pipe Welder

- The welder welds pipes.
- It searches for welding points along the rail and is suitable for horizontal and vertical-up welding position.
- CS-100P is applicable for the Pipe more than 250mm's diameter.
- The size of each Pipe Rail is readjustable by ± 50 mm's diameter.
- The fixing device for the pipe rail is manufactured as a unit, so it is possible to apply transformation up to $\pm 50\phi$ of the pipe size.

Welding Position	Fillet	Groove	PIPE
			5G

DIVISION		CS-100P		REMARK
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Option)	AC 48V	DC 18-72V(Option)	
	Dimensions	399(L) X 289(W) X 350(H)		
	Weight	8.4Kg		
Body	Driving Method	RACK-PINION DRIVEN		
	Traveling Speed	0~880 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
Torch	Y-SLIDE	0~110mm $\pm 5\%$		
	Z-SLIDE	0~70mm $\pm 5\%$		
	R-SLIDE(WORM)	360°(Rotation)		
Weaver	Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
	Reducer	1000 : 1		
	Weaving Width	$\pm 4^\circ \pm 5\%$		
	Weaving Speed	0~5rpm		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shift	0~360°		
Rail	Fixing	Magnet ON / OFF Type		
	Material / Size	AL / 1.5M / 7Kg		

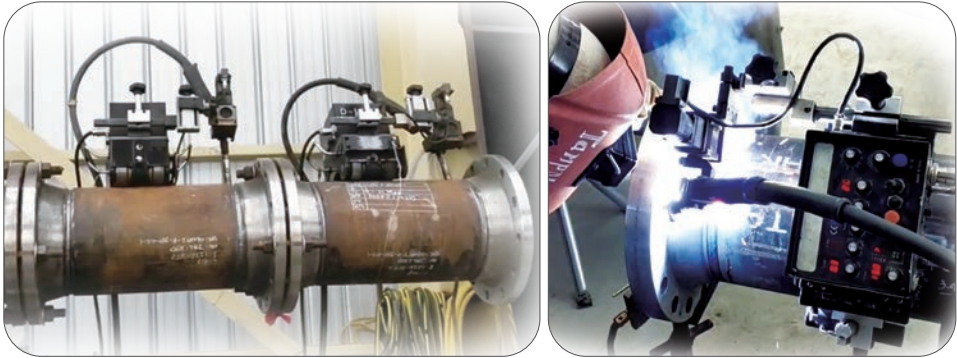


CS-PW Pipe Welder (Railless type, Guide rail type)

- Using magnetism created from the wheels, it can be stuck on the base material.
- It does not need the rail to travel on.
- It makes easily required results through a travel, adjusting weaving width.
- It can control weaving width, right-left stop time and center movement.

Welding Position	Fillet	Groove	PIPE
	1G Straight Guide Rail	1GR, 5G Railless	1GR, 5G, 2G, 5G Round Guide Rail

DIVISION		CS-PW		REMARK
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power (Option)	AC 48V	DC18-72V(Optional)	
	Dimensions	393(W) X 477(L) X 296(H)		
	Weight	17.3Kg		
Body	Driving Method	Create Magnetism on wheels		
	Traveling Speed	0~88 cm/min		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
Torch	Up / Down Angle	45°±10°		
	Front / Back Distance	0~116mm		
	Up / Down Distance	0~50mm		
Weaver	Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
	Reducer	1000:1		
	Weaving Width	±16%		
	Weaving Speed	0~5 rpm/min		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shift	0~360°		
Operating Distance of RC		10m		

