

## Orbital Welding System

P200 Power Source / Closed Chamber Welding Heads



Based on extensive experience and confidence, NODHA show you how much we trust in the durability and reliability of our products. We provide 3-years warranty free of charge all over the world. Consult us for details.

YouTube



## P200 Power Source

Program-Controlled



### Introduction

P200 digital welding power source is an automatic program-controlled welding power source. The welding power source adopts the new inverter power supply and control technology in the welding field, with the 10" color touch screen as the human-machine interface, which is advanced, digital, easy to operate, intelligent, expandable, and reliable. The power supply provides precise control of current, rotation and shielding gas, centrally sets and stores various functional parameters in all-position welding, and distributes synchronous and precise control. The power source is specially designed and manufactured for thin walled tubes/tubes. It can be used with all BH series closed chamber welding heads. Mainly used in chemical, food, medicine, Semi-conductor, various heat exchangers and other industries.

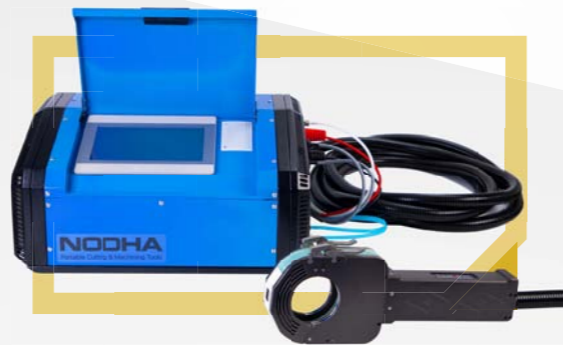
### Features

- **Equipment Composition**  
Control system, inverter integrated circuit, water cooling tank, etc
- **Preferred configuration**  
Siemens PLC control system
- **Module composition**  
Modular design for easy maintenance and maintainance
- **Lightweight and easy to carry**  
Small size and light weight. Easy to move and carry
- **Parameter storage**  
It has functions such as parameter saving/printing, and can be operated with basic welding knowledge

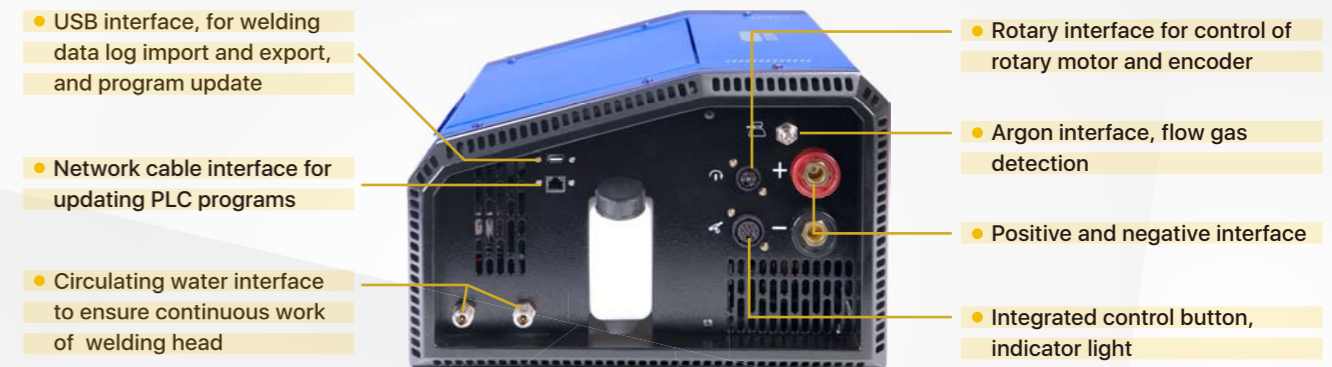
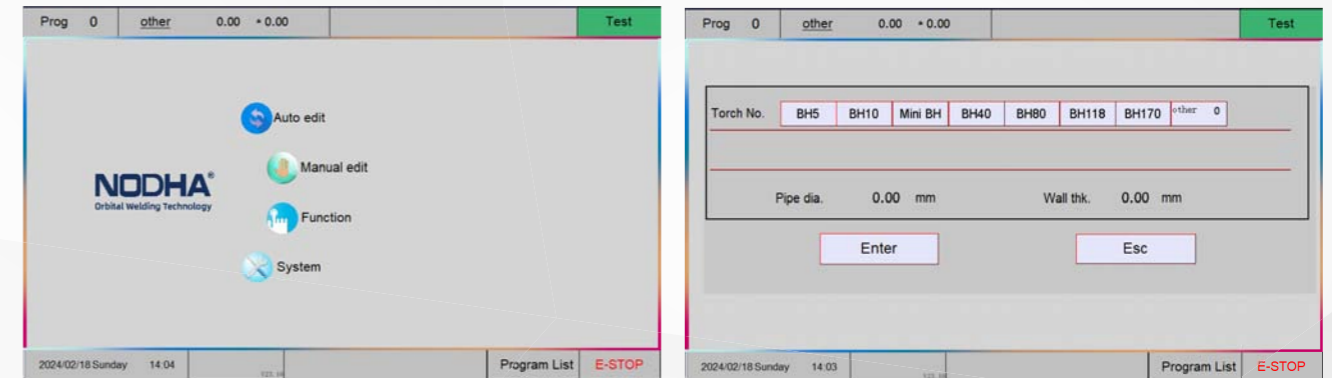
## Performance

- Function of automatic calculation of various welding parameters, which can easily realize the automatic welding process parameter matching of thin-walled pipes and tubes
- With parameter library, it can calculate and generate welding programs for different pipe diameters and wall thicknesses automatically
- With water detection and gas detection function
- Perfect fault detection, directly display the reason of the fault
- With parameter adjustment memory function, it can realize online real-time parameter adjustment memory, and can realize the comparison display of parameters before and after adjustment
- During the welding process, the welding parameters of current and speed can be adjusted at any time to meet the special requirements of certain welds
- The power source has the functions of software remote upgrade and U disk upgrade, and has offline programming function

Model	P200
Power Type	Inverter
Power Cable Length	2M
Welding Current	5~200A
Duty Cycle(20°C)	200A 60%/155A 100%
Unload Voltage	65V
Input Voltage	AC 220V±10% 50/60Hz
Power	4.5 KVA
Screen	10"
Programming	Manual / Automatic
Insulation Grade	F
Protection	IP21
Control Function	Gas/Current/Rotation/Cooling
Cooling	Water
Cooling Tank	3.7L
Number of storable program	70
Adjustable Welding Section	Standard: 4, Max.: 8
Printer	Thermal printer
Weight	18 kg (W/o Cable)
Shipping Weight	29 kgs
Package	Hard-slided case
Package Size	700*490*350mm



## Main Interface

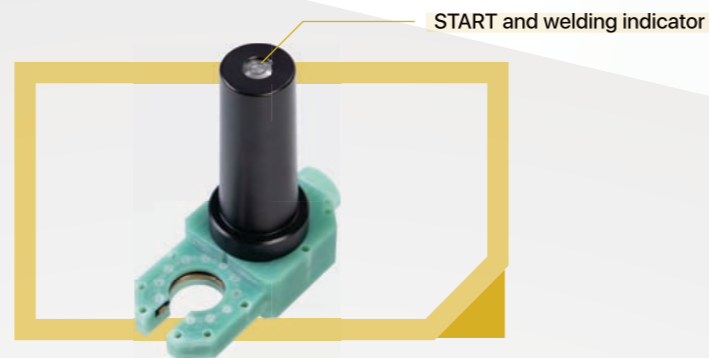
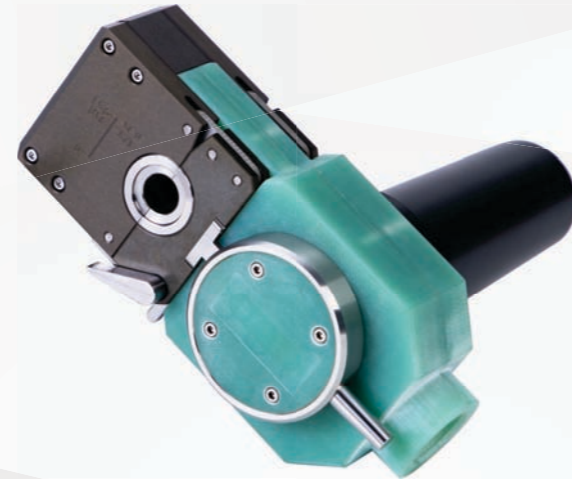


## Main Component

Control System	Program controlled welding power source software V1.0
Touch Screen	WEINTEK HIM, Taiwan
PLC control module	SIEMENS PLC, Germany
Inverter	Standard: Self-develop. Or ewm, Germany for option
Control Relay	OMRON 2662201, Japan
Power Switch	TAYEE ZW42A2, Shanghai
Water Pump	CEME WED-3510(220V), Italy
Drive Motor	Standard: SHA YANG YE DM300264, Taiwan. Or maxon, Swiss for option
Water/Gas quick Couple	LEGRIS 21KBTF04MFN, Germany
Control cable & Jacket	HELUKABEL, Germany
Control Plug	TE AMP, U.S.

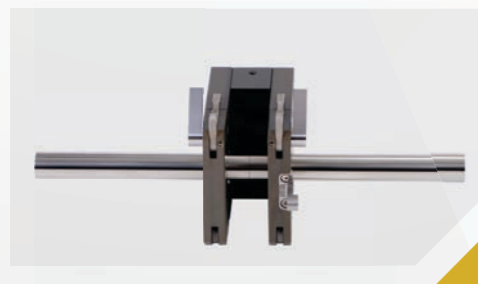
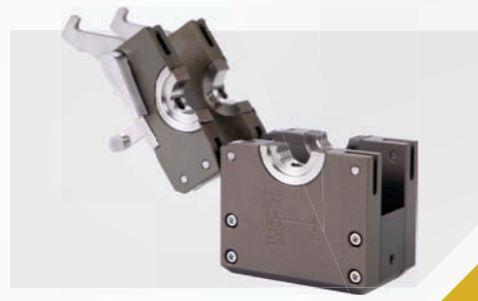
## CLOSED CHAMBER WELDING HEAD 1/8 - 5/8 in.

Model	BH5
Power Source	P200
Weldable Material	CS, SS, Ti alloy
Tube OD	Φ3.175-Φ15.875mm
Inch	1/8 - 5/8 in.
Max. Wall Thickness	1.5mm
Standard Collet Size	1/8, 1/4, 3/8, 1/2, 5/8 in.
Weld Preparation	Square butt joint
Cooling	Water
Rotation Speed	0.3-6 rpm
Tungsten Electrode Dia.	1.6mm
Shielding Gas	Argon
Cable Assembly Length	9.5M
Head Code	13
Weight	1.5 kg (W/o Cable)
Shipping Weight	10.5 kgs
Package	Durable plastic case
Package Size	580*450*220mm



### BH5

#### PRODUCT DETAILS



### Features

- Available for outside diameters ranging from 1/8 to 5/8 in.
- One button running, easy operation
- Self fusion welding method
- Adopts sealed design, and the protection effect is more sufficient
- Flexible automatic centering fixture, precise positioning
- Suitable for tube welding of thin-walled carbon steel, stainless steel, titanium and titanium alloys

### Standard Supply

BH5 Welding Head - 1 unit
Collets - 1 set
Centering gauge - 1 pce
Electrode alignment block - 1pce
Tungsten Electrode Grinder - 1 unit

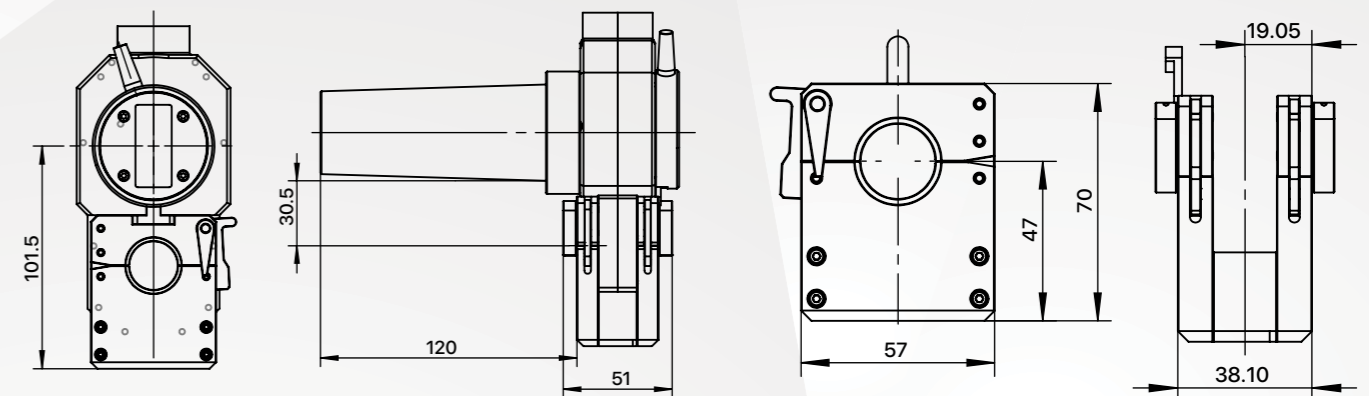
Cross screwdriver -1 pce
Tungsten Electrode 1.6mm - 2 pcs
Air hose adapter(ø10mm→ø6mm) - 1 pce
4M Fluorine gas hose(ø 6mm) -1 pce
9.5M Cable assembly - 1 pce

### Collets size (S.S.)

mm	Inch	Order No.
3.175	1/8	5H-3.17
6.35	1/4	5H-6.35
9.53	3/8	5H-9.53
12.7	1/2	5H-12.7
15.88	5/8	5H-15.88

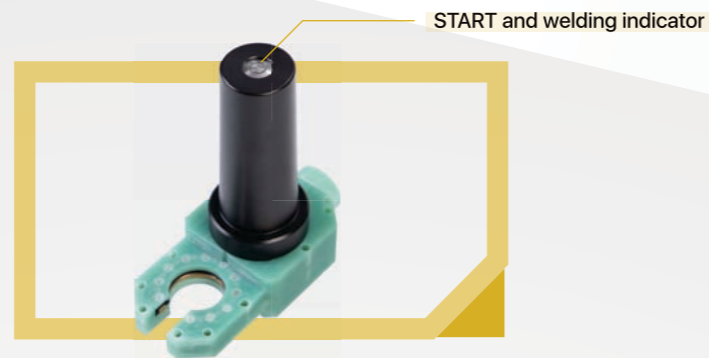


### Dimension Figure

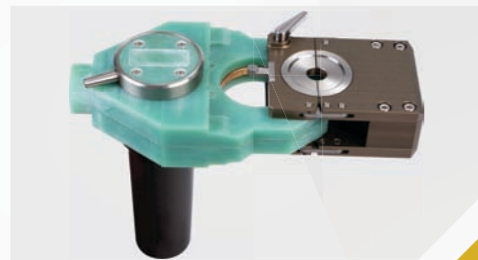


## CLOSED CHAMBER WELDING HEAD 1/4 - 1 in.

Model	BH10
Power Source	P200
Weldable Material	CS, SS, Ti alloy
Tube OD	Φ6.35-Φ25.4mm
Inch	1/4 - 1 in.
Max. Wall Thickness	2mm
Standard Collet Size	1/4, 3/8, 1/2, 3/4, 1 in.
Weld Preparation	Square butt joint
Cooling	Water
Rotation Speed	0.3-6 rpm
Tungsten Electrode Dia.	1.6mm
Shielding Gas	Argon
Cable Assembly Length	9.5M
Head Code	16
Weight	1.8 kg (W/o Cable)
Shipping Weight	11 kgs
Package	Durable plastic case
Package Size	580*450*220mm



### BH10 PRODUCT DETAILS



### Features

Available for outside diameters ranging from 1/4 to 1 in.

One button running, easy operation

Self fusion welding method

Adopts sealed design, and the protection effect is more sufficient

Flexible automatic centering fixture, precise positioning

Suitable for tube welding of thin-walled carbon steel, stainless steel, titanium and titanium alloys

### Standard Supply

BH10 Welding Head - 1 unit
Collets - 1 set
Centering gauge - 1 pce
Electrode alignment block - 1pce
Tungsten Electrode Grinder - 1 unit

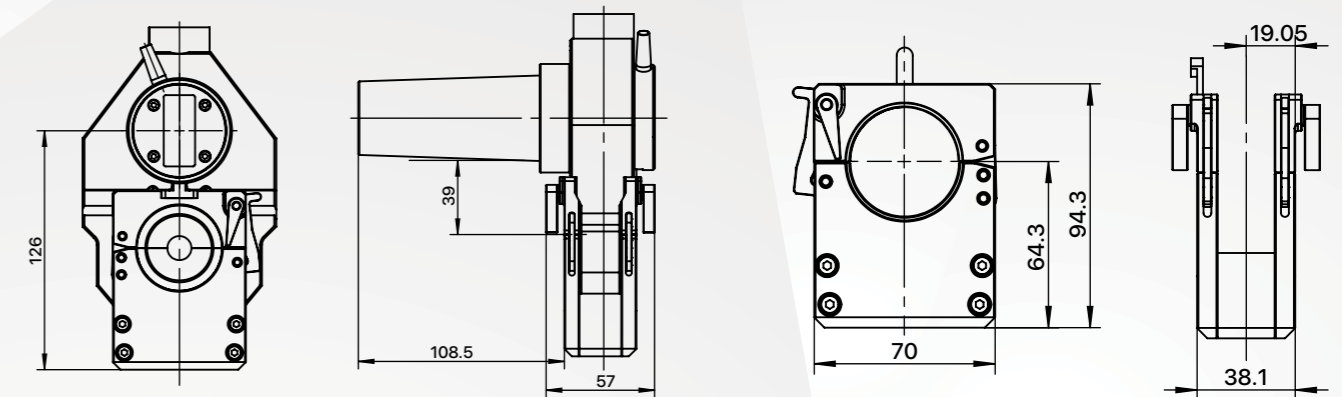
Cross screwdriver -1 pce
Tungsten Electrode 1.6mm - 2 pcs
Air hose adapter(ø10mm→ø6mm) - 1 pce
4M Fluorine gas hose(ø 6mm) -1 pce
9.5M Cable assembly - 1 pce

### Collets size (S.S.)

mm	Inch	Order No.
6.35	1/4	10H-6.35
9.53	3/8	10H-9.53
12.7	1/2	10H-12.7
19.05	3/4	10H-19.5
25.4	1	10H-25.4



### Dimension Figure



## CLOSED CHAMBER WELDING HEAD 1/4 - 1 1/2 in.

### BH40

Model	BH40
Power Source	P200
Weldable Material	CS, SS, Ti alloy
Tube OD	Φ6.35-Φ38.1mm
Inch	1/4 - 1 1/2 in.
Max. Wall Thickness	3mm
Standard Collet Size	1/4 , 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2 in.
Weld Preparation	Square butt joint
Cooling	Water
Rotation Speed	0.3-6rpm
Tungsten Electrode Dia.	2.4mm
Shielding Gas	Argon
Cable Assembly Length	9.5M
Head Code	28
Weight	3.5 kg (W/o Cable)
Shipping Weight	16.5 kgs
Package	Hard-sided case
Package Size	750*410*290mm



### Standard Supply

BH40 Welding Head - 1 unit
Collets - 1 set
Tungsten Electrode Grinder - 1 unit
Allen key -1 set
Tungsten Electrode 2.4mm - 2 pcs
Air hose adapter(ø10mm→ø6mm) - 1 pce
5M Fluorine gas hose(ø 6mm) -1 pce
9.5M Cable assembly - 1 pce



Collets size (Alu.)		
mm	Inch	Order No.
6.35	1/4	AS40-6.35
9.53	3/8	AS40-9.53
12.7	1/2	AS40-12.7
19.05	3/4	AS40-19.05
25.4	1	AS40-25.4
31.8	1 1/4	AS40-31.8
38.1	1 1/2	AS40-38.1



### Cable Assembly

- Positive cable
- Negative cable
- 7 pins AMP aviation plug
- 14 pins AMP aviation plug
- Water hose - 2 pcs
- Air hose



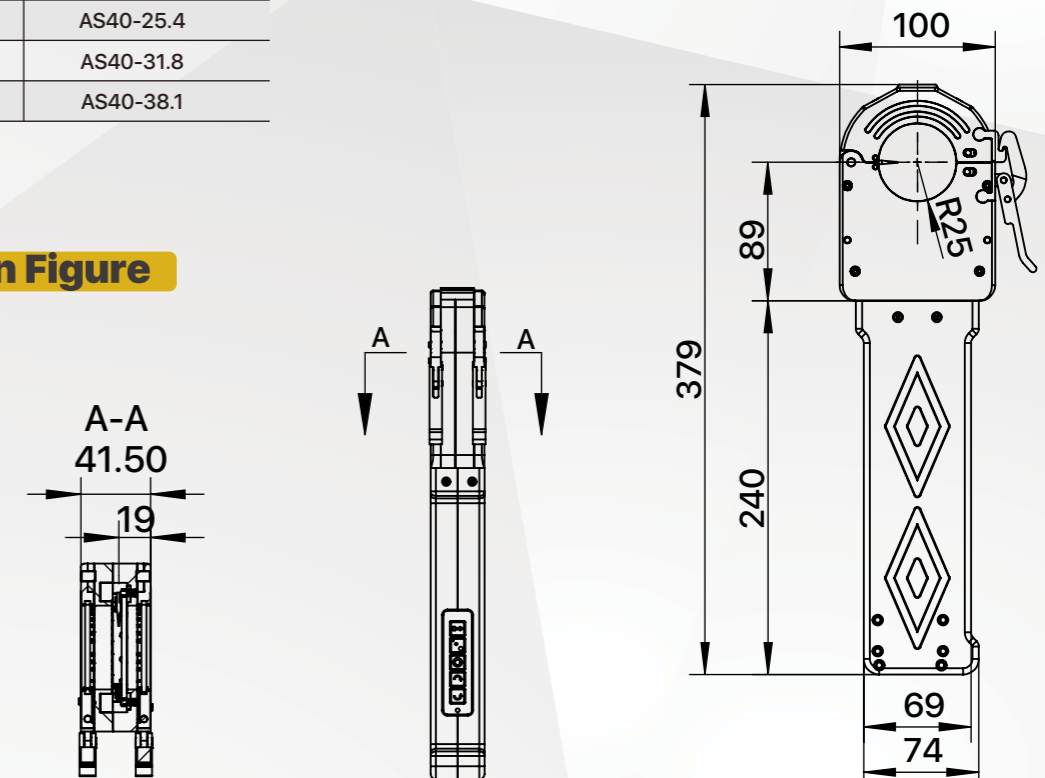
### Welding head button

- Clockwise rotation
- Anticlockwise rotation
- Emergency STOP
- Gas testing
- Start

### Features

- Available for outside diameters ranging from 1/4 to 1 1/2 in.
- Self fusion welding method
- Adopts sealed design, and the protection effect is more sufficient
- Flexible automatic centering fixture, precise positioning
- Suitable for tube welding of thin-walled carbon steel, stainless steel, titanium and titanium alloys
- Operation buttons on the welding head makes it is easy to use and suitable for on-site installation.

### Dimension Figure



## CLOSED CHAMBER WELDING HEAD 3/4 - 3 in.

### BH80

Model	BH80
Power Source	P200
Weldable Material	CS, SS, Ti alloy
Tube OD	Φ19.05-Φ76.2mm
Inch	3/4 - 3 in.
Max. Wall Thickness	3mm
Standard Collet Size	3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3 in.
Weld Preparation	Square butt joint
Cooling	Water
Rotation Speed	0.2657-5.31rpm
Tungsten Electrode Dia.	2.4mm
Shielding Gas	Argon
Cable Assembly Length	9.5M
Head Code	46
Weight	5 kg (W/o Cable)
Shipping Weight	17.8 kgs
Package	Hard-sided case
Package Size	750*410*290mm



### Standard Supply

BH80 Welding Head - 1 unit
Collets - 1 set
Tungsten Electrode Grinder - 1 unit
Allen key -1 set
Tungsten Electrode 2.4mm - 2 pcs
Air hose adapter(ø10mm→ø6mm) - 1 pce
5M Fluorine gas hose(ø 6mm) -1 pce
9.5M Cable assembly - 1 pce



#### Collets size (Alu.)

mm	Inch	Order No.
19.05	3/4	AS80-19.05
25.4	1	AS80-25.4
31.8	1 1/4	AS80-31.8
38.1	1 1/2	AS80-38.1
50.8	2	AS80-50.8
63.5	2 1/2	AS80-63.5
76.2	3	AS80-76.2



#### Cable Assembly

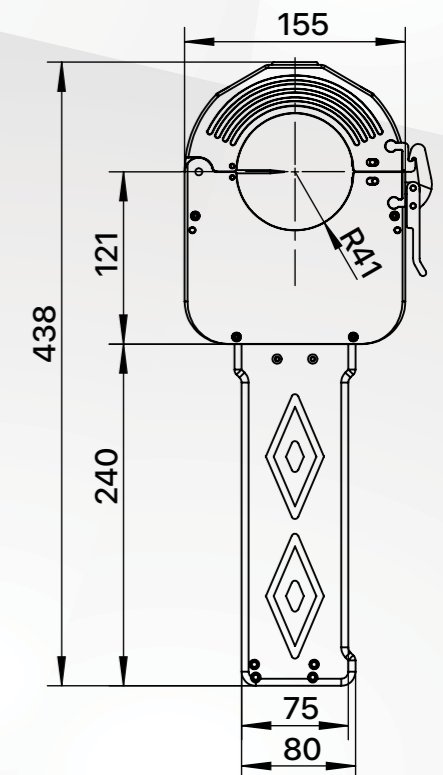
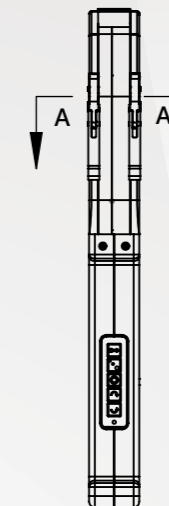
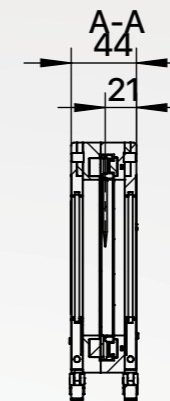
- Positive cable
- Negative cable
- 7 pins AMP aviation plug
- 14 pins AMP aviation plug
- Water hose - 2 pcs
- Air hose

#### Welding head button

- Clockwise rotation
- Anticlockwise rotation
- Emergency STOP
- Gas testing
- Start



### Dimension Figure



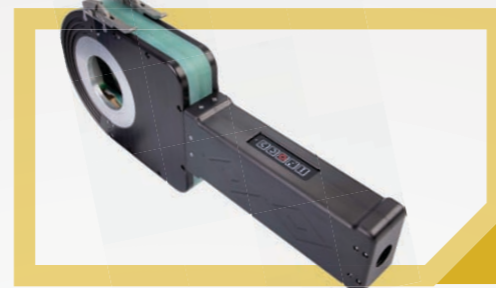
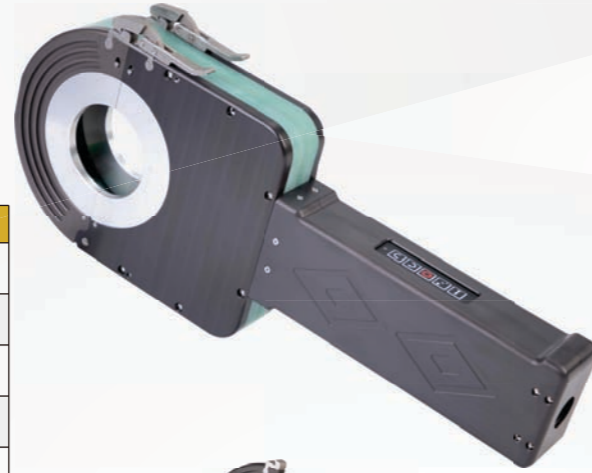
### Features

- Available for outside diameters ranging from 3/4 to 3 in.
- Self fusion welding method
- Adopts sealed design, and the protection effect is more sufficient
- Flexible automatic centering fixture, precise positioning
- Suitable for tube welding of thin-walled carbon steel, stainless steel, titanium and titanium alloys
- Operation buttons on the welding head makes it is easy to use and suitable for on-site installation.

## CLOSED CHAMBER WELDING HEAD 1 1/2-4 1/2 in.

### BH118

Model	BH118
Power Source	P200
Weldable Material	CS, SS, Ti alloy
Tube OD	Φ38.1-Φ114.3mm
Inch	1 1/2-4 1/2 in.
Max. Wall Thickness	3mm
Standard Collet Size	1 1/2, 2, 2 1/2, 3, 3 1/2, 4, 4 1/4 in.
Weld Preparation	Square butt joint
Cooling	Water
Rotation Speed	0.194-3.87rpm
Tungsten Electrode Dia.	2.4mm
Shielding Gas	Argon
Cable Assembly Length	9.5M
Head Code	94
Weight	6.5 kg (W/o Cable)
Shipping Weight	20.5 kgs
Package	Hard-sided case
Package Size	750*410*290mm



### Standard Supply

BH118 Welding Head - 1 unit
Collets - 1 set
Tungsten Electrode Grinder - 1 unit
Allen key -1 set
Tungsten Electrode 2.4mm - 2 pcs
Air hose adapter(ø10mm→ø6mm) - 1 pce
5M Fluorine gas hose(ø 6mm) -1 pce
9.5M Cable assembly - 1 pce



Collets size (Alu.)		
mm	Inch	Order No.
38.1	1 1/2	AS118-38.1
50.8	2	AS118-50.8
63.5	2 1/2	AS118-63.5
76.2	3	AS118-76.2
88.9	3 1/2	AS118-88.9
101.6	4	AS118-101.6
114.3	4 1/2	AS118-114.3



### Cable Assembly

- Positive cable
- Negative cable
- 7 pins AMP aviation plug
- 14 pins AMP aviation plug
- Water hose - 2 pcs
- Air hose



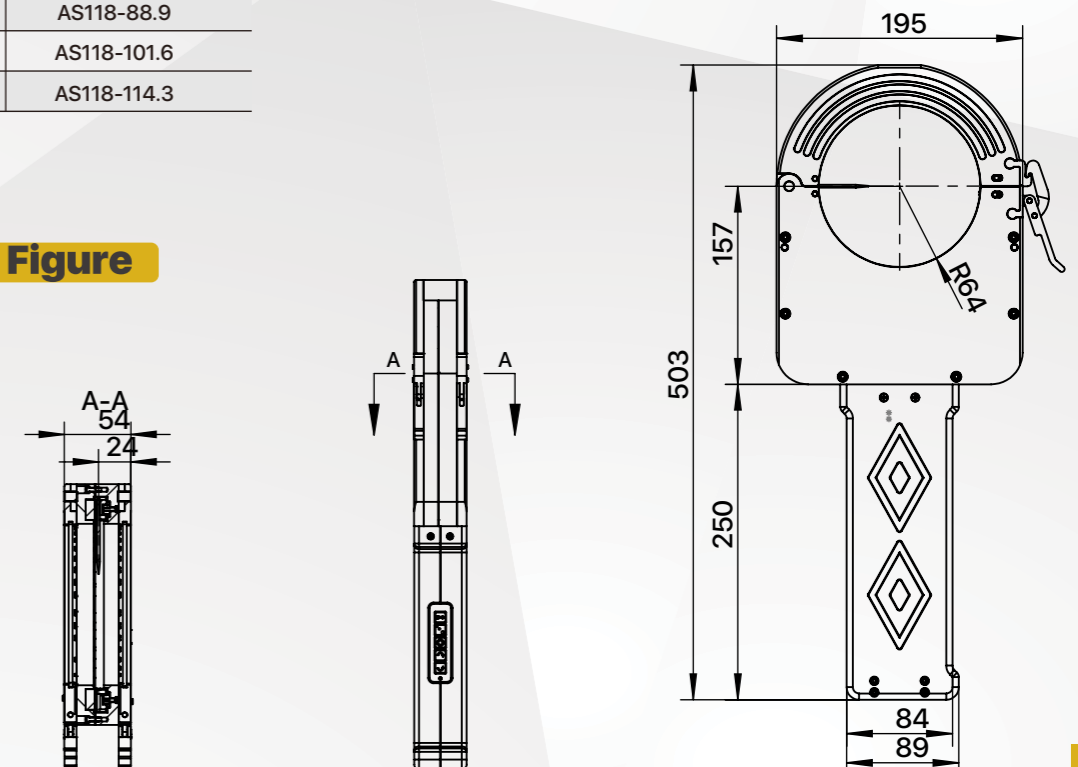
### Welding head button

- Clockwise rotation
- Anticlockwise rotation
- Emergency STOP
- Gas testing
- Start

### Features

- Available for outside diameters ranging from 1 1/2 to 4 1/2 in.
- Self fusion welding method
- Adopts sealed design, and the protection effect is more sufficient
- Flexible automatic centering fixture, precise positioning
- Suitable for tube welding of thin-walled carbon steel, stainless steel, titanium and titanium alloys
- Operation buttons on the welding head makes it is easy to use and suitable for on-site installation.

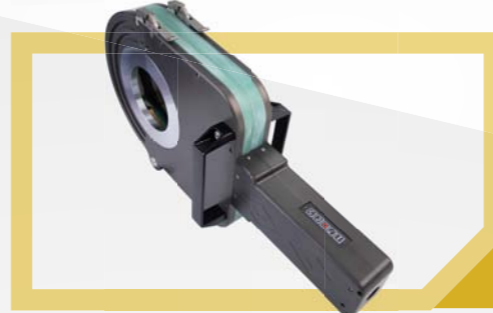
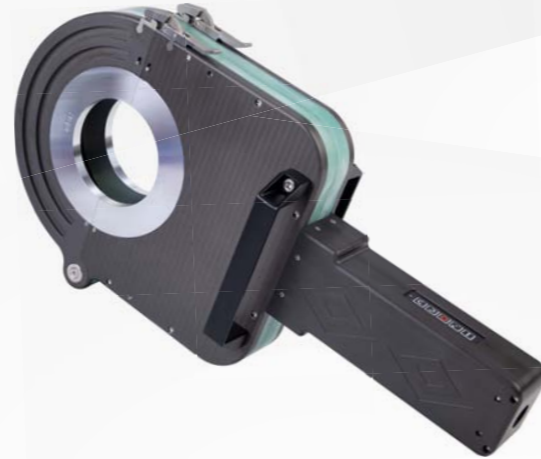
### Dimension Figure



## CLOSED CHAMBER WELDING HEAD 2-6 1/2 in.

### BH170

Model	BH170
Power Source	P200
Weldable Material	CS, SS, Ti alloy
Tube OD	Φ50.8-Φ165.2mm
Inch	2-6 1/2 in.
Max. Wall Thickness	3mm
Standard Collet Size	2, 2 1/2, 3, 3 1/2, 4, 4 1/2, 5 1/2, 6, 6 1/2 in.
Weld Preparation	Square butt joint
Cooling	Water
Rotation Speed	0.123-0.246rpm
Tungsten Electrode Dia.	2.4mm
Shielding Gas	Argon
Cable Assembly Length	9.5 M
Head Code	148
Weight	10.5 kg (W/o Cable)
Shipping Weight	27 kgs
Package	Hard-sided case
Package Size	750*410*290mm



### Standard Supply

BH170 Welding Head - 1 unit
Collets - 1 set
Tungsten Electrode Grinder - 1 unit
Allen key -1 set
Tungsten Electrode 2.4mm - 2 pcs
Air hose adapter(ø10mm→ø6mm) - 1 pce
5M Fluorine gas hose(ø 6mm) -1 pce
9.5M Cable assembly - 1 pce



#### Collets size (Alu.)

mm	Inch	Order No.
50.8	2	AS170-50.8
63.5	2 1/2	AS170-63.5
76.2	3	AS170-76.2
88.9	3 1/2	AS170-88.9
101.6	4	AS170-101.6
114.3	4 1/2	AS170-114.3
139.7	5 1/2	AS170-139.7
152.4	6	AS170-152.4
165.1	6 1/2	AS170-165.1



#### Cable Assembly

- Positive cable
- Negative cable
- 7 pins AMP aviation plug
- 14 pins AMP aviation plug
- Water hose - 2 pcs
- Air hose

#### Welding head button

- Clockwise rotation
- Anticlockwise rotation
- Emergency STOP
- Gas testing
- Start



### Features

- Available for outside diameters ranging from 2-6 1/2 in.
- Self fusion welding method
- Adopts sealed design, and the protection effect is more sufficient
- Flexible automatic centering fixture, precise positioning
- Suitable for tube welding of thin-walled carbon steel, stainless steel, titanium and titanium alloys
- Operation buttons on the welding head makes it is easy to use and suitable for on-site installation.

### Dimension Figure

