

Orbital Welding System

Brings consistent excellent quality and increased productivity -Very simple operation program -Excellent welding performance -Mature welding process -Extremely low Labor intensity Site photos >>>













Orbital Welding System

Developed for all position tube - tube sheet automatic welding, Compared with manual welding, more efficient, more reliable, more convenient, and more beautiful.

Areas of used: boiler, chemical industry, heat exchanger, air-conditioner, power plant.







Boiler

Heat Exchanger

Condensator

Product Configuration

Orbital Welding System

WTS60-ATIG400P-Z

Standard Equipment

Power Source ATIG400P-Z + Welding Head WTS60 + Manipulator CZJ1.9*1.2



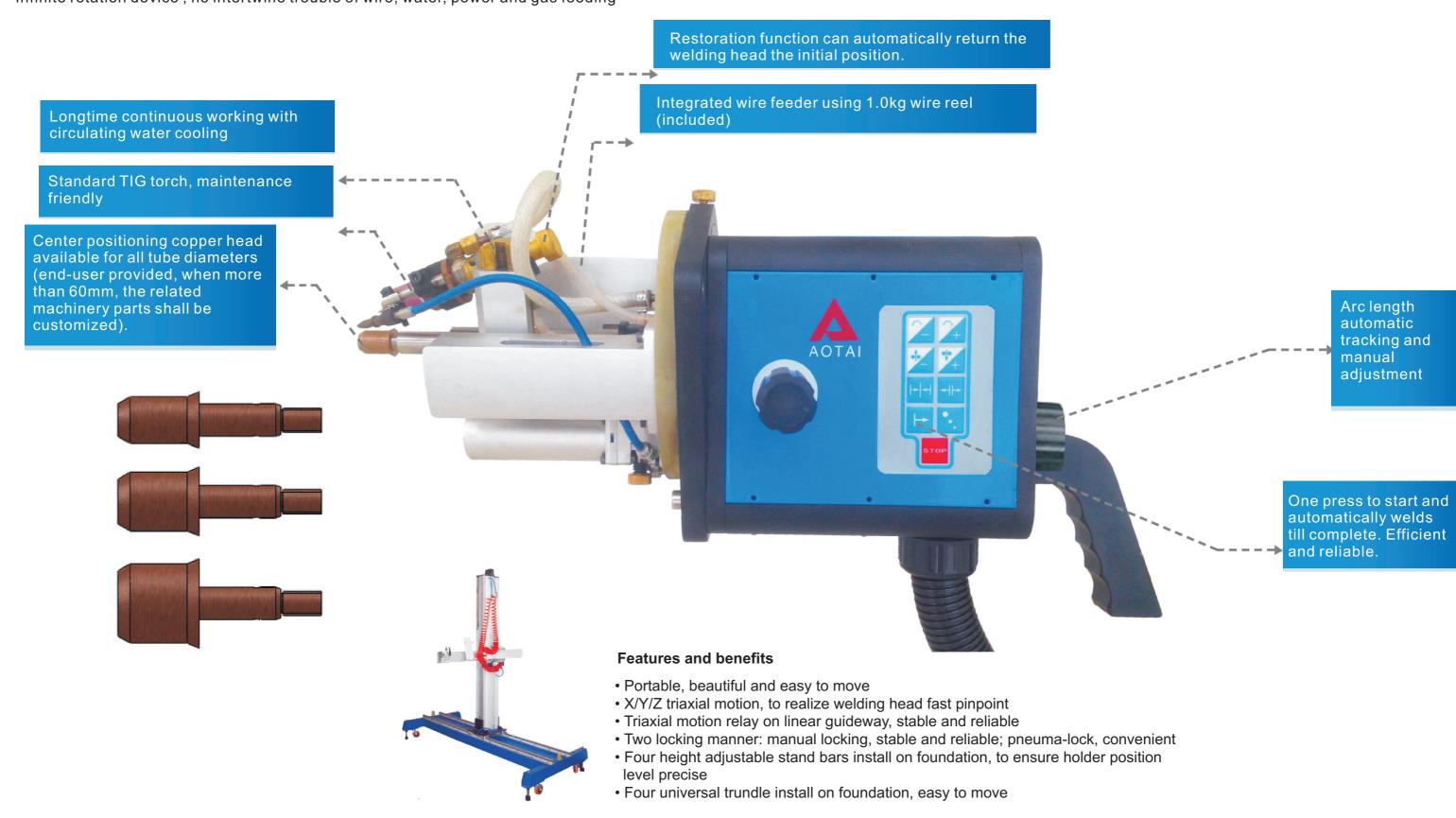




WTS60 WELDING HEAD

Benefits

- Easy operation, reduce welder's skill requirements
- Excellent welding performance and appearance
- Infinite rotation device, no intertwine trouble of wire, water, power and gas feeding