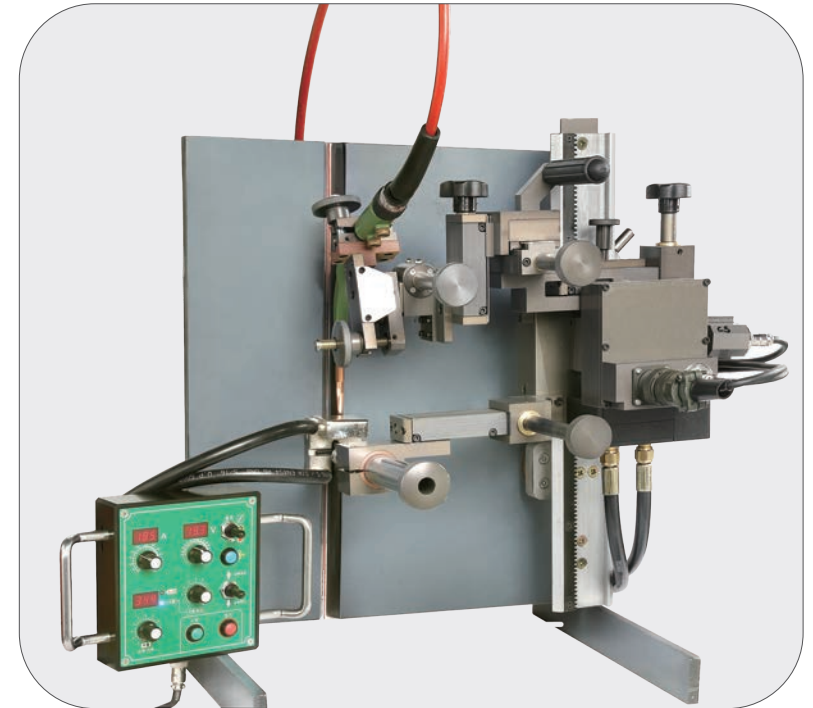


CS-MEGW II Mini E.G.W Welder

- It is a mini ultra-light EGW Welder.
- With Vertical-Up 1pass welding (25T or less), it can make welding bead shapes on the back(using ceramic backing material) and the front (using copper shoe).
- It reads the value of current between the welding gap in & out, and controlling the arc length by the difference compared to the input value it forms automatically a melting pool.
- It uses the BLDC (driving) motors, so it has good durability and excellent ability to respond to driving speed depending on the thickness of the base material.

Welding Position	Fillet	Groove	PIPE
		3G	

DIVISION		CS-MEGW II		REMARK
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input Power(Optional)	AC 48V	DC 18-72V(Optional)	
	Dimensions	405(L) X 312(W) X314(H)		
	Weight	10.6Kg		
Body	Driving Method	RACK-PINION DRIVEN		
	Traveling Speed	0~640 mm/min ±5%		
	Traveling Motor	DC 24V, 12W, 5000RPM		BLDC MOTOR
Torch	Up / Down Angle	20°~45°		
	Running Angle	±20°		
	X-SLIDE	0~47mm ±5%		
	Y-SLIDE	0~70mm ±5%		
	Z-SLIDE	0~58mm ±5%		

