

# Intelligent Tube Plate Robot Welding System

## Summary

This equipment is specially designed for tubesheet welding. It adopts advanced and accurate visual positioning control technology to realize a truly unmanned full-automatic tubesheet welding robot. It is mainly used for full-automatic welding of chemical industry, various heat exchangers, boilers, power plants, military industry and nuclear power tubesheet.

### Technical specification

TRP2000 Dimension	4200*1340*3040mm
TRP3000 Dimension	5000*1340*3040mm
Welding pipe range	Φ10~Φ80
Welding current	5~500A
Welding material	Carbon/Stainless steel,titanium alloy
Connector Type	Pipe flush/pipe protruding
Welding technology	TIG Self-Fusing/Wire Welding
Protective gas	Argon
Angle range of welding tool	-10°~30°
Welding wire diameter	Φ0.8~Φ10
Tungsten electrode diameter	Φ2.4~Φ3.2
Number of weld layers	Multi-layer Welding
Welding position	All Position Welding
Cooling type	Water Cooling



## Performance characteristics

- Suitable for flat welding or fillet welding of tube plate of heat exchanger;
- The main purpose is to solve the unmanned operation of tube plate, efficient TIG welding, one person and more than one machine control, improve production efficiency, reduce labor intensity;
- It is composed of TPR2000N/TPR3000 body, vision system, 500A program controlled intelligent welding power supply, special welding machine head, data acquisition system, automatic correction function, automatic arc length adjustment of spear head, etc.