

智能·高端·定制

TRINTFAR 骏腾发

IBC Cage Frame Production Line Machine

Shanghai Trintfar Intelligent equipment Co.,Ltd

IBC Cage Frame Information

Frame Tube Material : DX51D galvanized steel tube

Specification of frame tube : Diameter : 18mm Wall thickness : 1mm

Frame overall size (L*W*H) : 1200x1000x1145mm (Error ± 10 GBT21589-2008)

Base Frame Tube Material : DX51D galvanized steel tube

Specification of base frame tube : Diameter : 22mm Wall thickness : 1.5mm

网片应用 (IBC吨桶)
Wire Mesh Application (IBC Tank Frame)



◆ Frame Processing Machine ◆

➤ First Step: Frame Welding



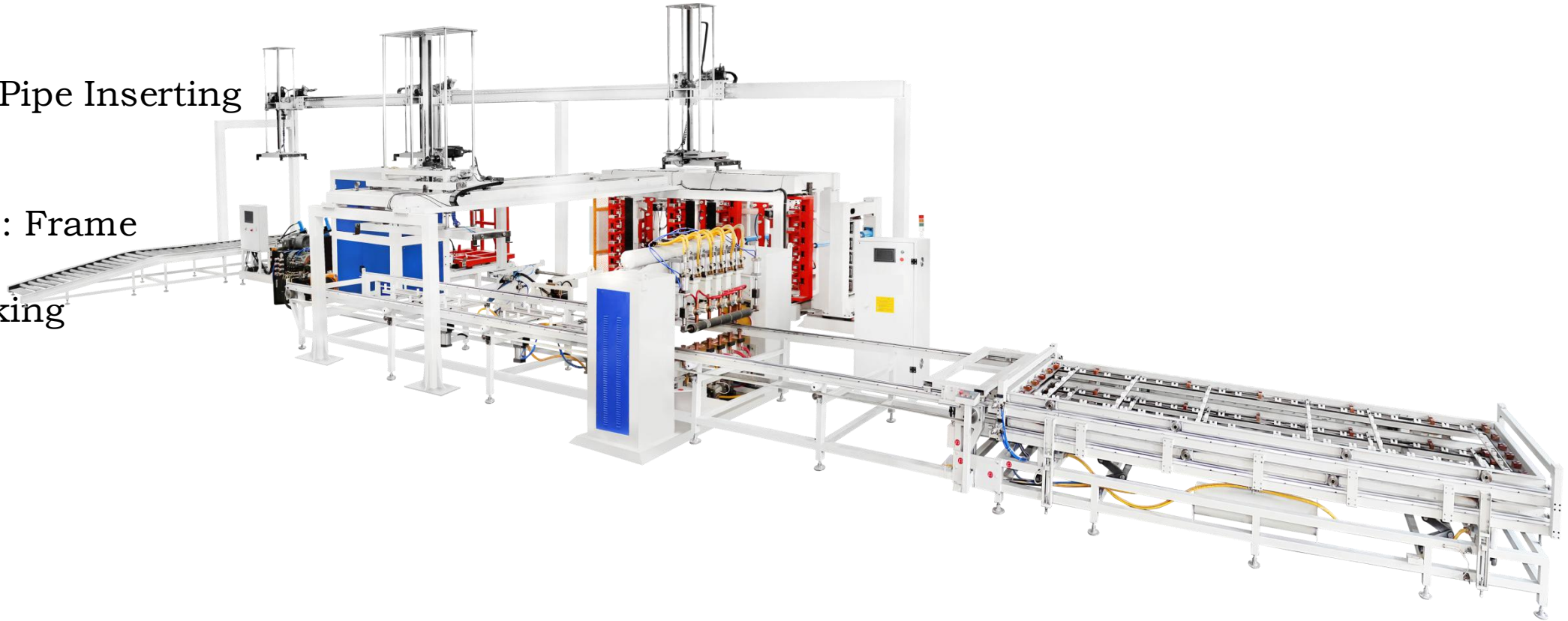
IBC吨桶框架网片龙门式自动焊接专机
IBC Tank Frame Automatic Welding Machine



