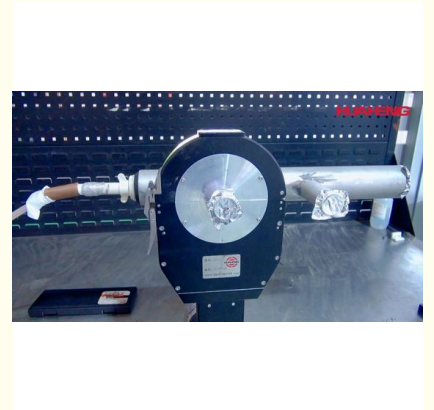




HUAHENG TC-4 Orbital TIG Welding Head For Tube-To-Tube Butt Joints

Basic Information



Product Specification

- Weldable Material: Carbon Steel, Stainless Steel, Titanium Alloy
- Tube OD(mm): $\Phi 38.1 \sim \Phi 101.6$ (3/4"~3")
- Tungsten OD(mm): $\Phi 1.6, \Phi 2.4$
- Rotation Speed(rpm): 0.2~4
- Weight(kg): 6(no Cable)
- Dimension(mm): 497*230*57
- Highlight: **Orbital TIG Welding Head,
TC-4 TIG Welding Head**

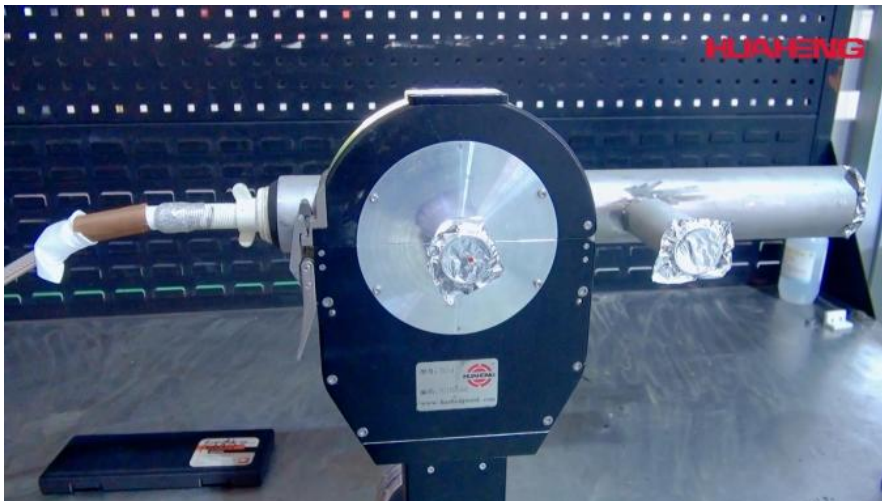
Product Description

Our Product Introduction

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The HUAHENG TC-4 is an orbital TIG (Tungsten Inert Gas) welding head engineered for full 360° tube-to-tube butt welding. It features a self-centering collet chuck that ensures precise alignment ($\pm 0.1\text{mm}$) of thin-walled tubes (OD 38.1–101.6mm), making it ideally suited for high-purity environments such as semiconductor gas delivery systems, pharmaceutical pipelines, and nuclear-grade tubing.



Technical parameter

	TC26	TC36	TC76	TC156	TC-2	TC-3	TC-4
Weldable material	Carbon steel, stainless steel, titanium alloy	Carbon steel, stainless steel, titanium alloy	Carbon steel, stainless steel, titanium alloy	Carbon steel, stainless steel, titanium alloy	Carbon steel, stainless steel, titanium alloy	Carbon steel, stainless steel, titanium alloy	Carbon steel, stainless steel, titanium alloy
Weldable tube diameter(m m)	Φ6 Φ22(1/4" 7/8")	Φ6 Φ32(1/4" 1 1/4")	Φ19.05 Φ63.5(3/4" 2 1/2")	Φ50.8 Φ168.3(2" 65/8")	Φ12.7 Φ50.8(1/2" 3")	Φ19.05 Φ7(3/4" 3")	Φ38.1 Φ101.6(2" 4")

Tungsten OD(mm)	Φ1.0 Φ1.6	Φ1.6 Φ2.4	Φ1.6 Φ2.4	Φ2.4 Φ3.2	Φ1.6 Φ2.4	Φ1.6 Φ2.4	Φ2.4 Φ3.2
Rotation speed(rpm)	0.6 12	0.3 6	0.2 6	0.06 1.2	0.24 4.8	0.2 4	0.095 1.9
Protective gas	Argon	Argon	Argon	Argon	Argon	Argon	Argon
Cooling method	water cooling	water cooling	water cooling	water cooling	water cooling	water cooling	water cooling
Cooling flow(ml/min)	≥300	≥300	≥300	≥300	≥300	≥300	≥300
Rated current	60A duty cycle 60%	65A duty cycle 60%	75A duty cycle 60%	100A duty cycle 60%	75A duty cycle 60%	75A duty cycle 60%	100A duty cycle 60%
Main dimensions(mm)							
A	80	98	145	295	135	160	195
B	40	47	72	150	65	79	97
C	40	41	43	61	38	38	57
D	340	360	412	630	426	453	497
Weight(kg)	2.0(without cable)	2.0(without cable)	3.0(without cable)	10.5(without cable)	2.5(without cable)	3.5(without cable)	6(without cable)
Dimension(mm)	340*80*40	360*120*41	412*165*43	630*330*61	426*155*38	453*177*38	497*230*57

The main part of the welding head is made of aluminum, and the structure is light;

The sealed design is adopted, and the protection effect is more sufficient;

Patented flexible automatic centering fixture, precise positioning;

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

Self fusion welding method;

Equipped with operation buttons on the welding head, the welding head is easy to use and suitable for on-site installation.

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