

KOWELD

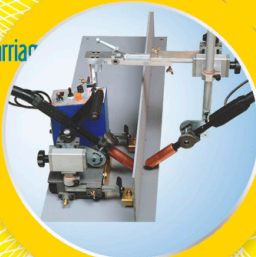
WELDING AUTO CARRIAGE

① 1 Torch Fillet Ultra Light Carriage



② 1 Torch Fillet Light Carriage

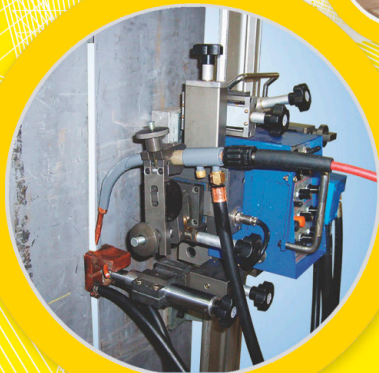
③ 2 Torch Dual Side Fillet Carriage



④ Wireless Communications Carriage



⑤ 1 Pass Electro GAS Welding Carriage(E.G.W)



⑥ koweld.co.kr

 CHUNG SONG INDUSTRY CO.,LTD.

World Best Welding Auto carriage



Founded in 1991, Cheong Song Industrial Machinery Co., Ltd is a manufacturer of welding auto.

Currently, welding auto carriage is widely used in dockyards and construction sites in Korea and abroad, and our company has supplied our products to many domestic and foreign companies as they have been recognized of their efficiency, thus approved of their values.

Our company has developed multi-functional welding carriage and digitally controlled welding auto carriage capable of horizontal and vertical welding, and in their functions, we have enjoyed many praises from our customers with endless R&D such as convenient controls for users, reducing products' weight, etc.

Our company has also received a certificate for enterprise annex research institute and is focusing on developing high-values products such as LWS(automatic welding robot for marks on ship), LNG carrier welding robot, etc.

Also, our company is an advancing, growing company with visions that has received up to 40 certificates and patents including INNO-BIZ Certificate, Venture Enterprise Certificate, ISO Quality Management Certificate, CE Mark, Promising Small and Medium Enterprise for Export Certificate.

We sincerely appreciate for our customers' interests and encouragements so far, and give our words that we will meet our customers' expectations with the best technologies and quality services.

Ok Kyoung Ho

President
Chungsong Industry Co., Ltd.

Contents

Fillet Carriage

1Torch Fillet Ultra Light Carriage [CS-7H]	4
1Torch Fillet Light Carriage [CS-5A]	5
2Torch Dual Side Carriage [CS-2A,CC-7B]	6/7
Stitch/Continuous Carriage [CS-7D, CS-5B]	8/9
Ultra Light Side Fillet Carriage [CS-4A]	10

Rail Setting Carriage

Rail Travel Carriage [CS-20]	11
Weaver - Horizontal, Butt, V-up, Comer-up [CS-100B(S) CS-100B(R)]	12/13

E.G.W

1Pass Electro GAS Welding Carriage(E.G.W) [CS-EGW CS-MINI EGW]	14/15
--	-------

Wireless Communications Carriage

Wireless Communications Carriage [CS-7WD]	16
---	----

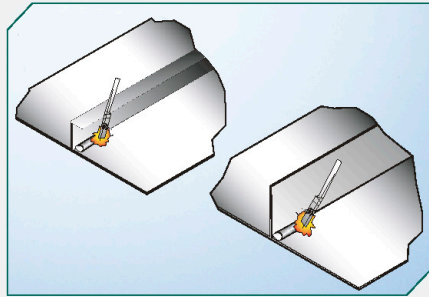
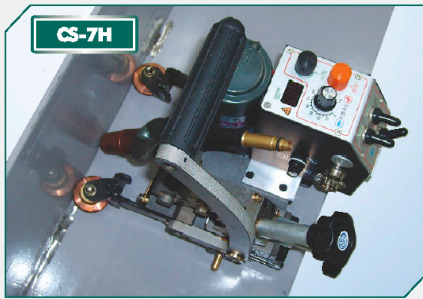
Special Carriage

[I-BAR]	17
----------------------	----

Products Generalize

.....	18/19
-------	-------

1Torch Fillet Ultra Light Carriage



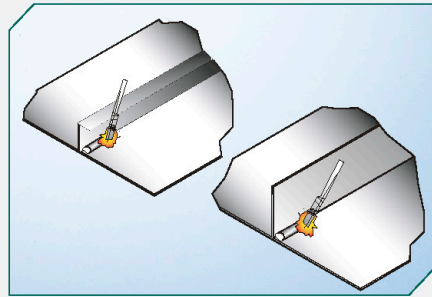
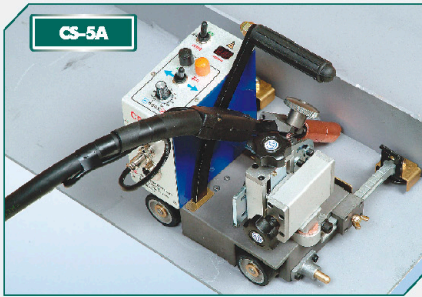
CS-7H Micro Automatic Fillet Welding Carriage