➤ Second Step: Frame Bending

➤ Third Step: Pipe Inserting and Locking

➤ Fourth Step: Frame Punching And Hole Making



◆ Base Processing Machine ◆

➤ First Step: Base Pipe Bending Machine

➤ Second Step: Base Welding



Base Pipe Bending Machine



Base Pipe Welding Machine





- ◆ Welding Efficiency: 45sec/pc
- ◆ Welding Source: 6 sets MF DC Power Source
- ◆ Feeder Platform Option: Single Layer or Double Layer
- ◆ Unloading System Option: Manual Unloading or Automatic Mechanical Arm Unloading

Features:

- This machine is designed as reinforced gantry structure with the advantage of high rigidity and stable running.
- The welding power is designed with medium frequency inverter power supply system with the features of electricity and energy saving.
- The machine is equipped with 6 sets of welding head and 6 sets of power supply systems. The welding current of each single point could be adjusted independently in order to ensure the reliability of welding spot.
- For the sake of increasing the output efficiency, it is designed as double-layer feeder for cycle running. When one feeder is under welding process, another feeder could be loaded with material.
- Automatic stepping welding. Servo motor will drive the stepping belt to ensure the accuracy of stepping position.
- Automatic demolding device: after welding the product, the demolding cylinder will jet up for preparation of automatic unloading.
- Automatic unloading device will grab the product via servo motor control. It will move down to grab the welded product and moving to the setting position via servo motor. It helps to reduce labor force and lower labor intensity. It is designed as 90° rotation of unloading feeder for the convenience of transportation of welded product.

◆ Frame Welding Machine ◆

MF DC Power System:

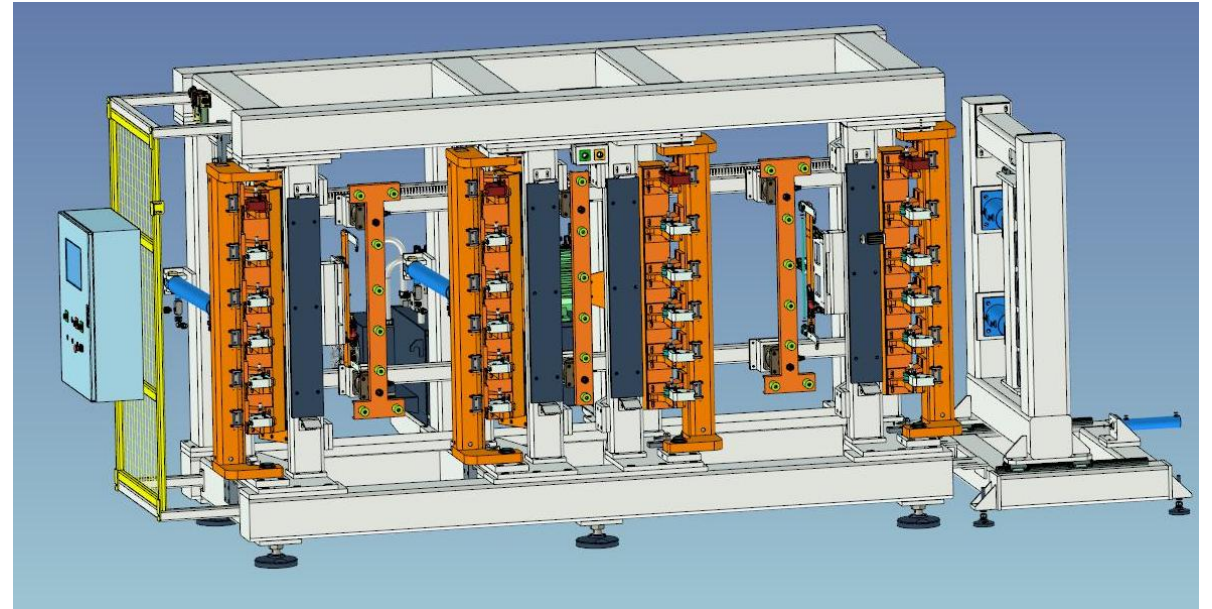
Items	Data
Rated Capacity	160KVAx6
Duty Cycle Rate	50%
Frequency	1000HZ
Control Heat Adjusting Range	15%~99%
Max. Output Voltage	DC11V
Max. Short Circuit Current	32-41KA
Program Section Time Adjusting Range	0~999ms
Insulation Grade	F

Machine Parameters:

Items	Data
Electricity Requirement	Three-phase Four Wires 380V ± 10%
Electricity Requirement	400KVA, air switch 600A
Control Method	PLC
Effective Welding Width	1200mm
Effective Welding Length	4000mm
Automatic Moving Speed	200-500mm/s Adjustable
Machine Size	3500x165000mm
Rated Air Pressure	0.6MPa
Cooling Water Temperature	15-25°C
Required Operator Number	2 people

Features:

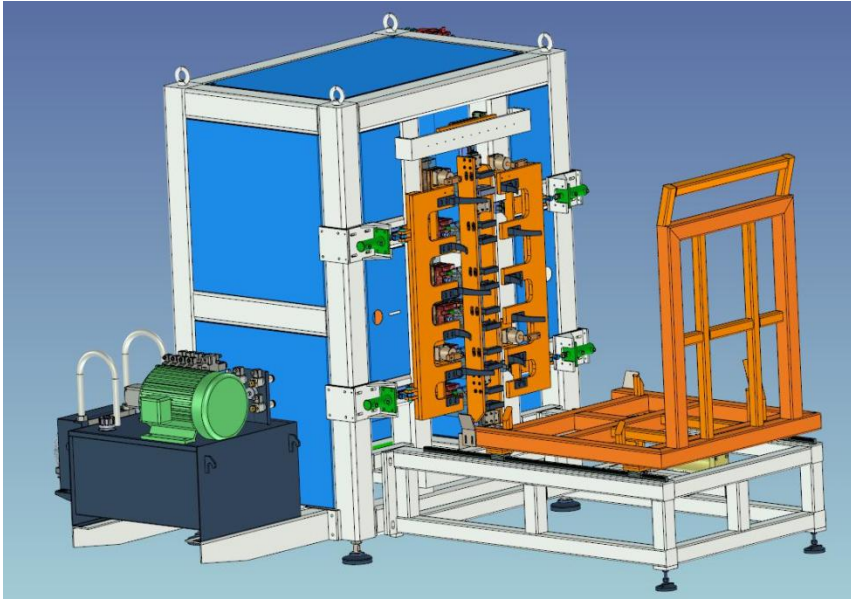
- 1. The equipment frame is processed as a whole to ensure high bending precision, stable operation and high efficiency. Every 15-20s can bend a frame.
- 2. Adopt special bending balance system to ensure diagonal dimension of frame.
- 3. The machine is controlled by human-machine interface +PLC programming control mode, with high degree of automation.
- 4. Manipulator can be configured to automatically load and unload materials to reduce personnel configuration.
- 5. Simply change the mold block, you can meet the needs of bending different pipes, and the mold is easy to change.
- 6. Servo hydraulic, with fast response, low inertia, high precision.
- 7. High degree of modularization of each part of the equipment, which can be configured to improve the degree of automation according to customer requirements.



Technical Parameters:

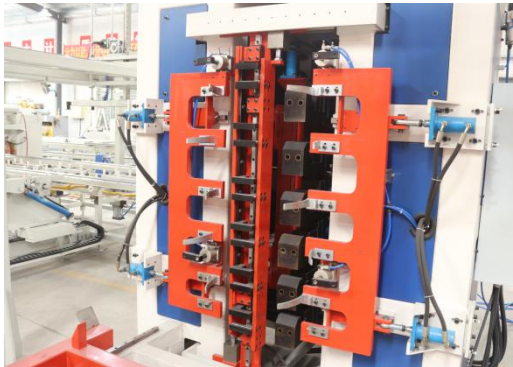
Items	Data
Bending Method	Four columns bending at the same time
Bending Size	1200+1000mm (tolerance ± 5 mm)
Loading Method	Manual or Automatic
Bending Efficiency	15-20 sec
Bending Force	Hydraulic
Required Operator Number	Manual: 1 people Automatic: 0

◆ Frame Locking Machine◆



Features:

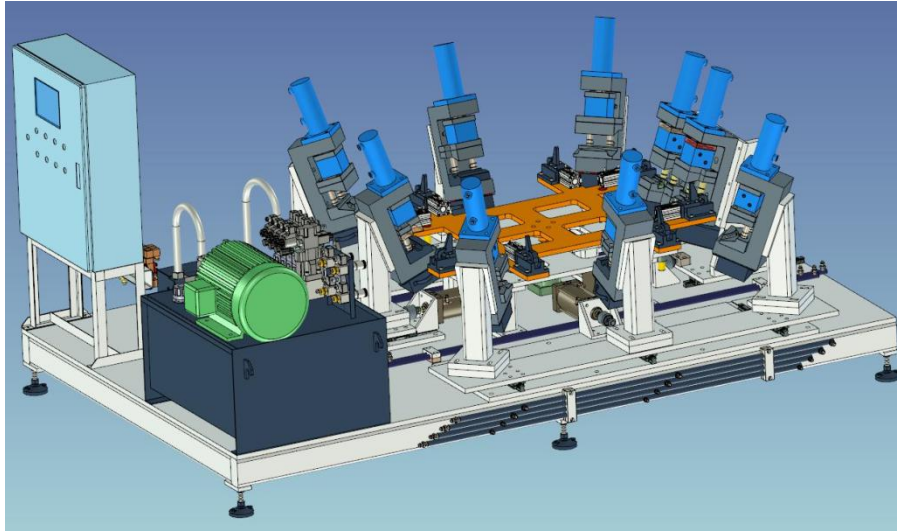
1. The machine frame is processed as a whole, with high insertion precision, large fastness to locking, stable and efficient operation.
2. The machine is controlled by human-machine interface +PLC programming control mode, with high degree of automation.
3. Manipulator can be configured to automatically load and unload materials to reduce personnel configuration.
4. Only by changing the mold block, the requirements of different locking pipes can be met, and the mold can be replaced easily.
5. The servo hydraulic system has the characteristics of fast response, small inertia and high precision.
6. High degree of modularization of each part of the equipment, which can be configured to improve the degree of automation according to customer requirements.



Technical Parameters:

Items	Data
Max. Working Height	1200mm
Loading Method	Manual: manual inserting and manual loading Automatic: automatic inserting and loading
Lock shape	The outside is round and the inside is backtoothed (customized)
Bending Efficiency	20 sec
Bending Force	Hydraulic+Pneumatic
Required Operator Number	Manual: 1 people Automatic: 0

◆ Punching and Hole Making Machine◆



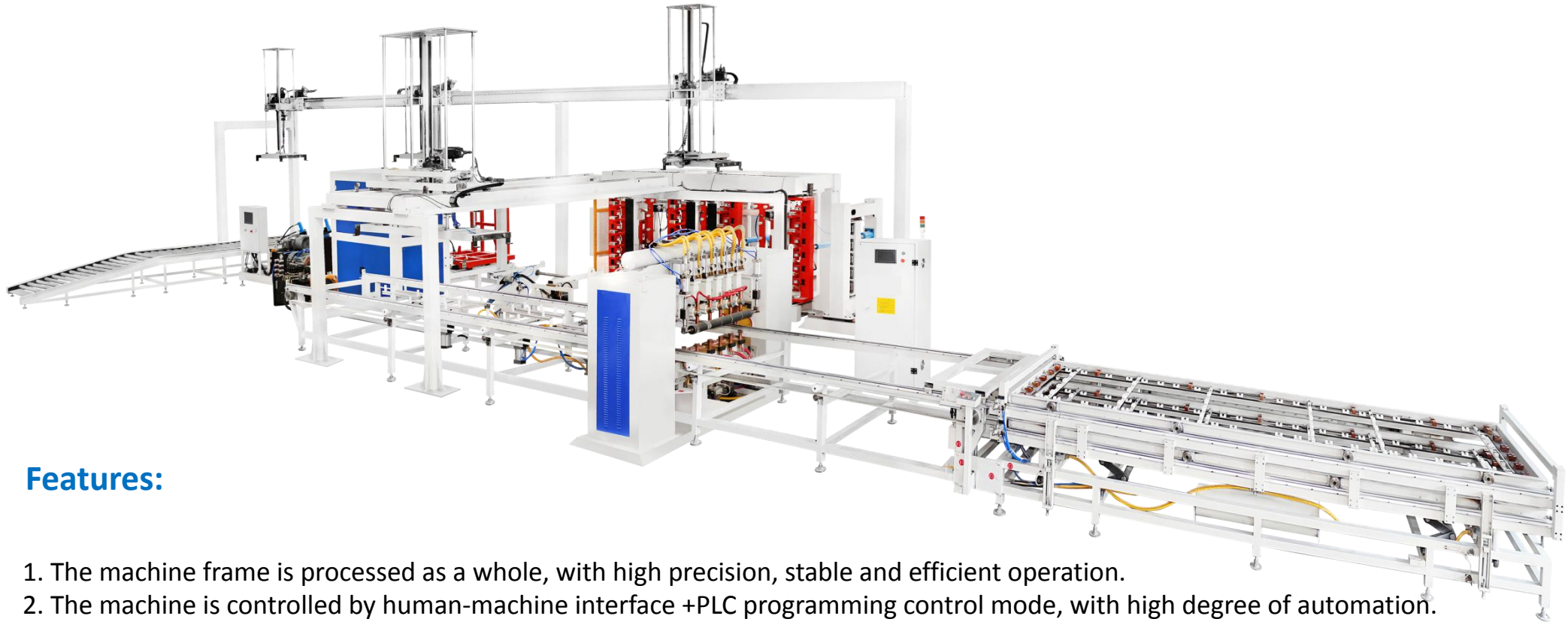
Features:

1. The machine frame is processed as a whole, with high precision, stable and efficient operation.
2. The machine is controlled by human-machine interface +PLC programming control mode, with high degree of automation.
3. Manipulator can be configured to automatically load and unload materials to reduce personnel configuration.
4. Simply change the mold block, you can meet the needs of different pipes for punching, and the mold is easy to change.
5. The servo hydraulic system has the characteristics of fast response, small inertia and high precision.
6. High degree of modularization of each part of the equipment, which can be configured to improve the degree of automation according to customer requirements.



Technical Parameters:

Items	Data
Max. Working Size	1200x1000mm (tolerance ± 5 mm)
Loading Method	Manual/Automatic
Punching Shape	Customized
Punching Efficiency	15-25 sec
Punching Force	Hydraulic+Pneumatic
Required Operator Number	Manual: 1 people Automatic: 0



Features:

1. The machine frame is processed as a whole, with high precision, stable and efficient operation.
2. The machine is controlled by human-machine interface +PLC programming control mode, with high degree of automation.
3. The whole automatic production line can complete the bending, locking and punching of the frame in 40 seconds.
4. The whole automatic production line can be operated by only one worker.
5. Simply change the mold block, you can meet the needs of different pipes for punching, and the mold is easy to change.
6. Servo hydraulic, with fast response, low inertia, high precision.
7. High degree of modularization of each part of the equipment, which can be configured to improve the degree of automation according to customer requirements.

Features:

The design adopts horizontal structure and 7 welding heads for completing the welding of base frame. The operator only need to load and unload the product. The machine will do the welding automatically. It adopts 3 sets of MF DC 160KVA power. The machine helps to increase product quality and production rate, lower the production cost. Solve the problem of unstable welding quality caused by manual work. Higher production rate and automation level.



◆ Frame Base Welding Machine ◆

MF DC Power System:

Items	Data
Rated Capacity	160KVA
Duty Cycle Rate	50%
Frequency	1000HZ
Control Heat Adjusting Range	15%~99%
Max. Output Voltage	DC11V
Max. Short Circuit Current	32-41KA
Program Section Time Adjusting Range	0~999ms
Insulation Grade	F

Machine Parameters:

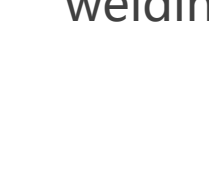
Items	Data
Electricity Requirement	Three-phase Four Wires 380V ± 10%
Electricity Requirement	Main Cable 90mm ² /300A
Effective Welding Width	1200mm
Effective Welding Length	1000mm
Machine Size	2500mmx2500mm
Rated Air Pressure	0.6MPa
Water Pressure	0.1Mpa
Cooling Water Temperature	15-25°C
Required Operator Number	1 people

MF DC Control System Introduction

- ◆ MF Inverter Spot Welder is advanced welding equipment. The three-phase power supply, through rectified by a special inverter, is converted into 1000Hz AC voltage and then is transmitted to a medium frequency transformer. The current is rectified in order to supply DC welding current. The advantage is that it helps to greatly reduce the energy of iron core material, as the frequency of welding transformer is promoted from 50/60Hz of mains supply to 1000Hz. Besides, the commutation diode of subloop of transformer could transform the electric energy into DC power which is used to provide power for welding. Under such circumstance, the inductance coefficient of subloop could be improved dramatically and the production cost could be minimized because the inductance coefficient is an important factor that results in energy loss but could almost be ignored in DC welding circuit.

