THCD-6 跨骑式圆弧角焊小车

THCD-6 straddle type arc fillet welding carriage

产品规格书

Product specification

一、概要及特点：

I. Summary and features:

1、概要：

1. Summary:

1.1、THCD-6 跨骑式角焊机采用两侧行走滚轮夹持，凸轮锁紧将小车跨骑夹持安装在焊接筋板上。采用无刷电机驱动、齿轮和链条传动的方式进行二轮驱动行走。整机结构小巧、轻便、稳定，特别适用于船舶分段的检修舱门、法兰密封边、围拦及T排宽度、窄小空间和钢结构同似结构件，可仿形跟踪焊缝完成焊接。

1.1、THCD-6 straddle-type corner welder is clamped by walking rollers on both sides, and the trolley is clamped and installed on the welding rib plate by cam locking. Brushless motor drive, gear and chain drive are adopted for two-wheel drive walking. The whole machine is compact, light and stable in structure, especially suitable for the maintenance hatch, flange sealing edge, fence and similar structural parts with T-row width, narrow space and steel structure in sections of ships, and can trace the welding seam to complete welding.

1.2、采用蓄电池供电，特别适用于野外及不便于提供小车电源的焊接场合，杜绝现场电缆破损产生安全隐患。小车运行稳定可靠，即便是无专业技术的操作人员也能获得良好的焊接效果。

1.2、The battery is used for power supply, which is especially suitable for outdoor and welding occasions where it is inconvenient to provide trolley power supply, so as to

prevent potential safety hazards caused by cable damage on site. The trolley runs stably and reliably, and even operators without professional skills can get good welding results.

特点：

Features:

2.1）、采用 DC24V 锂电池供电，免除了车体高压电源供电工作，提高了小车安全性能；

2.1) The DC24V lithium battery is used for power supply, which eliminates the high-voltage power supply of the car body and improves the safety performance of the car;

2.2）、筋板上跨骑式安装行走，车体上安装离合装置，可人工快速移动车体。体积小，重心低，便于携带；

2.2) The ribbed plate is mounted and walked in a straddle type, and the clutch device is mounted on the car body, so that the car body can be moved manually and quickly. Small size,Low center of gravity, easy to carry;

2.3）、弹性仿形压紧壁侧行走，可根据壁厚和运行平稳性调整压紧力，满足非导磁材料的焊接；

2.3) The elastic profiling presses the wall side to walk, and the pressing force can be adjusted according to the wall thickness and running stability to meet the welding requirements of non-magnetic materials;

2.4）、适用范围广，满足厚度 5-50mm，高度 50mm-300mm 筋板夹持，行走最小内圆弧 R≥350mm,最小外圆弧 R≧170mm；

2.4), wide application range, meet the thickness of 5-50mm, height of 50-300 mm steel plate clamping, walking minimum inner arc.R≥350mm, minimum outer arc R ≧ 170mm;

2.5）、行走电机采用无刷电机驱动，寿命为有刷电机的 3-5 倍；

2.5) Walking motor is driven by brushless motor, and its service life is 3-5 times of that of brushed motor;

2.6）、行走速度采用数码显示结合速度反馈技术，速度控制精度高；

2.6) Digital display combined with speed feedback technology is adopted for walking speed, which has high speed control accuracy;

2.7）、减少劳动强度，改善作业环境；提高工作效率，是手工焊的 2 倍以上；

2.7), reduce labor intensity and improve the working environment; Improve work efficiency, which is more than 2 times that of manual welding;

2.8）、能有效避免人为因素所造成的焊缝质量不良，一般的手工操作的不良率在 20%左右，而采用自动焊接小车没有产生焊接不良率，因此其综合效益，比手工焊提高近 200%；

2.8) It can effectively avoid the poor weld quality caused by human factors, and the defective rate of general manual operation is about 20%.

Right, and the use of automatic welding trolley does not produce welding defect rate, so its comprehensive benefit is nearly 200% higher than that of manual welding;

二、适用范围：

II. Scope of application:

2.1、用途广泛，适用于工件厚度 5-40mm，高度 50mm-300mm，船舶、桥梁、机车、钢结构、石油化工等行业加强筋板角焊作业，筋板夹持行走最小内圆弧 R≥350mm,最小外圆弧 R≧170mm。

2.1, widely used, suitable for the workpiece thickness of 5-40mm, height of 50mm-300mm, ships, bridges, locomotives,Steel structure, petrochemical industry, etc. strengthen the fillet welding of stiffener, and the minimum inner arc r of stiffener clamping and walking is ≥ 350mm.The minimum outer arc R≧170mm.