1. Working for the base metal which has 180 mm height of sill is possible.
2. This reduces the part which welding is reserved.(When using push type, the part is 80mm)
- 3 .It is also possible to weld improving multilayer
4. It is also possible to weld 75mm angle of base metal.
5. Easy positioning of the carriage by magnet release lever

※Include every Feature in CS-7 Product

Specification	CS-7H
Body Part	
Dimension	W195×L290×H255
Weight	6.4 kg
Travel Speed	0~999 mm/min
Magnet	BUILT - IN TYPE
Driver Method	4 WHEELS-CHAIN-DRIVER MOTOR
Input Voltage	AC 220V 60Hz / 50Hz
Driver Motor	AC 220V 6W 1700RPM
Gear Reduction	120:1
Slide Part	
Up / Down Angle	±12°
Left / Right	30mm
Welding Angle	35~50°
Running Angle	±3°
Torch Clamp	Hinge Handle Clamping Type
Control Box	
MAIN FUNCTION	LCD Display • Travel Start • Sto • Forward, Reverse • Speed • Weld / NO-Weld • POWER On / Off
POWER CABLE	30M(3P 1.0SQ, 220V PLUG-CIRCULAR 20-3PIN CONNECTOR)
TORCH(OPTION)	4M 500A, AIR COOLING, STRAIGHT TORCH

1Torch Fillet Light Carriage

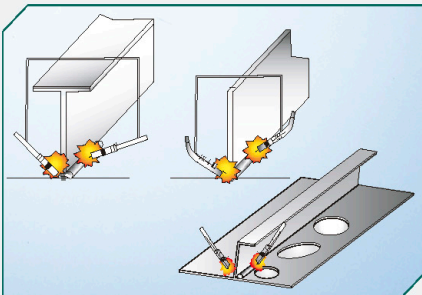
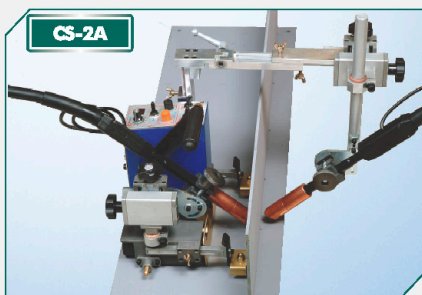


CS-5A Lever Type Automatic Fillet Welding Carriage

1. Automatic Horizontal fillet welding carriage.
2. Precise display of travel speed.
3. Easy positioning of the carriage by magnet release lever.
4. The stop sensor to be established to both direction, the both direction welding possibility.
5. It can run on the walls with strong permanent magnets.
6. Start/Stop Crater time can be infinitely set for 0.0 ~ 5 seconds.

Specification	CS-5A
Body Part	
Dimension	W298×L240×H269
Weight	8.1 kg
Travel Speed	200~999 mm/min ±5%
Magnet	BUILT - IN TYPE
Driver Method	4 WHEELS-CHAIN-DRIVER MOTOR
Input Voltage	AC 220V 60Hz / 50Hz
Driver Motor	AC 220V 6W 1700RPM
Gear Reduction	120:1
Slide Part	
Up / Down Angle	±20°
Left / Right	0~32mm
Welding Angle	35~50°
Running Angle	±10°
Torch Clamp	Hinge Handle Clamping Type
Control Box	
MAIN FUNCTION	LCD Display • Travel Start • Stop • Forward, Reverse • Speed • Weld • NO-Weld
POWER CABLE	30M(3P 1.0SQ, 220V PLUG-CIRCULAR 20-3PIN CONNECTOR WELDING)
TORCH(OPTION)	4M 500A, AIR COOLING, STRAIGHT TORCH

2Torch Dual Side Fillet Carriage

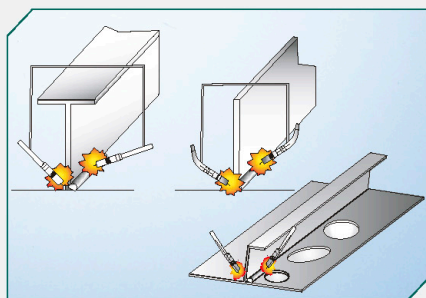


CS-2A Micro Automatic Fillet Welding Carriage

1. Automatic horizontal fillet welding on both side of the stiffener.
2. Precise display of travel speed.
3. The stop sensor to be established to both direction, the both direction welding possibility.
4. Because this drives at constant speed through microprocessor control, this has the excellent effect for quality when welding the curved joint.
5. Start/Stop Crater time can be infinitely set for 0.0 ~ 5seconds.
6. Easy positioning of the carriage by magnet release lever.
7. Carriage arm height is adjustable to cope with the various base metal height.