Technical Specifications

| Parts | Item | Parameter |
|--------------------------|--|--|
| ATIG 400P-Z | Rated Input Voltage / Frequency | 380V±10% 50/60Hz |
| | Welding Current | 5~400A |
| | Duty Cycle | 400A 60%/310A 100% |
| | Rated Power | 13.5KVA |
| | Storage Channel Number | 60 |
| | Programming Sectors | 16 |
| | Functions | DC or Pulse output/ Rotating Control/Wire Feeding Control/Protection Gas Control/Arc Length Control/ oscillating Control/ etc. |
| | Standards | GB 155579.1-2004 |
| | Dimension | 1100X600X1250mm |
| WTS60 Welding Head | Connection between tube and tube sheet | Protruding tubes / Flush tubes |
| | Material Applicable | Carbon steel, stainless steel, titanium alloy |
| | Tube Outside Diameter | Ф 16~Ф60 mm |
| | Max. Welding Current | 300A |
| | Wire diameter | 0.8mm/1.0 mm |
| | Torch Rotating Speed | 0.35~6.0rpm |
| | Cooled by | Water |
| | Weight | 12.5Kg |
| | Duty Cycle | 300A 70% |
| | Dimension | 425×265×210mm |
| 3D Manipulator | Lateral distance of travel (X axis) | 750 mm |
| | Horizontal distance of travel (Y axis) | 1900 mm |
| | Vertical distance of travel (Z axis) | 1200 mm |
| | Min. Working Height | 600 mm |
| | Dimension | 1100×2300×2230mm |



Main interface

Features and benefits

- Visual interface, easy operation, convenient to use
- Friendly human-computer interaction interface, 10 inches touch screen display
- Has advanced and normal parameter setting interface, for multi-user operation
- Login password setting, avoid welding standard modify wrongly
- Welding monitoring interface, when welding display real time parameter, welding

stage, alarm information, etc.



Remote controller

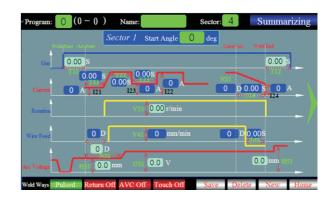
Features and benefits

- Fine adjust welding parameter, perfect control whole welding process
- Realize real time welding parameter modification
- LCD on hand controller can real time show welding parameter, faulty information like over heat or over current, and welding stage like HF arc ignition
- Multi-function buttons save space, make interface simple, beautiful and powerful,

improve the cost-efficacy



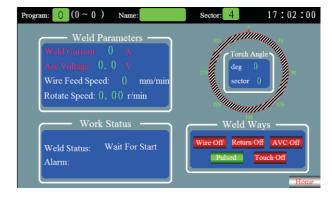
Login interface



Programming interface



System setting



Welding interface

Spare Parts List

| | | 0.11.50.11.00 |
|----|---------------------------------------|-----------------|
| 1 | Ceramic Nozzle | 6# 53N60 |
| 2 | Ceramic Nozzle | 7# 53N61 |
| 3 | Flow Deflector | 45V44 |
| 4 | Tungsten Electrode Holder | 13N23 |
| 5 | Tungsten Electrode Holder | 45V45 |
| 6 | Tungsten Electrode Holder | 13N24 |
| 7 | Water and Electricity Pipe Components | WTS60.4.0 |
| 8 | Wire Feed Rolls | Ф0.8/Ф1.0 |
| 9 | Wire Feed Nozzle | Ф1.0 |
| 10 | Wire Feeding Tube Components | S20 |
| 11 | Polytetrafluoroethylene Ttube | Ф4×6 |
| 12 | Torch Head Components | WTS60.1.1.0 |
| 13 | Minitype Guide Rail | MR9MNSS1V0N-53L |
| 14 | Adjustment Screw | WTS60.1-6 |
| 15 | Arc Length Adjustment Rod Components | WTS60.5.1.0 |
| 16 | Wire Feed Nozzle Clamping Piece | WTS60.1-17 |
| 17 | Installation Disk Joint | WTS60.4.1-10 |
| 18 | Shoulder Seal | 598882 |
| 19 | Insulating Mat | WTS60.1-13 |
| 20 | Positioning Copper Head | Customized |





Dezhou, Shandong, China Stainless Steel, 25mm 1 pass with wire feeding 36 seconds per pipe





Heat exchanger in chemical industry Carbon Steel, 25mm 2 pass with wire feeding 1 Min per pipe





Wuhan, Hubei, China Stainless Steel, 15.5mm 1 pass No wire feeding 30 seconds per pipe