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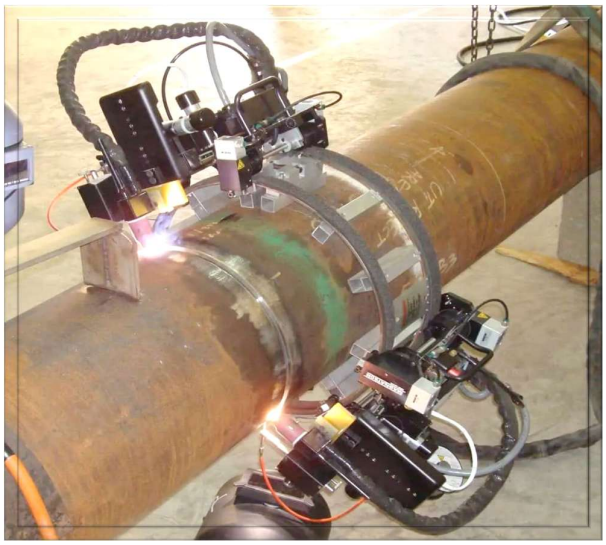
Rail type orbital welding machine Automatic root pass welding



I Features

Convenient import and export of welding parameters Real-time adjustment of welding parameters

Design of integrated touch screen

Single-sided welding on both sides of the bike

High-frequency arc starting function

II Based on CAN bus communication and communication with the welder, the welding parameters can be adjusted in real-time. The I0 direct connection control is adopted with the welding car, effectively avoiding interference from the arc on the control system.

→It has high-frequency arc starting function and arc tracking function, which maximally simplifies the operation of the welder and makes it more intelligent.

→The control box adopts an integrated touch screen design, which makes the operation of the control system interface convenient. Welding technicians can modify the welding parameters on their own to meet the welding construction requirements.

→The handheld box adopts a silicone key concave-convex design, with small size and light weight. The panel buttons are independently functional, making it easy to operate and master.

III parameter

Moving speed: 0-1100mm/min

Feeding Speed: 0-12000mm/min

Welding torch left right range:50mm

Welding torch top and down range: 40mm

Swing frequency: 0-240 ocs/min

Swing model: Flat

Size: 490*273*319 mm Weight: 10kg

Welding wire: 1-1.2 mm

Driving model: rack-and-pinion

Suitable working temperature: -40 to 65 degrees

Suitable pipe size: OD168 and bigger limit

Root face: Less than 3mm

Moisture requirement: less than 90%

Altitude requirement: Less than 4000m

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II, Rail type orbital welding machine FILLING AND CAPPING

1 - Technical standards and applicable environment:

A, Technical standard

Track type automatic pipeline welding machine and supporting logistics equipment (design, manufacture) and their spare parts are in accordance with the latest version of the national standard (GB), industry standards (JB, DL) and other relevant specifications and standards. The standards for product design and manufacturing are as follows:

GB 50231 General Code for Construction and Acceptance of Mechanical Equipment Installation Engineering GB/T 25295 "Electrical Equipment safety design Guidelines"

GB 5226.1 Mechanical and Electrical Safety Mechanical and Electrical Equipment GB 4884 "Marking of insulated Conductors"

GB 15579.1 "Arc welding equipment. Part 1: Arc welding power supply" GB 15579.5 Safety Requirements for Arc Welding Equipment

GB 15579.12 "Arc Welding Equipment Safety Requirements"

GB 28736 "Energy Efficiency Limit Value and Energy Efficiency grade of Arc welding Machine" GB/T 16935.1 "Insulation coordination of equipment in low voltage system"

GB/T 2423.3 "Environmental Test for Electrical and Electronic Products" GB/T 2900.22 "Electrician terms welding machine"

GB/T 13165 "Arc welding machine noise determination method"

GB 50205 Code for Acceptance of Construction Quality of Steel Structure Engineering The latest version of international standards (SI, ANSI, ASME, AWS, API, DIN, ISO) B,Adapt to the working environment

Power supply: 380V,50Hz/60Hz

Altitude: <1000m

Ambient temperature: -5℃-45℃(operating temperature)

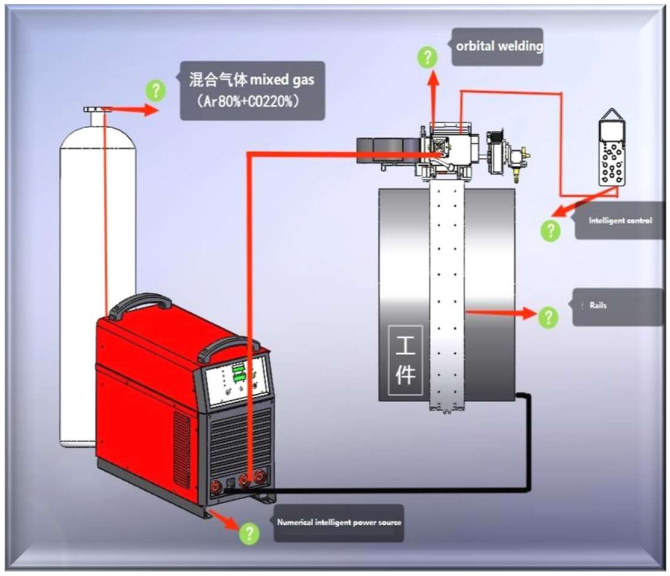
Relative humidity: the maximum daily average relative humidity is 95%; Seismic intensity: not greater than Ⅷ.