2.2、可满足钢板和双相不锈钢材料等非导磁材料的的角焊接作业。

2.2. It can meet the fillet welding of non-magnetic materials such as steel plate and duplex stainless steel.

2.3 适用焊材： 适用于Φ1.6mm 及以下普通焊丝及药芯焊丝。

2.3 Applicable welding materials: applicable to common welding wires and flux-cored wires with φ Φ1.6mm or less.

三、规格及技术参数：

III. Specifications and technical parameters:

序号	项 目	参 数 内 容
1	适用工件	铁质工件、角焊缝、对接焊缝
2	行走方式	跟踪式-导轮仿形
3	垂直行走速度	65 — 930 (cm/min)
4	筋板高度	50-300mm
5	满足圆弧外径	R≧170mm
6	满足圆弧内径	R≥350mm
7	焊枪　横向	40mm

	调节范围	垂直	40mm
		焊枪绕 X 轴转动	±45°
		焊枪绕 Y 轴转动	±30°
8	输入电源		24V-3AH 锂电池
			一次充电工作时间不低于 10 小时
9	小车尺寸		长×宽×高：200×395×242
10	小车重量		9kg

serial number	**Item**		**Parameter internal capacity**
1	Applicable workpiece		Iron workpiece, fillet weld, butt weld
2	Walking mode		Tracking-guide wheel profiling
3	Vertical walking speed		65 — 930 (cm/min)
4	Reinforcement height		50-300mm
5	Meet the arc outside diameter.		R≧170mm
6	Meet the inner diameter of arc.		R≥350mm
7	welding gun regulate range	crosswise	40mm
		be on the perpendicular	40mm
		Rotate around x axis of welding gun.	±45°
		The welding gun rotates around the Y axis.	±30°
8	Input power supply		24V-3AH lithium battery
			The working time of one charge shall not

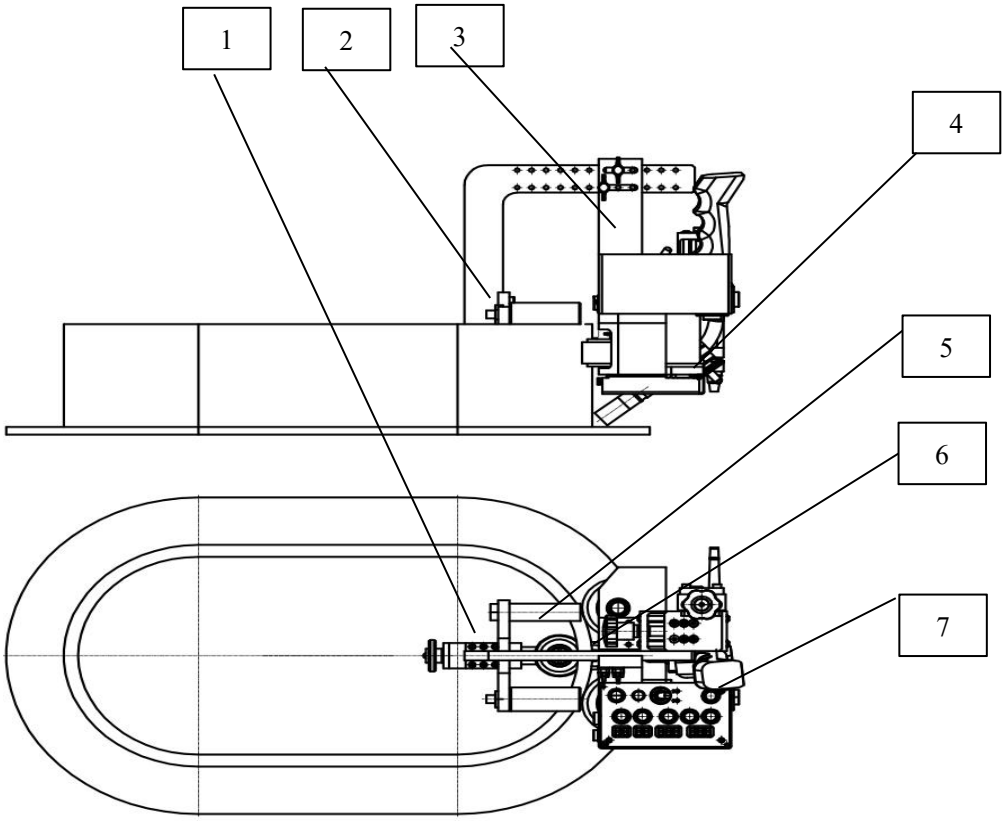
		be less than 10 hours.
9	Trolley size	Length× width× height: 200×395×242
10	Weight	9kg

