**伊朗DK工厂钢结构及公用动力方案**

**The plan of steel structure and utility power of DK Factory in Iran**

**制造技术中心**

**Manufacturing technique center**

目录

Catalogue

第一部分：方案简介

First part: Introduction of plan

第二部分：钢结构方案

Second part: Plan of steel structure

第三部分：公用动力方案

Third part: Plan of utility power

1. 方案简介

One. Introduction of plan

* **项目来源**：根据董总批示的《关于E系列夹具改造的报告》和尹泰和总签批的《广州基地焊装线转移方案》，焊装线所需的钢结构和公用动力部分，需要伊朗当地完成；
* The part of steel structure and utility power required by the welding assembly line needs to be finished in the local place in Iran according to the Report on E-series Jig Modification approved by Director Dong and the Transfer Scheme of welding assembly line of Guangzhou Base approved by Director Yin Taihe;
* **方案构成**：本方案主要包括钢结构部分和公用动力部分；
* Composition of plan: this plan is mainly including the part of steel structure and the part of utility power;

|  |  |  |  |
| --- | --- | --- | --- |
| 序号  Serial No. | 分类  Classification | 主要内容及用途  Main content and purpose | 备注  Note |
| 1 | 钢结构  Steel structure | 焊机、焊钳悬挂钢结构、水电气支撑钢结构、电葫芦轨道  Suspension steel structure of welder and welding pliers, supporting steeling structure of electricity, water and gas, track of electric hoist |  |
| 2 | 焊机、焊钳滑移轨道及附件  Welder, sliding track and attachments of welding pliers |  |
| 3 | 公用动力  Utility power | 冷却循环水管路及阀门（焊机、焊钳用）  Cooling circulating pipeline and valves (used by welder and welding pliers) |  |
| 4 | 压缩空气管路及阀门（焊机、焊钳、夹具、气动工具等用）  Compressed air pipeline and valves (used by welder, welding pliers, jig and pneumatic tool) |  |
| 5 | 插接箱、配电柜及电缆、调整线灯廊、工艺照明及工位壁扇  Plug-in unit, distribution box and cable, light corridor of adjusting line, process lighting and wall fan of working position |  |

1. 钢结构方案

Two. Plan of steel structure

钢结构主要包括立柱、顶梁、横梁、焊机焊钳轨道、电葫芦轨道及滑移系统

The steel structure is mainly including column, roof beam, cross beam, track of welder and welding pliers , track of electric hoist and sliding system

焊机焊钳轨道

（18工字钢）

Track of welder and welding pliers

(18 I-beam)

电葫芦轨道

（18工字钢）

Track of electric hoist

(18 I-beam)

顶梁（200H型钢）

Roof beam (200 H-shape steel)

横梁（200H型钢）

Cross beam (200 H-shape steel)

滑轨滑车

Sliding-rail pulley

（Ω轨道）

(Ω track )

立柱（200H型钢）

Column(200 H-shape steel)

1. **平面图：**

**1. Plane graph.**

俯视图

Vertical view

左视图

Left view

立柱

Column

横梁

Transverse beam

焊机梁

Beam of welder

焊钳梁

Beam of welding pliers

电葫芦轨道

Track of electric hoist

滑移纵轨

Sliding longitudinal rail

滑移横轨

Sliding cross rail

1. **材料用量表：**

**2. Table of material consumption:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **序号**  **Serial No.** | **材料种类**  **Type of Material** | **规格**  **Dimension** | **数量**  **Number** | **备注**  **Note** |
| 1 | H型钢  H-shape steel |  |  | 立柱、顶梁、横梁  Column, roof beam, cross beam |
| 2 | 工字钢  I-beam |  |  | 焊机焊钳梁、电葫芦轨道  Beam of welder and welding pliers, track of electric hoist |
| 3 | 连接配件  Connecting accessories |  |  | 底座、斜撑、加强板、标准件等  Base, diagonal bracing, enhanced plate, standard parts, etc. |
| 4 | 骨架、护网等  Skeleton, protection net, etc. |  |  | 骨架、护网、栏杆、爬梯等  Skeleton, protection net, railing, ladder stand, etc. |
| 5 | Ω轨道  Ω track |  |  | 焊机、焊钳滑移轨道  Welder, gliding track of welding pliers |
| 6 | 滑车  Pulley |  | 92 个  92 pieces | 纵轨滑车52，横轨滑车40  Longitudinal-rail pulley 52, transverse-rail pulley 40 |

1. 公用动力方案

Three. Plan of utility power

1. **冷却循环水**

1. Cooling circulating water

焊钳用冷却循环水，做到焊机附近，做好阀门(DN20)，共计14组；

Welding-pliers-used cooling circulating water, well placed near the welder, well finish the valves(DN20), 14 units total;

压缩空气管及阀门

Compressed air pipe and valve

回水管及阀门

Return pipe and valve

进水管及阀门

Water inlet pipe and valve

放大

Enlarge

1. **压缩空气**

2. Compressed air

焊钳用压缩空气与冷却循环水管并列安装，做好阀门（DN15），共计24组；

Welding-pliers-used compressed air pipes are installed with cooling circulating water pipes side by side, well finish valves(DN15), 24 units total;

夹具用压缩空气管沿地面铺设到夹具附近，做好阀门（DN15） ，共计5组。

Jig-used compressed air pipes are laid near the jig along the ground, well finish the valves(DN15), 5 units total.

夹具用气源管

Jig-used air source tube

夹具用气源阀门

Jig-used air source valve

1. **压缩空气**

**2. Compressed air**

气动工具用压缩空气，做到调整线边，做好阀门（DN15）及伸缩气管，共计20组；

Pneumatic-tool-used compressed air, well adjust the line side,well finish valves(DN15) and elastic air tube, 20 units total;

气动工具气源

Air source of pneumatic tool

伸缩气管

Flexible air tube

1. **动力电源**

3. Utility power

焊机用电源，在焊机上方附近做好插接箱（315A），共计14个；

Welder-used power, the plug-in unit(315A) are well placed on the top of welder, 14 pieces total;

插接箱

Plug-in unit

插接箱到焊机的柔性电缆由焊机供应商提供

The flexible cable from plug-in unit to welder is provided by the supplier

1. **动力电源**

**3. Utility power**

电葫芦、二保焊等其他用电设备，做到线边配电箱或插座。

The other power consumption equipment such as electric hoist and two-welding machine is equipped with distribution box and socket for its line side.

配电箱

Distribution box

插座

Socket

1. **工艺照明**

**4. Process lighting**

调整线灯廊（60m）和焊接工位照明（18m）及工位壁扇；

Light corridor of adjusting line(60 m), lighting of welding position((18m) and wall fan of workplace;

其中，调整线照度500LUX，焊接工位照度200LUX。

Therein, the Illuminance of adjusting line is 500LUX, and the illuminance of the welding position is 200 LUX.

照明灯

Lighting lamp

灯廊立柱

Column of light corridor