Installation location: indoor, seaside, field, etc 2, the overall introduction of equipment A,

2.Overall overview

Device model: **DW-EW-I**

The equipment is designed for the automatic welding of fixed pipe, especially for the field installation of pipe, do a lot of targeted design, such as integrated intelligent integrated power supply, head quick clamping mechanism, cable and pipeline quick joint, optimized cable connection, quick adjustment of welding gun, programmable remote control, easy to understand the operation interface



Track type automatic gas welding connection diagram B, Device application scope and configuration

Applicable pipe diameter: ₵150mm above, can be customized according to Party A's requirements of track size. (Min Diameter DN100)

Groove form: U, V, compound groove. Welding position: 2G, 5G,6G, etc.

Applicable base materials: stainless steel, carbon steel, nickel base, double phase steel, chromium molybdenum steel and other base materials.

Welding technology

Standard gas welding (MAG/MIG)

3. Detailed technical parameters, function description and welding process description of the equipment

A, Welding process:

Automatic cover filling: GMAW, GMAW-P,FCAW, FCAW-GS/GTAW automatic welding features

Provide optimized welding process package, covering: carbon steel, chromium molybdenum steel, stainless steel, nickel base, biphase steel and other base materials

Suitable for a variety of positions: 1G, 2G, 3G, 4G, 5G, 5GX, 6G, 6GX and so on Suitable for up welding, down welding without stop welding requirements.

Suitable for full position welding of solid cored wire, flux-cored wire, powder cored wire and other welding Material

B- Product Features

1. The DW-EW-I single-gun automatic welder uses toothed steel flexible rails as the guiding track, with replaceable tooth blocks. The rails are strong, lightweight, and easy to install and dismantle.
2. The welding car has a compact structure, is lightweight, dustproof, easy to clamp, and has a low overall height, making it suitable for a wider range of working conditions.
3. Welding parameters for all welding points can be preset independently for full-position welding, with automatic execution based on the position of the welding torch during the welding process.
4. A visual touchscreen is used for pre-setting, displaying, modifying, and storing welding parameters, as well as uploading and downloading data.

5.The system has an automatic tracking function for welding seam, with automatic correction and height adjustment.

6.The system components are highly localized, with a modular structure that is easy to maintain, resulting in low user operating costs.

4. Welding robot

Magnetic transmission walking mode with specially designed flexible track
A track covers at least 3 dimensions of track diameter or covers a 200mm diameter range Minimum fitting pipe diameter to 100mm, maximum fitting pipe diameter: 2m or above With Angle sensor, automatic position perception, automatic matching welding parameters Matching arc length tracking function
Adaptable wall thickness: 4mm-70mm Built-in 5kg wire feed tray
The welding gun has many functions, such as up and down height, straight swing, Angle swing adjustment, pitch Angle adjustment and left and right-side deflection adjustment

Key parameter index:

1. Walking Speed: 0-1100 mm/min
2. Wire Feeding Speed: 0-25000mm/min
3. Left-Right Travel of Welding Gun: 0-50mm
4. Up-Down Travel of Welding Gun: 0-40mm
5. Swing Adjustment Angle: ±60°
6. Swing Mode: Straight swing/Angle swing
7. Swing Speed: 0-4000mm/min
8. Dimensions (mm): 440384318
9. Weight: 15.8kg
10. Drive Mode: Gear meshing transmission
11. Adaptation Temperature: -40℃～65℃
12. Adaptation Pipe Diameter: Above ϕ168mm
13. Adaptation Air Humidity: ≤90%
14. Adaptation Altitude: ≤4000m

5. Control programmer, rails and power source

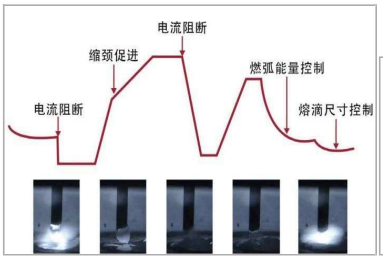
The welder adopts the MEGMEET Artsen Plus series Product Features

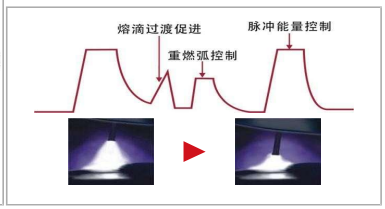
On the basis of the Artsen series welder, we launched the high-end model of Artsen Plus series. The inverter frequency of this series is up to 100KHZ, with low sampling delay and accurate control.