四、产品的主要部件：

IV. Main components of the product:

1、THCD-6 跨骑式角焊机示意图（图片仅供参考，以产品实物为准）

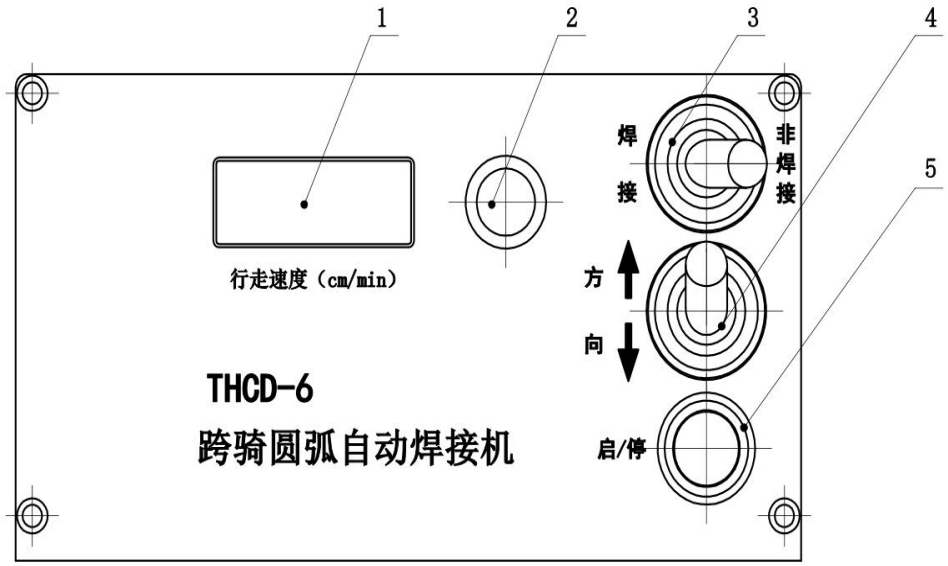
1、Schematic diagram of THCD-6 straddle angle welder (the picture is for reference only, and the product in kind shall prevail)



编号	名 称	功 能
1	调节机构	将两侧滚轮夹持，导轮仿形行走
2	高度调节机构	满足一定圆及圆弧工件高度调节
3	车体部件	小车主体、及行走装置。
4	焊枪夹持部件	用于夹持焊枪及仿形焊枪对中
5	导轮组件	用于连接车体与轨道组件，起导向作用
6	位置调节机构	用于调节焊枪的工作位置
7	控制盒	用于小车的电气操作，具体操作内容见 4.1 条 控制盒

number	Naming	Gongneng
one	Adjusting mechanism	Clamp the rollers on both sides, and the guide wheel will follow the contour.
Two	Height adjusting mechanism	Meet the height adjustment of certain circle and arc workpiece.
three	Car body parts	The main body of the trolley and the traveling device.
four	Welding gun clamping part	Used for centering clamping welding gun and copying welding gun.
five	Guide wheel assembly	Used to connect the car body with the track assembly and play a guiding role.
six	Position adjusting mechanism	Used to adjust the working position of welding gun.
seven	control box	Used for the electric operation of the trolley. See Article 4.1 Control Box for specific operation contents.