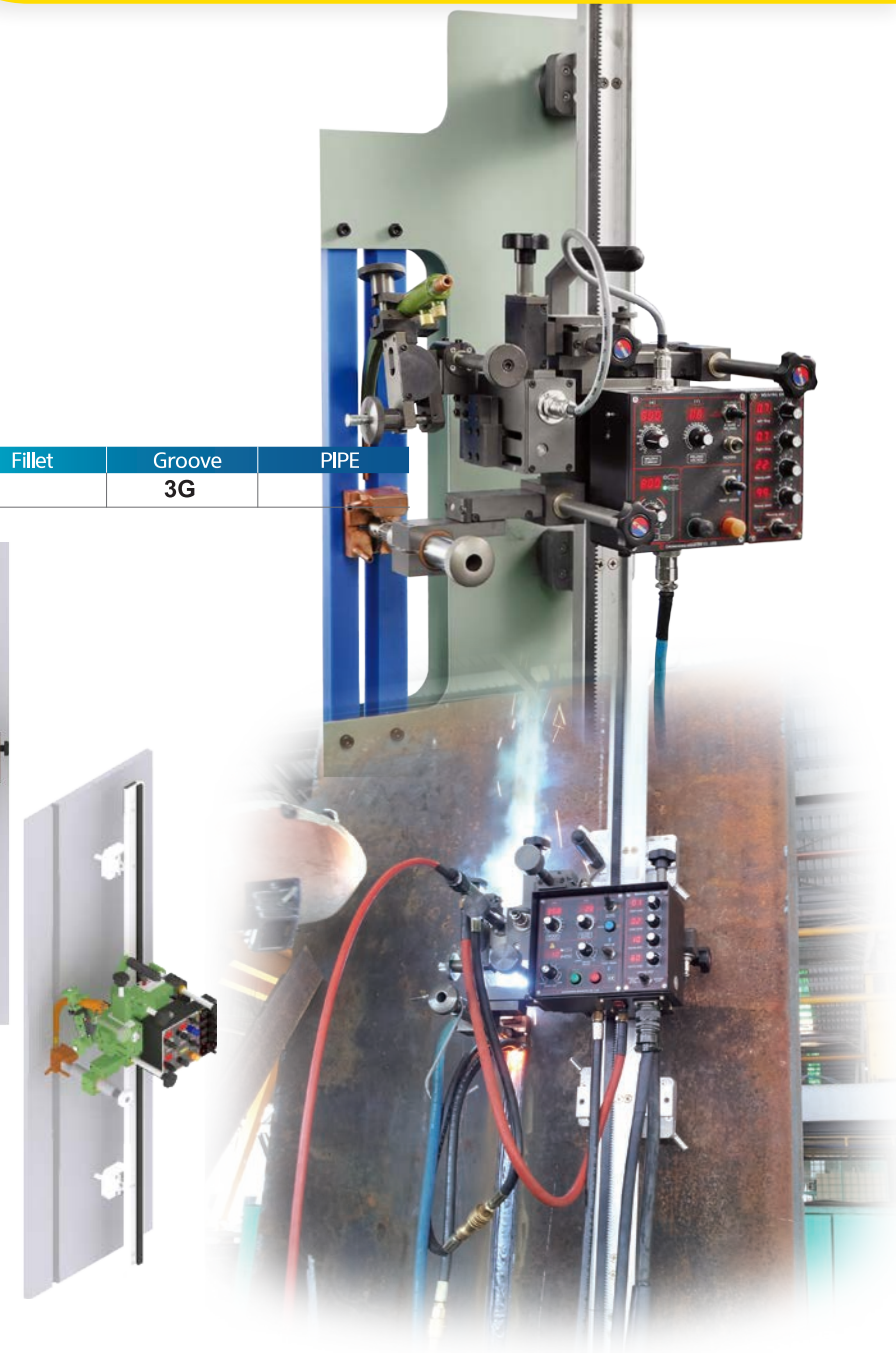
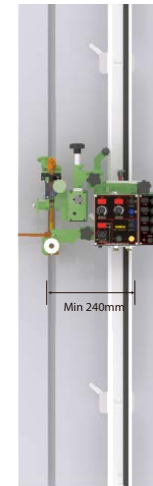


CS-EGWN Vertical-Up, E.G.W Butt Weaving Welder

- It is a vertical-up, butt weaving welder of Electric Gas Welding, and the welding thickness of 10 ~ 42mm is acquired Through a travel.
 - It is applicable for ship blocks or large storage tanks.
 - The bead is formed while the Welder drives up with the copper shoe, and it is cooled by water circulation.
 - The position of the rail can be easily readjusted by the on-off magswitches.
 - It drives at a constant speed with the minimized gear backlash.
- Thus the high welding quality and the long life span of the welder is acquired.
- It is small and light, so it can be conveniently used and easily moved.

DIVISION		CS-EGW-N		Carriage
General	AC Input power	AC100V~240V 50/60Hz		-
	DC Input power (Option)	AC 48V	DC 18-72V (Option)	
	Dimension	407(W) X 325(L) X 268(H)		
	Weight	11.7Kg		
Body	Body	Material : AL		
	Traveling Speed	0~800 mm/min		
	Traveling Motor	DC24V, 40W, 4000 RPM		
	Reduction Ratio	40 : 1		
	Reduction Gear Ratio	10 : 1		
	Traveling Method	Rack Pinion DRIVEN		
Control Box	Skill	Display, Driving speed, Stick out,Ampere, VoltageFast rising, Fast down,Run, Stop, Weld, Not weldManual Welding, Inching		
Weaver	Weaving Width	0 ~ 50 mm		-
	Weaving Speed	0 ~ 4000 mm/min		-
	Weaving Motor	DC24V, 12W, 5000 RPM		BLDC Motor
	Reduction Ratio	10 : 1		5:1
	Reduction Gear Ratio	1 : 2		
	Front / Back Stop	0.0 ~ 9.9 (sec)		-
Rail	Fixing	Magnet ON/OFF Fixed three places		Mag switch(3EA)
	Material	AL		
	Rail Size	1.5 M / 5.4Kg		Length can be changed
Other	Panel Color	Black		Maker

Welding Position	Fillet	Groove 3G	PIPE
------------------	--------	--------------	------

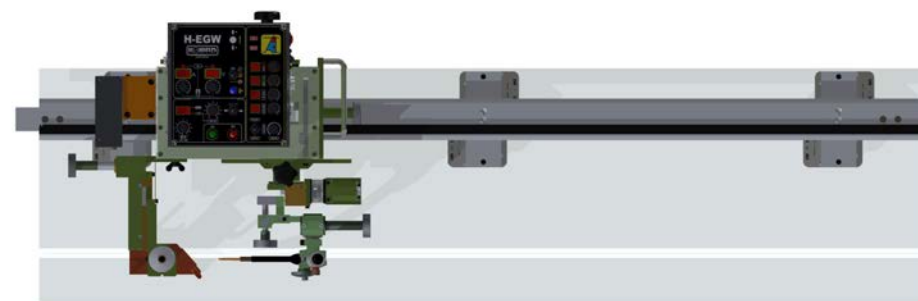


CS-HEGW Horizontal Butt Weaving Welder of E.G.W

- It is a horizontal, butt weaving welder of EGW (Electric Gas Welding), and FCAW (Flux Cored Arc Welding).
- Driving on the rail, it follows the welding points and makes a high-quality welding bead shape with a weaving device of weaving patterns, and a copper shoe suitable for horizontal welding.
- It reads the value of current between the welding gap in & out, and controlling the arc length by the difference compared to the input value it forms automatically a melting pool.
- It has a feedback control device for changes in driving speed due to load, so it makes excellent ability in constant-speed driving.
- It uses the BLDC (driving, weaving) motors, so it has good durability and excellent ability to respond to driving speed depending on the thickness of the base material.

Welding Position	Fillet	Groove	PIPE
		2G	

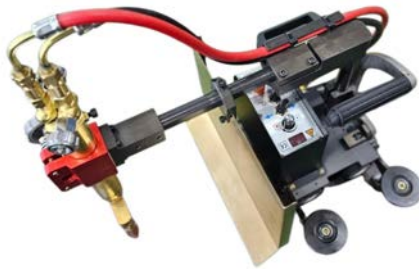
DIVISION		CS-HEGW		Remark
General	AC Input power	AC100V~240V 50/60Hz		
	DC Input power(Optional)	AC 48V	DC 18-72V (Option)	
	Dimension	440(W) X 330(L) X 200(H)		
	Weight	13Kg		
Body	Driving Method	RACK PINION DRIVEN		
	Traveling Speed	40~570 mm/min ±5%		
	Traveling Motor	DC 24V, 24W, 5000RPM		BLDC MOTOR
Torch	Left / Right	±10mm		
	Forward & Backward	0~35mm		
	Up & Down	±30mm		
Weaver	Motor	DC24V, 24W, 5,000RPM		BLDC MOTOR
	Reducer	100 : 1		
	Weaving Width	0~75mm ±5%		
	Weaving Speed	0~5rpm		
	Left / Right Stop	0.0~9.9(sec)		
	Center Shift	0°~360°		
Rail	Fixing	Magnet ON/OFF Type		
	Material / Size	AL / 1.5M /10.4kg		



Heating Carriage

Features:

- Field : HEATING / BACK HEATING
- Control : Skip heating / Continuous heating
: Adjust point-to-point separation / Adjust point-stop time / Adjusting the Driving Speed
- Power Type : Battery Power / DC Power
- Traveling Type : Rail Track / Railless Track
- Position : Fillet / Flat / Horizontal / Vertical / Overhead



CS-100C TYPE		CS-100C TYPE (FLEXIBLE)		CS-100C TYPE (VACUUM)	
					
Product No	4-RAIL-003	Product No	4-RAIL-003-4	Product No	4-RAIL-008
Magnet Type	Mag Switch(On/Off)	Magnet Type	Mag Switch(On/Off)	Magnet Type	VACUUM
Quantity of Magnet	3EA (1.5M)	Quantity of Magnet	3EA (1.5M)	Quantity of Magnet	3EA (1.5M)
CS-7WC TYPE (FLEXIBLE)		E.G.W TYPE		CS-GW TYPE	
					
Product No	4-RAIL-006	Product No	4-RAIL-005	Product No	4-RAIL-GW
Magnet Type	Mag Switch(On/Off)	Magnet Type	Mag Switch(On/Off)	Magnet Type	Mag Switch(On/Off)
Quantity of Magnet	4EA (1.5M)	Quantity of Magnet	6EA (1.5M)	Quantity of Magnet	3EA (1.5M)

CS-PW TYPE		CS-100CP TYPE	
			
Product No	4-RAIL-PW	Basic Model Two Divisions (500Ø)	Optional Model Four Divisions (~2000Ø)
Type	Pressure Clamp	*Rail length, magnets and brackets can be customized after consultation.	
Quantity of Magnet	Fixed unit: 6EA		
CS-VUP TYPE			
			
CS-VUP BUTT		CS-VUP VERTICAL FILLET	



General 2P type
(Manual Torch)



WIRE: 5M/ 50SQ/ 500A

General 2P type
(Mechanized Torch)



WIRE: 5M/ 50SQ/ 500A

General 2P/3P type
(Mechanized Torch)



WIRE: 5M/ 50SQ/ 500A

General 4P type
(Mechanized Torch)



WIRE: 5M/ 50SQ/ 500A

Euro 2P type
(Mechanized Torch)



WIRE: 5M/ 50SQ/ 500A

Chung Song Industry is exporting to 20 countries.





CO₂ Welding Conditional Data (Reference example of FCW)

Diameter of Wire (mm)	Leg length	Welding Conditions			Remarks
		Electric current(A)	Voltage (V)	Speed(cpm)	
1.2	4	230	28	70	
	5	270	30	60	
	6	270	30	40	
	7	310	32	40	
	8	310	32	35	
1.4	4	250	28	70	
	5	300	31	60	
	6	300	31	45	
	7	330	33	40	
	8	330	33	35	
1.6	4	270	28	70	
	5	320	32	60	
	6	320	32	50	
	7	360	34	40	
	8	360	34	45	

• Cautions

- 1 The above welding conditional table can only be applied to horizontal fillet welding.
- 2 Leg length that can welded 1 pass in horizontal fillet welding is generally 4to 8(mm).
When leg length beyond 8mm is required,2 pass welding has to be done.
- 3 During weaving and vertical welding, conditions differ according to upward, downward, improvement depth, improvement angle, etc, thus, please make a separate data by using it separately.
- 4 As it is highly likely that blow hole will occur by primer during horizontal fillet welding, it is advisable to use special welding materials for fillet.
- 5 It is safe to work under 50 (cpm) for welding speed

• Remarks

1. Wire stick out : 30~35mm
(tip 끝에서shielding cup 바닥간거리28mm /
The distance between the end of tip to shielding cup's floor: 28mm).
2. Shielding gas Flux : CO2 30 Liter/min.
3. Wire : Ø1.6



EGW Welding Conditional Data

Width 두께	Groove Angle 개선탄도	Gap	Welding Conditions					
			Slide Copper shoe	Backing material	Current (A)	Voltage (V)	Speed (CPM)	Heat input (KJ/cm)
9	60°	6	Groove width 24	water cooled backing copper	350	34	13. 5	53
12	50°	6	Groove width 24	water cooled backing copper	350	34	11. 5	62
16	45°	5	Groove width 24	KL-4GT	380	34	9.9	78
19	40°	5	Groove width 24	KL-4GT	380	35	8.1	99
22	40°	5	Groove width 24	KL-4GT	380	36	7.0	117
25	35°	5	Groove width 24	KL-4GT	380	37	5.9	143



koweld.co.kr

CHUNG SONG INDUSTRY CO., LTD.

Head Office & Factory

62-129, No.962-Gil, Daedong-Ro, Daedong-Myeon, GIMHAE-CITY,
GYEONGNAM, 50806, KOREA

Tel. +82-55-329-9500 Fax : +82-55-329-9505

www.koweld.co.kr E-mail : koweld@koweld.co.kr