Specification	CS-2A	
Body Part		
Dimension	W457×L347×H274	
Weight	11.5kg	
Travel Speed	200~999 mm/min	
Magnet	BUILT - IN TYPE	
Driver Method	4 WHEELS-CHAIN-DRIVER MOTOR	
Input Voltage	AC 220V 60Hz / 50Hz	
Driver Motor	AC 220V 6W 1700RPM	
Gear Reduction	120:1	
Slide Part		
Torch	Torch(1)	Torch(2)
Up / Down Angle	32mm	32mm
Left / Right	32mm	32mm
Welding Angle	±45°	±45°
Running Angle	±10°	±10°
Torch Clamp	Hinge Handle Clamping Type	
Control Box		
MAIN FUNCTION	LCD Display • Travel Start • Stop • Forward, Reverse • Speed • Weld ,NO-Weld(1) • Weld ,NO-Weld(2)	
POWER CABLE	30M(3P 1.0SQ, 220V PLUG-CIRCULAR 20-3PIN CONNECTOR)	
WELDING TORCH(OPTION)	4M 500A, AIR COOLING, STRAIGHT TORCH	

2Torch Dual Side Fillet Carriage

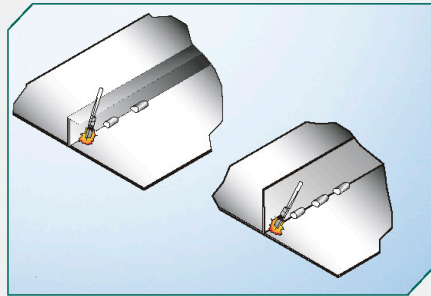


CS-7B Micro Mini Dual Side Carriage

1. Designed exclusively for continuous dual side horizontal fillet welding
2. Precise display of travel speed
3. It guarantees delicate traveling including the traveling on slopes with constant traveling by MICOM controlling.
4. The stop sensor to be established to both direction, the both direction welding possibility.
5. Start/ Stop Crater time can be infinitely set for 0.0 ~ 5 seconds.

Specification	CS-7B	
Body Part		
Dimension	W210×L565×H470	
Weight	7.9 kg	
Travel Speed	200~999 mm/min	
Magnet	BUILT - IN TYPE	
Driver Method	4 WHEELS-CHAIN-DRIVER MOTOR	
Input Voltage	AC 220V 60Hz / 50Hz	
Driver Motor	AC 220V 6W 1700RPM	
Gear Reduction	120:1	
Slide Part		
Torch	Torch(1)	Torch(2)
Up / Down Angle	±20°	0~20mm±1mm
Left / Right	0~20mm±1mm	0~20mm±1mm
Welding Angle	35° ~ 55°	45° ±20°
Running Angle	±3°	±3°
Torch Clamp	Hinge Handle Clamping Type	
Control Box		
MAIN FUNCTION	LCD Display • Travel Start • Stop • Forward, Reverse • Speed • Weld ,NO-Weld(1) • Weld ,NO-Weld(2)	
POWER CABLE	30M(3P 1.0SQ, 220V PLUG-CIRCULAR 20-3PIN CONNECTOR)	
WELDING TORCH(OPTION)	4M 500A, AIR COOLING, STRAIGHT TORCH	

Stitch / Continuous Carriage

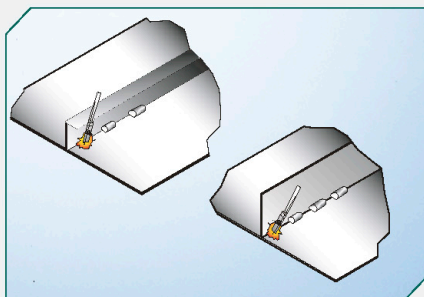


CS-7D Micro MINI Distance Establish and Stitch / Continuous Carriage for Automatic Stitch /Continuous Welding Application.

1. Automatic welding carriage for Stitch/Continuous welding
2. For stitch welding application, respectively welding / non-welding distance can be set and displayed.
3. Because this controls the feedback of set distance between welding section and non welding section using motor and generator, the precision of measure is high and it is possible to weld uniformly and precisely at constant speed driving.
4. Start/Stop Crater time can be infinitely set for 0.1 ~ 5 seconds.
5. Easy positioning of the carriage by magnet release lever.

Specification	CS-7D
Body Part	
Dimension	W167×L232×H180
Weight	5.4kg
Travel Speed	200~999 mm / min
Magnet	BUILT - IN TYPE
Driver Method	4 WHEELS-CHAIN-DRIVER MOTOR
Input Voltage	AC 220V 60Hz / 50Hz
Driver Motor	AC 220V 6W 1700RPM
Gear Reduction	120:1
Slide Part	
Up / Down Angle	±20°
Left / Right	0~20mm ±1mm
Welding Angle	35° ~55°
Running Angle	±3°
Torch Clamp	Hinge Handle Clamping Type
Control Box	
MAIN FUNCTION	LCD Display • Travel Start • Stop • Forward, Reverse • Speed • Weld ,NO-Weld(1) Welding Distance, No Welding Distance, Distance
POWER CABLE	30M(3P 1.0SQ, 220V PLUG-CIRCULAR 20-3PIN CONNECTOR)
WELDING TORCH(OPTION)	4M 500A, AIR COOLING, STRAIGHT TORCH

Stitch / Continuous Carriage

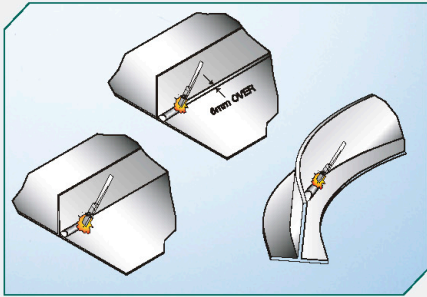
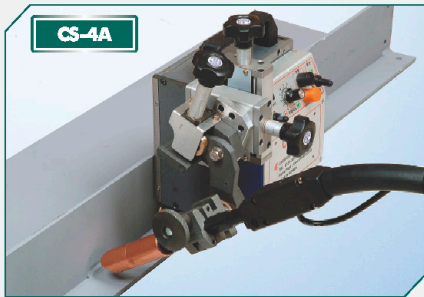


CS-5B Lever Type Carriage for Automatic Stitch/Continuous Welding Application

1. Automatic welding carriage for Stitch/Continuous welding
2. For stitch welding application, respectively welding /non-welding distance can be set and displayed.
3. Because this controls the feedback of set distance between welding section and non welding section using motor and generator, the precision of measure is high and it is possible to weld uniformly and precisely at constant speed driving.
4. Start/Stop Crater time can be infinitely set for 0.1 ~ 5seconds.
5. Easy positioning of the carriage by magnet release lever.

Specification	CS-5B
Body Part	
Dimension	W295×L240×H269
Weight	8.2kg
Travel Speed	200~999 mm / min
Magnet	BUILT - IN TYPE
Driver Method	4 WHEELS-CHAIN-DRIVER MOTOR
Input Voltage	AC 220V 60Hz / 50Hz
Driver Motor	AC 220V 6W 1700RPM
Gear Reduction	120:1
Slide Part	
Up / Down Angle	0~90mm
Left / Right	0~130mm
Welding Angle	±45°
Running Angle	±10°
Torch Clamp	Hinge Handle Clamping Type
Control Box	
MAIN FUNCTION	LCD Display • Travel Start • Stop • Forward, Reverse • Speed • Weld ,NO-Weld(1) Welding Distance, No Welding Distance, Distance
POWER CABLE	30M(3P 1.0SQ, 220V PLUG-CIRCULAR 20-3PIN CONNECTOR)
WELDING TORCH(OPTION)	4M 500A, AIR COOLING, STRAIGHT TORCH

Ultra Light Side Fillet Carriage

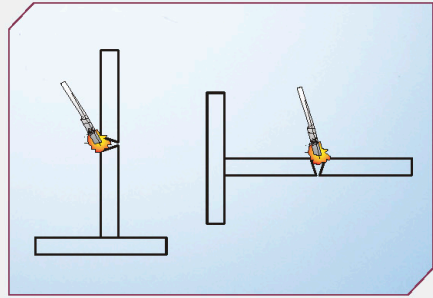
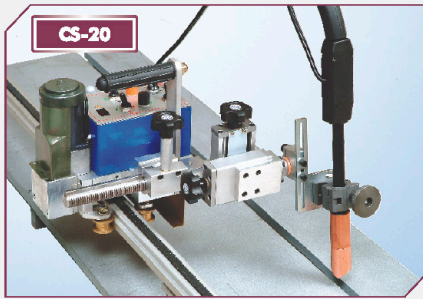


CS-4A Micro Corner Fillet Carriage

1. Light weight, small and easy to handle, corner fillet welding carriage.
2. Automatic proximity sensor(5mm) provides automatic stop of the carriage operation when the carriage drives over the edge of the plate.
3. Precise display of travel speed.
4. Start/Stop Crater time can be infinitely set for 0.0~5 seconds.
5. It is also possible to work the low height of base metal.
6. Applicable also to the curved joint (Radius1000mm).
7. It is also possible to work 6mm width of base metal at the bottom.