四、控制面板操作说明：



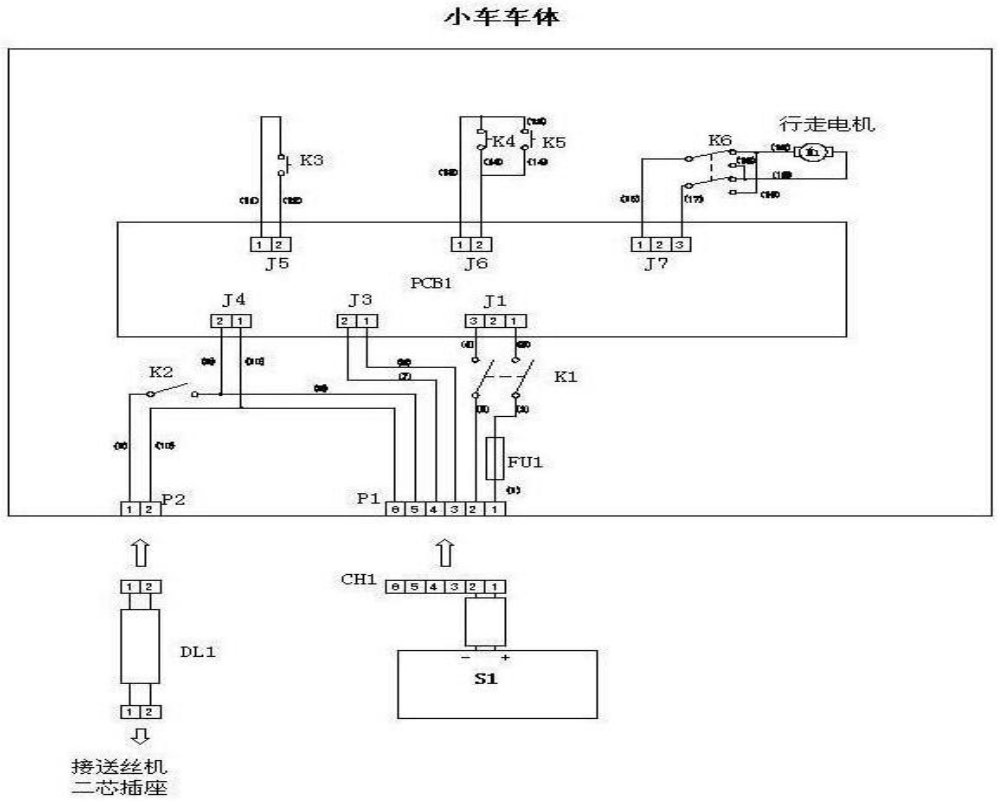
编号	名 称	功能
1	行走速度 显示数码管	显示格式为 XX.X，用于实际显示行走速度大小。
2	行走速度 调节电位器	旋转电位器旋轴以调节行走速度数值大小，顺时针旋转数值增加，逆时针旋转数值减小。
3	焊接/非焊接控制开关	用于控制焊接状态，将开关拨到“焊接”，则焊接与小车同步，启动小车时焊接电源同步动作（起弧延时时间仍然有效，同时需小车焊枪端口与电源送丝机正确连接）。
4	行走方向控制开关	用于切换小车的行走方向，开关推至左行小车则向左方行走，同理开关推至右行小车则向右方行走。
5	启停开关	用于切换小车的启停状态，每按动一次开关，则小车在启停状态间切换一次。

number	Naming	function
one	Walking speed Display nixie tube	The format is XX.X, which is used to actually display the walking speed.
Two	Walking speed Adjusting potentiometer	Rotate the potentiometer shaft to adjust the walking speed. The clockwise rotation increases and the counterclockwise rotation decreases.
three	Welding/non-welding control switch	It is used to control the welding state. When the switch is set to "Welding", the welding will be synchronized with the trolley, and the welding power supply will act synchronously when the trolley is started (the arc starting delay time is still valid, and the welding gun port of the trolley needs to be correctly connected with the power feeder).
four	Travel direction control switch	Used to switch the walking direction of the trolley. When the switch is pushed to the left, the trolley will walk to the left, and when the switch is pushed to the right, the trolley will walk to the right.
five	Start-stop switch	Used to switch the start-stop state of the car. Every time the switch is pressed, the car switches between the start-stop states.

五、自动焊接机电气原理图

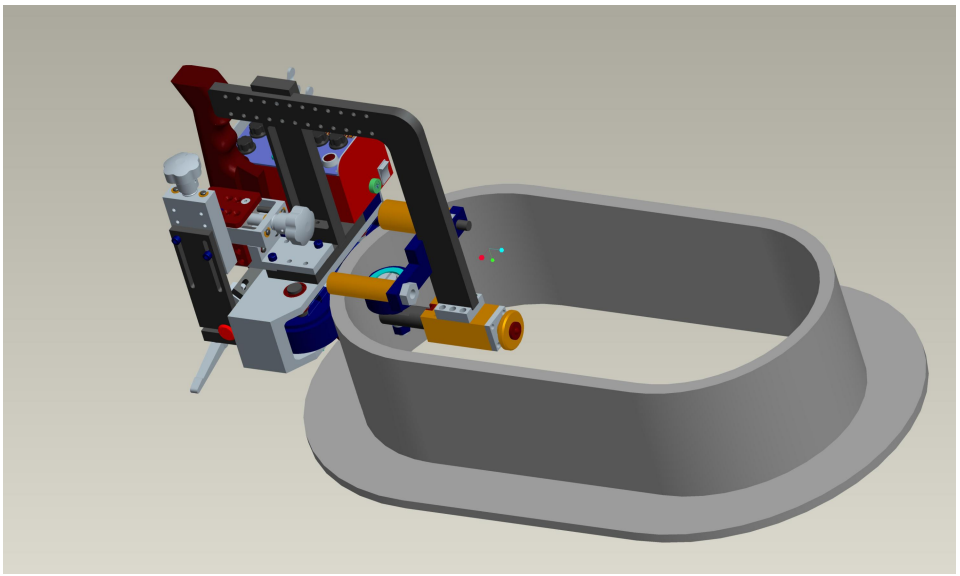
Operating instructions of control panel:

V. Electrical schematic diagram of automatic welding machine



六、产品照片

VI. Product photos



七、焊接工件附图：

VII. Welding workpieces Attached Figure: