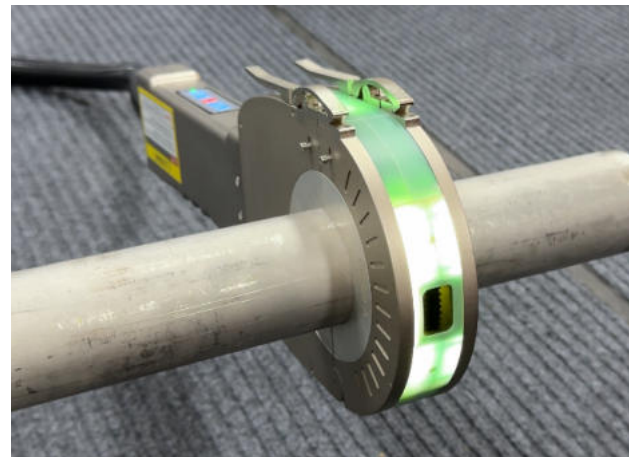


CLOSED PIPE WELDING SERIES

[Optional collocation] XD-40/80/120/170

Special welding head designed for all-position TIG welding, closed welding, good welding protection effect, beautiful surface shape, suitable for on-site installation with small operating space. Good accessibility. Mainly used in pharmaceutical pipelines, food, bioengineering, electronics, instrumentation, installation pipelines and other industries.



Closed tube welding pliers

- Equipped with an exclusive fixture compartment; Manual engineering grip handle;
- The operation button is placed in the customized handle, which is comfortable to hold. Can output forward and reverse, welding and other signal commands, suitable for high-altitude remote work.
- The thickness of the fixture compartment is only 12MM, - it is a narrow space ideal welding torch for pharmaceutical, aerospace and semiconductor industries.
- Removable fixture compartment design for convenience and flexibility helps operators align welds even in tight Spaces.

Other properties

- The jig compartment can be changed quickly and no additional tools are required.
- Clamp compartment can be equipped with a variety of pipe diameters, flexible replacement
- Welding head light to 4KG, positive and negative mounting, current input, report Controls such as alarm detection are integrated into the 8H micro welding head.
- Quick-fitting connector design, easy to install and disassemble.
- Highly flexible cable structure, (8M long) external protection layer, Effectively resist the influence of wind sand and dirt.
- Can be combined with XD-20W welding power supply,
- Optimized operation handle structure, thickness only 29mm, can hold with one hand.

OPTIMIZATION FUNCTION	
✓	Water-cooled structure
✓	flexible fixture
✓	gas path optimization
✓	Imported Z-ring gear
✓	Tungsten electrode can be deflected



Operation button integration area



Customized solution for special-shaped fixtures



Various fixture compartment inserts



Tungsten electrode conversion device

APPLICATION OF CLOSED PIPE WELDING TONGS

Welding gun code		40	80	120	170
With power system		XD-20W/XD-20PRO			
Welding material		Stainless steel, carbon steel, titanium and titanium alloys, etc.			
Pipe diameter range (outer diameter)	[mm]	6.35-38.1	10-76.2	19.05-114.3	38.1-168
	[inch]	0.25"- 1.50"	0.25"- 3.00"	0.75"- 4.50"	1.50"- 6.61"
welding thickness	[mm]	0.5-2.5	0.5-3.0	0.5-3.0	0.5-3.0
	[inch]	0.02"-0.060"	0.020"-0.118"	0.020"-0.118"	0.020"-0.118"
Electrode diameter	[mm]	2.0	2.4	2.4	2.4
	[inch]	0.078"	0.094"	0.094"	0.094"
Cable length	[m]	8	8	8	8
	[ff]	26.2	26.2	26.2	26.2
Weight	[kg]	3.5	5	6.5	9.5
	[lb]	7.7	11.0	14.3	20.9



XD-40 [ordered separately]



XD-80 [ordered separately]



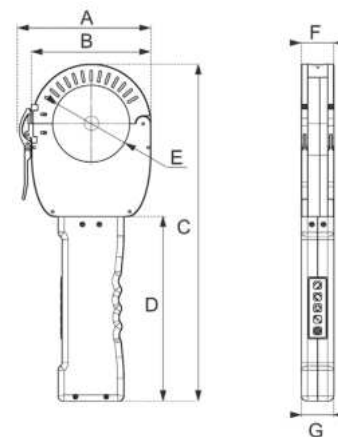
XD-120 [ordered separately]



XD-170 [ordered separately]

ENCLOSED PIPE WELDING TONGS - DIMENSIONS

SIZE	XD-40		XD-80		XD-120		XD-170	
	mm	inch	mm	inch	mm	inch	mm	inch
size "A"	120	4.72"	172.5	6.79"	226.5	8.92"	331.5	13.05"
size "B"	99	3.90"	155	6.10"	210	8.27"	290	11.42"
size "C"	381.5	15.02"	438.5	17.26"	513	20.20"	650	25.60"
size "D"	230	9.05"	240	9.45"	260	10.24"	280	11.02"
size "E"	57	2.24"	100	3.94"	134	5.28"	145	5.71"
size "F"	48	1.89"	52	2.05"	53	2.09"	75	2.95"
size "G"	38	1.50"	42	1.65"	48	1.90"	64	2.52"



ALL POSITION PIPE WELDING POWER SUPPLY

The power supply of the orbital welding machine is composed of the control system, the power supply system and the cooling water tank. This power supply is specially designed and manufactured for pipe welding, which is used in semiconductor, chemical, food, medicine, electronic pipeline, new energy, heat exchanger, refrigeration equipment, water treatment, laboratory and other industries.



[XD-20PRO][XD-20W]
Welding power source
Two new types of welding power sources are available.

- OPTIMIZATION FUNCTION**
- ✓ German Welding Quality
- ✓ 10 - inch User - friendly Display
- ✓ Reliability of Siemens PLC
- ✓ USB Data Management
- Real - time Monitoring

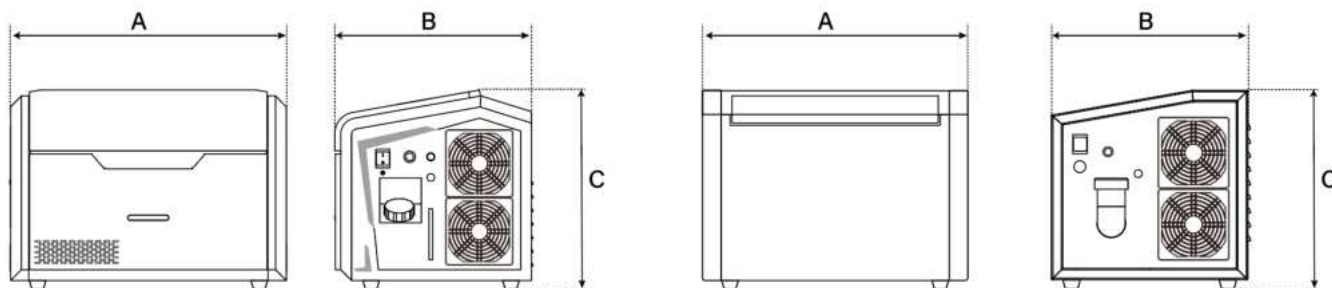
Power supply characteristics

- German orbital pipeline welding process features a high welding qualification rate and can pass the first-level flaw detection.
- Equipped with a 10-inch high-definition color industrial-grade display, it is capable of continuous full-day operation and features user - friendly operation.
- The Siemens PLC control system ensures the rapid operation of welding process parameters, which is precise, reliable, and has a low maintenance cost.
- The dual - cooling system provides stable pressure supply, allowing the equipment to operate reliably over long hours. This effectively boosts the duty cycle of the welding torch to a large extent.
- With the accumulation of welding data by experts over many years, intelligent expert parameters can be automatically generated, allowing for selection and use whenever needed.
- The system provides real - time welding monitoring along with multi - level alarm protection mechanisms. In the event of improper operation, it can accurately and immediately detect and signal such anomalies.
- The entire equipment is compact and lightweight, making it suitable for high - altitude and outdoor operations. It can be directly used on - site.
- It has the functions of one-click printing and automatic printing, and is equipped with a built-in miniature maintenance-free printer.
- The core components sourced from Germany significantly ensure the stability and durability of the equipment.
- A USB interface is added, enabling the import and export of welding data.

TECHNICAL PARAMETERS OF POWER SUPPLY

Model	XD-20W	XD-20PRO
Duty cycle	200A 60% /155A 100%	
Floating voltage	90V	
Power	4.5 KVA	
Welding gun cooling	Built-in circulating water cooling	
Screen	10 inch touch screen	
Partition Free Space	12 SET	
Insulation grade/Protection grade	F/IP21	
Welding current	4-200A	
Input voltage	AC220V ±10% 50Hz/60Hz	AC90-265V 50Hz/60Hz
Programmable memory	99 PIECE	600
Tank Volume	4L	4L
Weight	33KG(Water inclusion 4L)	30KG(don't contain water)
Machine size	512*355*350mm	560*360*365mm
	20.16**13.98**13.78" in	22.05**14.17**14.37"
Device Function	<ul style="list-style-type: none"> • DC/pulse current control / gas control/rotary motion /auto printing/water cooling control • Overvoltage, overload, leakage, arc failure and tungsten needle short circuit protection • Water level alarm, water flow alarm, welding torch short circuit alarm, motor current alarm • Welding speed detection, arc pressure detection 	
Upgrading of function	<ul style="list-style-type: none"> • Argon flow setting • Detection and control • Water flow and temperature detection • Automatic welding gun recognition • Welding status indicator 	<ul style="list-style-type: none"> • Import and export recipes/can connect the mouse • Heat dissipation channel optimization, better heat dissipation performance

Welding power source	XD-20PRO		XD-20W	
	MM	INCH	MM	INCH
size "A"	560	20.16"	512	22.05"
size "B"	360	13.98"	355	14.17"
size "C"	365	13.78"	350	14.37"



SCOPE OF SUPPLY	
name	quantity
Closed pipe welding joint	1
Tube welding power supply	1
Aviation packing box	2
Tool Suite	1
Tungsten grinding machine	1
Special insert for fixture compartment	3
Manual and equipment list	1

APPLICABLE ACCESSORIES[ACCESSORIES OPTIONAL]
<ul style="list-style-type: none"> • tungsten electrode • Cable extension • Z series imported ring gear • Spot welding positioner[Already displayed] • Endoscope[Already displayed] • Pipe levelling machine[Already displayed] • Pipe cutting machine[Already displayed]



Spot welding positioner
[Selective collocation]



Tube facing machine
[Selective collocation]



Tungsten grinding machine
[Standard configuration]



Endoscope
[Selective collocation]



Pipe cutting machine
[Selective collocation]

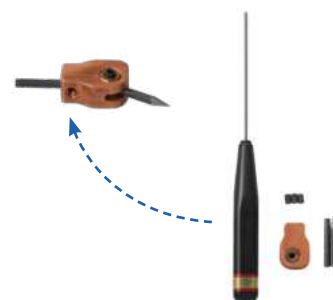


Hose length extension
[Customized]

TUNGSTEN ELECTRODE DEFLECTION SCHEME

It can provide the necessary flexibility and control to adapt to different welding positions and angles.

PRODUCT	Suitable for tungsten needle		Weight
	mm	inch	kg
40 tungsten electrode conversion device	-	-	-
80 tungsten electrode conversion device	2.4	0.094	0.016
120 tungsten electrode conversion device	2.4	0.094	0.016
170 tungsten electrode conversion device	2.4	0.094	0.016



ENCLOSED PIPE WELDING TONGS - FIXTURE CHAMBER INSERTS SPECIFICATIONS

- The fixture compartment insert made of aluminum material has certain flexibility;
- A separate fixture compartment insert is required for each diameter of pipe;
- Each welding gun can be matched with a variety of fixture compartment inserts;
- Equipped with various forms of fixture cabin inserts: fixtures for straight pipes; fixtures for elbows; fixtures for tee pipes; fixtures for flange joints; fixtures for special-shaped pipe fittings

PIPE WELDING TONGS CLAMP CABIN INSERTS - STRAIGHT PIPE TYPE

- Clamp inserts for holding straight pipe ends;
- Fixture A and Fixture B are a group;
- Compatible with other straight pipe clamps, tee clamps, elbow clamps, chuck clamps, etc

Matching welding gun	Tube outer diameter range	weight	diameter	thickness
XD-40	6.35-38.1MM	0.025KG	64MM	7MM
	0.25" - 1.50" inch		2.520"	0.276"
XD-80	10-76.2MM	0.085KG	108MM	8MM
	0.25" - 3.00"		4.250"	0.315"
XD-120	19.05-114.3MM	0.18KG	142MM	10MM
	0.75" - 4.50"		5.591"	0.393"
XD-170	38.1-168MM	0.25KG	193MM	12MM
	1.50" - 6.61"		7.598"	0.472"



Straight pipe clamp

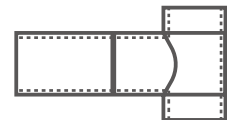


Closed welding joint with straight pipe fixture

PIPE WELDING TONGS CLAMP CABIN INSERTS - TEE TYPE

- Fixture insert for clamping tee fittings, profiling structure design;
- Fixture A and Fixture B are a group;
- Compatible with other straight pipe clamps, elbow clamps, chuck clamps, etc

Matching welding gun	Tube outer diameter range	weight	diameter	thickness
XD-40	6.35-38.1MM	-	64MM	-
	0.25" - 1.50" inch		2.520"	-
XD-80	10-76.2MM	-	108MM	-
	0.25" - 3.00"		4.250"	-
XD-120	19.05-114.3MM	-	142MM	-
	0.75" - 4.50"		5.591"	-
XD-170	38.1-168MM	-	193MM	-
	1.50" - 6.61"		7.598"	-



Tee pipe fixture

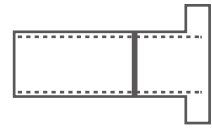


Enclosed welded joint with a tee clamp

PIPE WELDING TONGS CLAMP CHAMBER INSERTS - CHUCK TYPE

- Fixture inserts for clamping chuck pipe fittings, etc.
- Fixture A and Fixture B are a group;
- Can be adapted with other straight pipe fixtures, elbow fixtures, tee fixtures, etc.

Matching welding gun	Tube outer diameter range	weight	diameter	thickness
XD-40	6.35-38.1MM	0.040KG	64MM	-
	0.25" - 1.50" inch		2.520"	-
XD-80	10-76.2MM	0.060KG	108MM	-
	0.25" - 3.00"		4.250"	-
XD-120	19.05-114.3MM	0.179KG	142MM	-
	0.75" - 4.50"		5.591"	-
XD-170	38.1-168MM	0.315KG	193MM	-
	1.50" - 6.61"		7.598"	-



Chuck type fixture

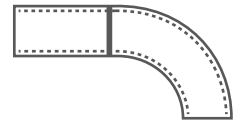


Closed welded joint with chuck fixture

PIPE WELDING CLAMP COMPARTMENT - PIPE BENDING - UNIVERSAL TYPE

- Fixture used to hold elbow pipe fittings; universal design, pipe fittings can be rotated at an angle, convenient and flexible.
- Fixture A and Fixture B are a group;
- Compatible with other straight pipe clamps, tee clamps, and chuck clamps

Matching welding gun	Tube outer diameter range	weight	diameter	thickness
XD-40	6.35-38.1MM	0.024KG	64MM	7MM
	0.25" - 1.50" inch		2.520"	0.276"
XD-80	10-76.2MM	0.053KG	108MM	8MM
	0.25" - 3.00"		4.250"	0.315"
XD-120	19.05-114.3MM	0.18KG	142MM	10MM
	0.75" - 4.50"		5.591"	0.393"
XD-170	38.1-168MM	0.30KG	193MM	12MM
	1.50" - 6.61"		7.598"	0.472"



Elbow Clamp - Universal Type

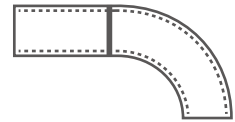


Closed welding joint with elbow clamp [universal type]

PIPE WELDING CLAMP COMPARTMENT - PIPE BENDING - ORIENTATION TYPE

- Fixture for clamping elbow pipe fittings; directional design, good sealing, beautiful and reliable welding effect;
- Fixture A and Fixture B are a group;
- Can be adapted with other straight pipe fixtures, tee fixtures, chuck fixtures, etc.
- Applicable to different pipe diameter elbows, no need to replace the fixture base, only need to replace the embedded fixture.

Matching welding gun	Tube outer diameter range	weight	diameter	thickness
XD-40	6.35-38.1MM	0.006KG	50MM	2MM
	0.25" - 1.50" inch		1.969"	0.079"
XD-80	10-76.2MM	0.012KG	90MM	2MM
	0.25" - 3.00"		3.543"	0.079"
XD-120	19.05-114.3MM	0.03KG	124MM	2MM
	0.75" - 4.50"		4.882"	0.079"
XD-170	38.1-168MM	0.05KG	175MM	2MM
	1.50" - 6.61"		6.890"	0.079"



Elbow Clamp - Orientation Type



Closed welding joint with elbow clamp [orientation type]