Specification	CS-4A
Body Part	
Dimension	W360×L233×H290
Weight	7.5kg
Travel Speed	200~950 mm / min
Magnet	BUILT - IN TYPE
Driver Method	4 WHEELS-CHAIN-DRIVER MOTOR
Input Voltage	AC 220V 60Hz / 50Hz
Driver Motor	AC 220V 6W 1700RPM
Gear Reduction	250:1
Slide Part	
Torch	Torch
Up / Down Angle	0~52mm(±20°)
Left / Right	0~32mm
Welding Angle	±45°
Running Angle	±10°
Torch Clamp	Hinge Handle Clamping Type
Control Box	
MAIN FUNCTION	LCD Display • Travel Start • Stop • Forward, Reverse • Speed • Weld ,NO-Weld(1) • Weld ,NO-Weld(2)
POWER CABLE	30M(3P 1.0SQ, 220V PLUG-CIRCULAR 20-3PIN CONNECTOR)
WELDING TORCH(OPTION)	4M 500A, AIR COOLING, STRAIGHT TORCH

Rail Travel Carriage

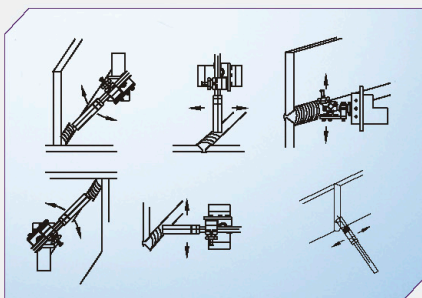
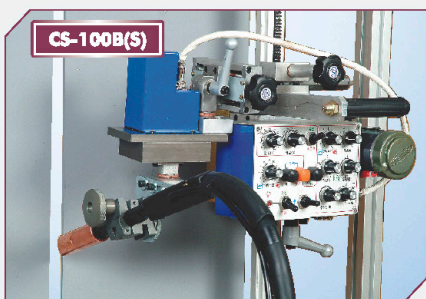


CS-20 (Mini-Rail Carriage)

1. This is automatic welding carriage fit for confronting, horizontal, vertical, backward welding
2. Precise display of travel speed.
3. This is the carriage whose operation is easy and weight is minimized.
4. Quick release clutch mechanism is provided to freely move the carriage into the desired position on the rail.
5. It is possible to apply variously like welding of general fillet and butt.

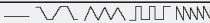
Specification	CS-20
Body Part	
Dimension	W310×L325×H215
Weight	8.0kg
Travel Speed	200~640 mm/min
Driver Motor	AC 220V 60w 1700RPM
Input Voltage	AC 220V 60Hz / 50Hz
Clutch	NEUTRAL-2PHASE CLASSIFYING TYPE
Gear Reduction	120 : 1
Slide Part	
Up/Down Angle	0~52mm ±20°
Left / Right	0~52mm
Welding Angle	±45°
Running Angle	±0°
Torch Clamp	Hinge Handle Clamping Type
Rail	
Material	AL Signet Heat Treated
Fixing Type	Magnet Lever Operation
Length / Weight	1.5 / 6kg
Control Box	
Main Function	Power On / Off • Torch On / Off
	Travel Start • Travel Suspension • Travel Speed • Travel Direction
	Welding Current • Voltage Control • Inching (Option)
Power Cable	30M (3P 0.75SQ,220V PLUG-CIRCULAR 16-3PIN CONNECTOR)
Welding Torch(Optional)	4M, 500A, AIR COOLING, STRAIGHT TORCH

Weaver-Horizontal, But, V-up, Comer-up

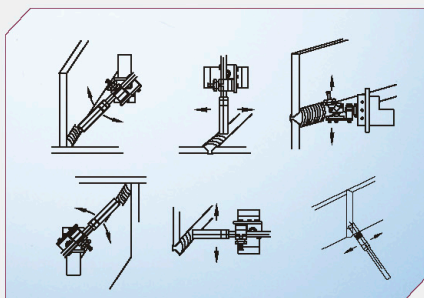
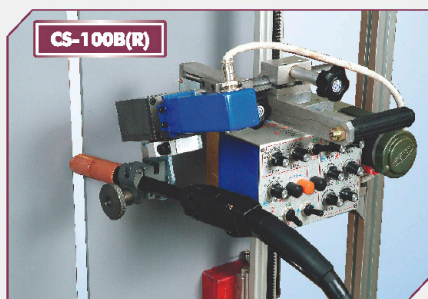


CS-100B S-WEAVE Mini Rail Weaving Carriage

1. Multi-functional welding carriage for all position fillet and butt joint welding
2. The function of right and left stop time is added in order to prevent the lack of penetration.
3. Display of travel speed.
4. Quick release clutch mechanism is provided to freely move the carriage into the desired position on the rail.
5. Because rail is small size and light weight, it is easy to move it, and because magnet is equipped and taken off by slide equipped lever type, it is convenient to use it. There is the home return function that torch stops in the middle location when equipment stops.