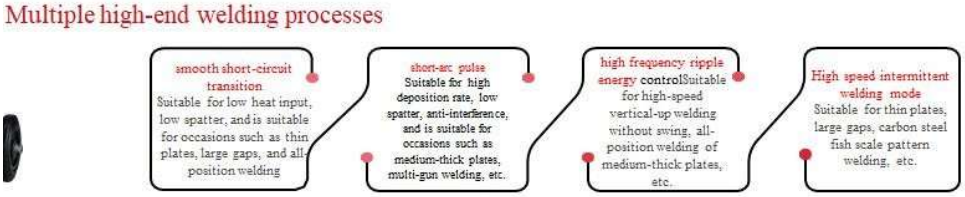
The combination of high-end software and hardware and various welding expert databases can realize high-end welding processes such as ultra-low spatter, short-arc pulse, high-speed intermittent welding and high-frequency energy pulsation. With multiple welding processes, it can realize the hybrid matching and lightning switching of multi-process JOB on demand, so as to efficiently face the flexible and changeable complex welding conditions.

Equipped with a USB interface, ensuring customers enjoy the cutting-edge welding technology of MEGMEET conveniently. Different optional process software can be loaded to meet different welding requirements for different base materials.

Rich types of automatic welding communication interface can be connected with all models quickly.







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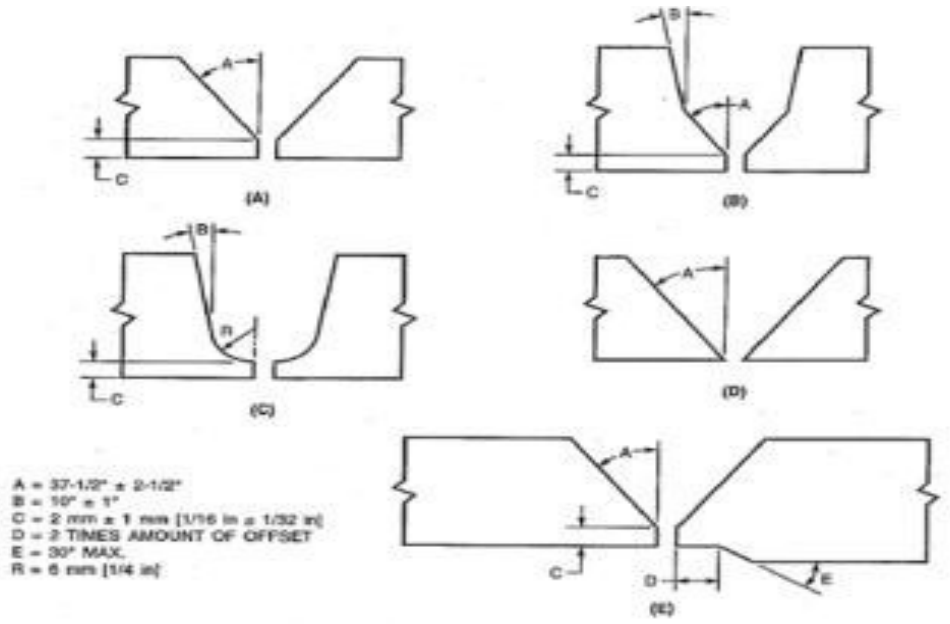

Bevel type

Total on-site application mileage of single-torch automatic welding equipment on-site application in the past three years:

Low temperature (Operating in temperatures ranging from -20°C to -30°C): 125 kilometers Welding in other environmental conditions: 260 kilometers

Major projects:

China-Russia Pipeline Project

West-East Gas Pipeline Line 3 Project West-East Gas Pipeline Line 4 Project

Beijing-Shijiazhuang-Handan Pipeline Project Beijing-Shaanxi Pipeline Project

Jiangsu LNG Pipeline Project Weifang Natural Gas Pipeline Project Yantai LNG Pipeline Project

Guangxi Pipeline Project

China-Russia Eastern Line (Heihe-Changling), Liaoyang Oil Construction Lead Unit (1422)

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China-Russia Eastern Line (Changling-Tangshan), Liaoyang Oil Construction Lead Unit (1219)

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Site Pictures

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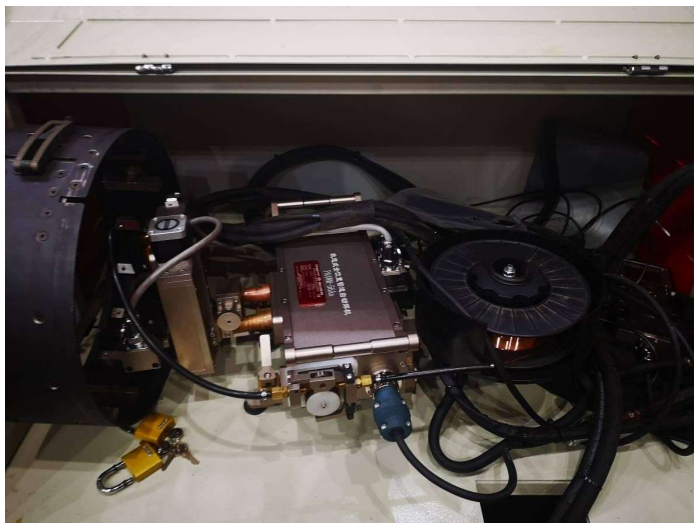

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