Options

Robot Welding Torch Cleaner



- The Robot Welding Torch Cleaner can do a combination of wire cutting, splash cleaning and silicon oil spraying at one time, resulting in much shorter cleaning time and therefore higher working efficiency of the robot welding system.
- The operation has been simplified because of the three-in-one mode and their closely located design. Only one adjustment is required in case to suite different size of torch nozzle before the cleaner starts to work.
- The oil spraying device is better designed to achieve more uniform injections by spraying oil along its axial than the normal one which injects oil from two points at both sides and causes uneven injections and a few corners uncovered.
- The wire cutting and reamer devices are sealed and packaged for safety protection purpose as they are risky.
- The PLC electrical control has been adopted for this cleaner and therefore their operational time can be adjusted respectively according to their specific requirement, no additional hardware is required.
- The reductive type of fully automatic feedback control has been adopted and so no communication needed between the cleaner and robot and no connection required, with the robot welding system simplified.

• Welding Arc Monitoring Camera



The Monitoring Camera is adopted to realize a lookout over the welding/cutting torches corresponding to the seam before welding/cutting starts, the position of welding/cutting torches in relation to the welding pool and status during welding process.





Front View

Welding Positioners

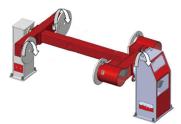
- They are used to tilter jobs to the suitable positions for robotic welding
- They are integrated into the automatic welding system for higher welding efficiency and better welding quality.
- Each positioner consists of rotating head, tilter mechanism and controller. Its tiltering is realized by servo motor and its reduction by high accurate reducer, and it is reliable and step-less speed regulating.



One axis Positioner



Two axes Positioner



Three axes Positioner





Kunshan Huaheng Electronic Add: No.100 huasheng Rd., Kunshan, Jiangsu PC: 215300 Tel: +86(0)512-57328118 Web: www.essenmall.com



HUAHENG

ROBOTIC WELDING STATION



HUAHENG WELDING · INTELLIGENT MANUFACTURING

Improve Welding Quality | Enhance Productivity | Reduce Production Cost | Ensure Production Safety

HUAHENG Robot Welding Station, launched after 20 years'experience of integration of robotic automatic welding lines, is composed of well-known brands of robots, OTTO ARC welding power sources, welding torch, torch cleaner, and positioners, and is characterized by its high reliability, high working efficiency, high performance-price ratio, simple operation, easy expansibility, and wide applications as well.

Huaheng supplies the advanced automatic welding / cutting machines and a variety of robotic welding production lines to its customers in leading industries of engineering machinery, energy and chemical, shipbuilding, aerospace and astronautics, nuclear power plant in China and overseas since 1995, with its subsidiaries in USA, Malaysia and India, and its products worldwide.

Arc Welding Robot

Brand	Made in	Robot body	Controller	Radius	Axis	Rated Load	Accuracy	Weight	Protection
KUKA	Germany	KR8 R1620	KRC4	1620mm	6	8kg	±0.04mm	165kg	IP54
		KR10 R1420	KRC4	1420mm	6	10kg	±0.04mm	160kg	IP54
FANUC	Japan	M-10iD/8L	R-30iM	2032mm	6	8kg	±0.03mm	180kg	IP54
		M-10iD/12L	R-30iM	1441mm	6	12kg	±0.02mm	145kg	IP54



Welding Power Source

OTTO ARC welding power sources are adopted here with their characteristics of guick reaction, arc stability, high duty-cycle, dependable performance.

• MIG-350DPW / MIG-500DPW



- · The machine including all parts is designed to be of tri-protections and high reliability.
- · With inverter full-bridge topology, and coupling with the digital control system, the whole machine reacts very quick and its arc is stable.
- Elaborately designed pulse welding control function enhances dramatically the successful rate of "One Pulse and One Drop", controls accurately the drop shape and arc energy input, and improves the seam formation, also increases the deposition rate.
- Elaborately designed double pulse energy synergistically controlled, synchronized with the wire speed, pulse current, arc voltage control, and other parameters to control heat input, facilitate the formation of welds, and improve the welding quality.
- Specially designed anti-interference capacity, even suitable for long-lead welding application.
- · All the welding programs can be saved and withdrawn easily, up to 100 sets programs can be stored.
- · The built-in welding parameter library is applicable to a majority of welding materials and wires.

Power Source Parameter	MIG-3	50DPW	MIG-500DPW		
Rated Input Voltage	AC380V±	10%, 3Ф	AC380V±10%, 3Φ		
Input Frequency	50/6	60Hz	50/60Hz		
Input Power	13KW		22KW		
Rated Output Current	15-350A		15-500A		
Rated Output Voltage	14.8-31.5V		14.8-39V		
Temporary Load Rating	270A@100%	350A@60%	390A@100%	500A@60%	
Welding Mode	Unit	fied, Pulse, Double F	Pulse, Constant Pressure		
Protection Grade	IP21S		IP21S		
Overall Dimensions	929×470×840mm		929×470×840mm		
Weight	55Kg		65Kg		

Wire Feeder Parameter	WF-500R
Driving Wheel	4 wheel drive
Wire Feeding Speed	1.5-24m/min
Weight	8Kg
Overall Dimensions	350×200×250mm
Wire Diameter	Ф0.8/1.0/1.2/1.6mm

Welding Torch

• External Air / water-cooled Robot Welding Torch



- Highly reliable and durable
- Compact design, simple structure, and high performance-price ratio.
- The torch neck can be dismantled easily, replaced and maintained quickly
- With automatic water stopping function and no shut-down of water-pump when replacing troch neck.
- High quality sleeves and tubing, tolerable to long-time

Model Parameters	APG35F	APG50F		
Rated current	CO ₂ 350A/60%	CO ₂ 500A/60%		
Duty-Cycle	MAG 350A/60%	MAG 500A/60%		
Cooling Mode	Air Cooled	Water Cooled		
Wire diameter	0.81.6mm			

Anti-Collison Sensor

- The Sensor can provide the proper protection in axes of X, Y, Z and along Z axial rotation.
- · It is smaller in size and lighter in weight, resulting in lighter load on the robotic arm, and increasing robot stability, the moving-speed, and flexibility of its operation. High allowable torsional angle: Max. ≥15° (less than 10° for normal product in the market) Such range of torsional
- angle can reduce the possibility of damages to the system, caused by its mechanical inertia. • High repeat positioning accuracy, which is at least the same or even higher than that of foreign counterparts.

 - · High Reliability comes from the carefully-chosen material and manufacturing process, longer life-time, less failures, dual protection to all the mechanical parts and electrical components.