Specification	CS-100B S-WEAVER
Body part	
Dimension	W268×L358×H258
Weight	9.3kg
Travel Speed	200~1112 mm/min±3°
Input Voltage	90~220V 60Hz / 50Hz
Driver Motor	DC 24V 15W 2950RPM
Gear Reduction	250:1
Slide part	
Up / Down Angle	0~65mm
Left / Right	0~125mm
Welding Angle	±45°
Running Angle	±10°
Torch Clamp	Hinge Handle Clamping Type
Weaving Control	
Weaving Width / Angle	30mm
Weaving Speed	Bead 4.5 basis 20~200time/min
Weaving Center	±5°
Weaving Mode	
Weaving Motor	DC 24V (300:1)
Left / Right Dwell Time	0~2 SEC(4SEC)
Control Method	FeedBack Location Control By Potention-Meter
Weaving Control	Weaving On / Off, Weaving Width, Weaving Speed, Left / Right Dwell Time
Rail	
Material	AL Signet Heat Treated
Rail Fixing Type	Magnet Lever Poeration
Rail Length / Weight	1.5m / 6kg
Power Cable	30M(3P 1.0SQ, 220V PLUG-CIRCULAR 26-8PIN CONNECTOR)
Welding Torch(OPTION)	4M 500A, AIR COOLING, STRAIGHT TORCH

Weaver-Horizontal, But, V-up, Corner-up



CS-100B R-WEAVE Mini Rail Weaving Carriage

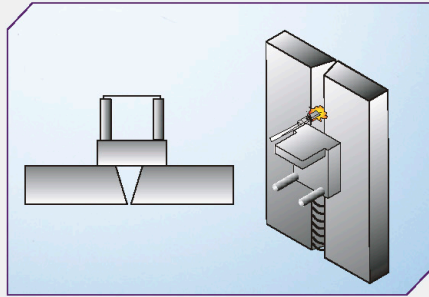
1. Multi-functional welding carriage for all position fillet and butt joint welding
2. The function of right and left stop time is added in order to prevent the lack of penetration.
3. Display of travel speed.
4. Quick release clutch mechanism is provided to freely move the carriage into the desired position on the rail.
5. Because rail is small size and light weight, it is easy to move it, and because magnet is equipped and taken off by slide equipped lever type, it is convenient to use it. There is the home return function that torch stops in the middle location when equipment stops.

Specification	CS-100B R-WEAVER
Body part	
Dimension	W268×L358×H258
Weight	9.3kg
Travel Speed	200~1112 mm/min±3°
Input Voltage	90~220V 60Hz / 50Hz
Driver Motor	DC 24V 15W 2850RPM
Gear Reduction	250:1
Slide part	
Up / Down Angle	0~65mm
Left / Right	0~125mm
Welding Angle	±45°
Running Angle	±10°
Torch Clamp	Hinge Handle Clamping Type
Weaving Control	
Weaving Width/Angle	0~28mm
Weaving Speed	Bead 4.5 basis 20..200time/min
Weaving Center	±5°
Weaving Mode	
Weaving Motor	DC 24V (300:1)
Left/Right Dwell Time	0~2 SEC (4SEC)
Control Method	FeedBack Location Control By Potention-Meter
Weaving Control	Weaving On / Off, Weaving Width, Weaving Speed, Left/Right Dwell Time
Rail	
Material	AL Signet Heat Treated
Rail Fixing Type	Magnet Lever Poeration
Rail Length / Weight	1.5m / 6kg
Power Cable	30M(3P 1.0SQ, 220V PLUG-CIRCULAR 25-8PIN CONNECTOR)
Welding Torch(OPTION)	4M 500A, AIR COOLING, STRAIGHT TORCH

1Pass Electro GAS Welding Carriage (E.G.W)



CS-EGW

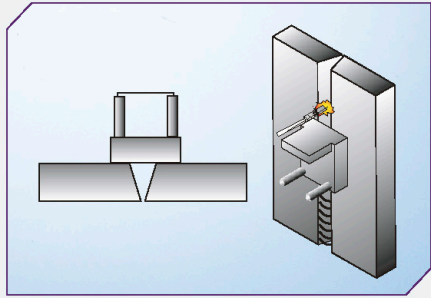
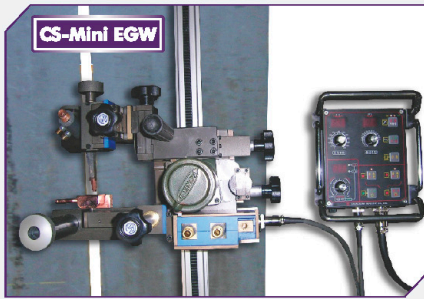


CS-EGW (SEG ARC Carriage)

1. This is automatic welding carriage for outer wall and confronting.
2. With micro processor controlled full function torch weaving, operator may have a freedom to set the welding parameter as required to weld the joint by 1 pass welding
3. This automatically displays welding current and voltage during welding. (When choosing automatic mode)
4. Travels in rails with rack & pinion drive, and the rail to be set parallel to the welding joint.
5. This can weld the desired width of base metal by one time driving because this has the weaving function, and it has the function that it controls digitally weaving speed, weaving width, weaving mode, forward stop, and backward stop and so on
6. Welding torch and copper shoe are equipped at carriage body, and operation panel and carriage compose single body.

Specification	CS-EGW
Body part	
Dimension	W464×L390×H294
Weight	19.0kg Cable, Horse, Carriage
Travel Speed	0~800 mm / min
Running Method	Rack - Pinion Gear - Motor Driving Method
Input Voltage	AC 90V~250 Free Voltage
Driving Motor	DC24V 15W 3000RPM
Gear Reduction	250:1
Slide part	
Torch	After-Cooling Curved Torch
X Axis	0~105mm
Y Axis	0~55mm
Z Axis	0~50mm
Left / Right	±8°
Forward / Reverse	±30°
Torch Clamp	Hinge Handle Clamping Type
Weaving Control	
Weaving Width	±20mm
Weaving Speed	100~2800 mm /min
Center Shift	Left / Right 5mm
Weaving Motor	DC 24V(90:1)
Left / Right	Dwell Time 2sec (4sec)
Control Method	Feed Back Location Control
Weaving Control Function	Weaving On / Off, Weaving
Rail	
Material	AL Signet Heat Treated
Rail Fixing Type	Magnet Level Operation (Safety Ring Attached)
Length / Weight	1.5M / 11kg
Main Function	Power On/Off, Power LampCurrent, Voltage Display, Current, Voltage ControlWelding / No-Weld, Travel

1Pass Electro GAS Welding Carriage (E.G.W)

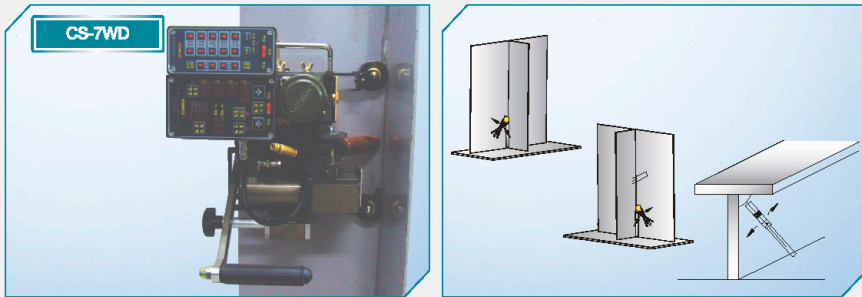


CS-MINI EGW (Micro Seg Arc Carriage)

1. This is automatic welding carriage for outer wall and confronting.
2. With micro processor controlled full function torch weaving, operator may have a freedom to set the welding parameter as required to weld the joint by 1pass welding
3. This automatically displays welding current and voltage during welding. (When choosing automatic mode)
4. Travels in rails with rack & pinion drive, and the rail to be set parallel to the welding joint.
5. This can weld the desired width of base metal by one time driving because this has the weaving function, and it has the function that it controls digitally weaving speed, weaving width, weaving mode, forward stop, and backward stop and so on
6. Welding torch and copper shoe are equipped at carriage body, and operation panel and carriage compose single body.


Specification	CS-MINI EGW
Body part	
Dimension	W330 x L228 x H234
Weight	10.5kg Cable, Horse, Carriage
Travel Speed	0~540 mm / min
Running Method	Rack - Pinion Gear - Motor Driving Method
Input Voltage	AC 90V~250 Free Voltage
Driving Motor	DC24V 15W 3000RPM
Gear Reduction	250:1
Slide part	
Torch	After-Cooling Curved Torch
X Axis	0~72mm
Y Axis	0~55mm±1mm
Z Axis	0~55mm±1mm
Left / Right	±10°
Forward / Reverse	±20°
Torch Clamp	Hinge Handle Clamping Type
Rail	
Material	AL Signet Heat Treated
Rail Fixing Type	Magnet Level Operation (Safety Ring Attached)
Length / Weight	1.5M / 6kg
Controlbox	
Main Function	Power On/Off, Power LampCurrent, Voltage Display, Current, Voltage ControlWelding / No-Weld, Traile

Wireless Communicationes Carriage

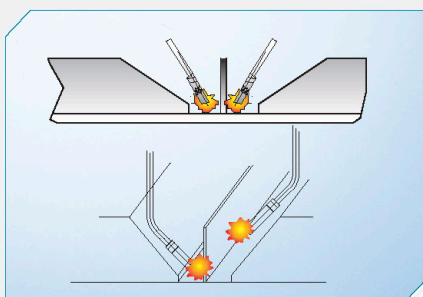


CS-7WD Wireless Communicationes Carriage

1. Automatic vertical fillet welding carriage
2. It can run on the walls the upside and Multipurpose.
3. It guarantees delicate traveling including the traveling on slopes with constant traveling by MICOM controlling.
4. Vertical fillet welding of high joint is possible with wired remote control method.
5. Easy positioning of the carriage by magnet release lever.

Specification	CS-7WD
Body part	
Dimension	W310×301×H280
Weight	Body 8.9kg, Controlbox 225g
Travel Speed	200~945 mm/min
Adsorptive Power	50kgf /
Traction Power	30kgf /
Input Voltage	AC 220~240V 60Hz / 50Hz
Driver Motor	DC 24V 15W 3000RPM
Gear Reduction	250 : 1
Slide part	
Left / Right	0~30mm ±5%
Welding Angle	±10°
Running Angle	±30°
Torch Clamp	Hinge Handle Clamping Type
Weaving Control	
Width / Angle	±8° (R-WEAVER)
Speed	70 mm /min
Center Shift	±12°
Mode	
Motor	DC 24 (100:1)
Left/Right Dwell Time	0.0~5.0 sec
Control Method	Feedback Location Control By Pontention-meter
Weaving Control Functions	Weaver Width Seaver Speed, Left/Right Dwell Time, Weaver Center Shift, Weaver Mode
Control Box	
Main Functions	Power Lamp, Power On/Off, Travel Start, Suspension, Direction, Speed, Weld/No-Weld, Inching, Weaving Width, Weaving Mode Selection, Center Shift, Left / Right Dwell
Power Cable	30M(3P,1.0SQ220V Plug-Circular) 20-3PIN Connector
Remot Control Cable	17PIN, 5M
Welding Torch	4M, 500A, Straight Torch Air Cooling

Special Carriage



I-BAR

1. Automatic fillet horizontal welding of both side of I-BAR.
2. Precise display of travel speed.
3. The constant and precise travel speed controlled by a microprocessor can bring about excellent welding quality (desired depth and width); the carriage can be clamped fast directly to I-bar so it can perform welding work without being affected by the material of a base metal.
4. The installation of a built-in crate treatment function will improve the efficiency of welding work.
5. The convenient torch adjustment device will make the setting of a welding location markedly simple and easy.

Specification	I-BAR	
Body part		
Dimension	W210×L565×H470	
Weight	7.9kg	
Travel Speed	0~999 mm / min	
Magnet	BUILT-IN TYPE	
Driver Method	4 WHEELS-CHAIN-DRIVER MOTOR	
Input Voltage	AC 220V 60Hz / 50Hz	
Driving Motor	AC 220V 6W1700RPM	
Gear Reduction	120:1	
Slide part		
Torch	Torch(1)	Torch(2)
Up / Down Angle	0~50±1mm	0~50±1mm
Left / Right	0~50±1mm	0~50±1mm
Welding Angle	45° ±20°	45° ±20°
Running Angle	±3°	±3°
Torch Clamp	Hinge Handle Clamping Type	
Controlbox		
Main Function	LCD Display, Travel Start, Stop, Forward,Reverse, Speed, Weld,NO-Weld(1),Weld,NO-Weld(2)	
Power Cable	30M(3P,1.0SQ220V Plug-Circular) 20-3PIN Connector	
Welding Torch(OPTION)	4M 500A, AIR COOLING, STRAIGHT TORCH	

CS-7H

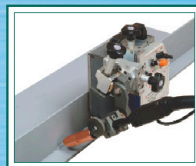


1Torch Fillet Ultra Light Carriage

CS-5A



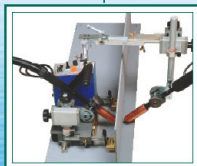
1Torch Fillet Light Carriage



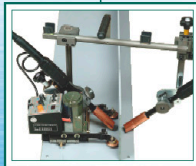
CS-4A

Ultra Light Side Fillet Carriage

2Torch Dual Side Carriage



CS-2A



CS-7B

Switch / Continuous Carriage

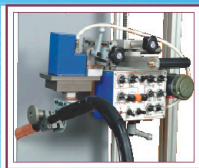


CS-7D

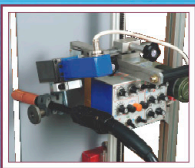


CS-5B

CS-100B(S)



CS-100B(R)



CS-7WD



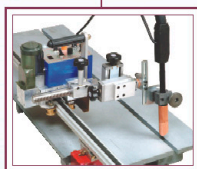
Wireless Communications Carriage

Weaver - Horizontal, Butt, V-up, Corner-up

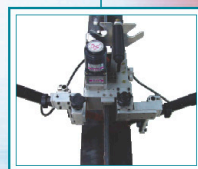
Rail Travel Carriage

1Pass Electro GAS
Welding Carriage
(E.G.W)

Special Carriage



CS-20



I-BAR



CS-EGW



CS-MINI EGW

Rail Travel Carriage

Stitch/Continuous Carriage

Weaver - Horizontal, Butt, V-up, Carriage

Ultra Light Side Fillet Carriage

CHUNG SONG INDUSTRY CO., LTD.

KOWELD

Head & Factory : 234-22, Daegam-ri, Daedong-myeon, Gimhae-si,
Kyeongsangnam-do, South Korea. [621-892]

TEL : +82-51-326-2131 FAX : +82-51-324-2989

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

2009. 09. 02

REV 1.0