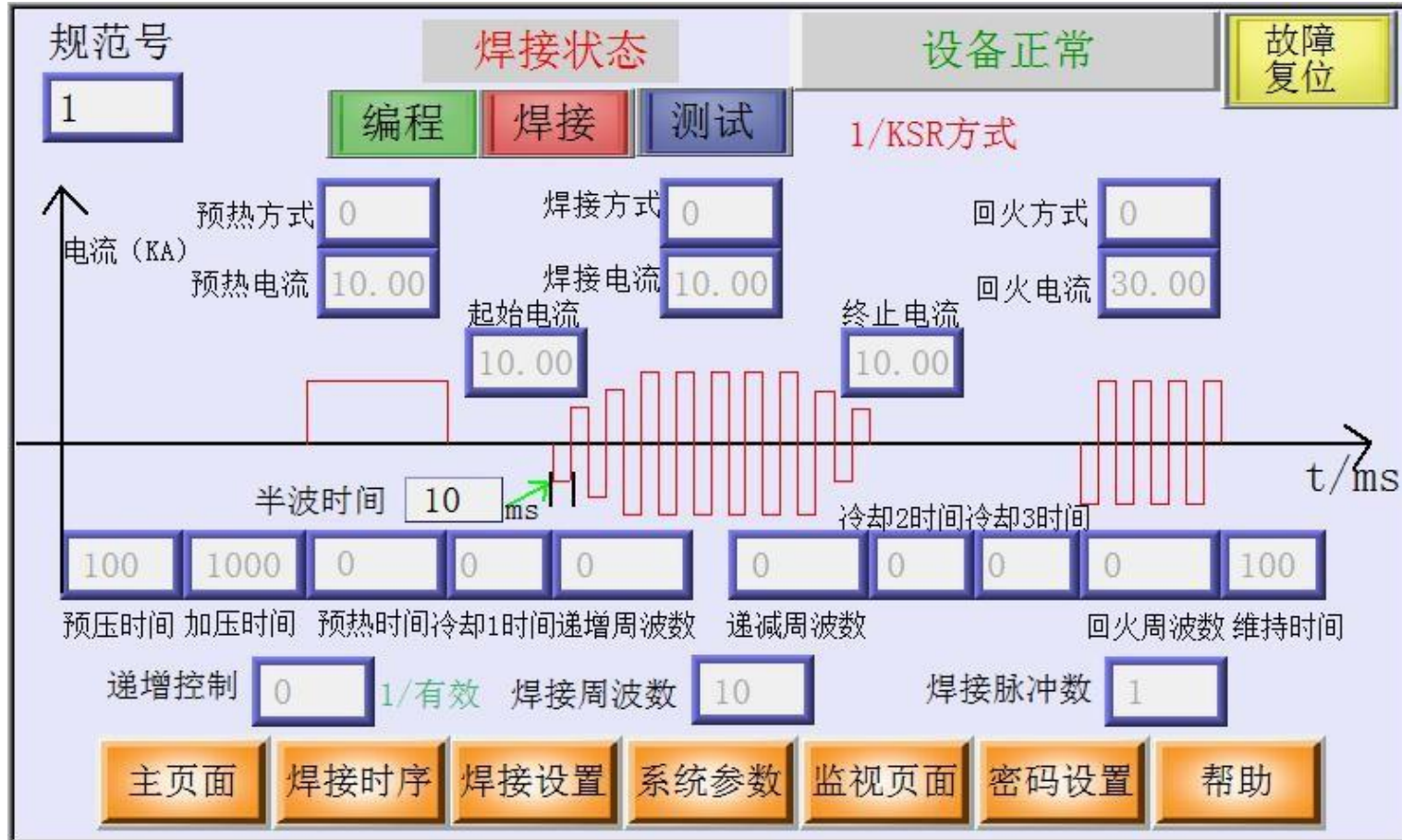
- ☆ **Free Technical Consulting**
- ☆ **Free Welding Test**
- ☆ **Systematic Technical Training**

We only do one thing in past 20+ years.



MF Inverter Welding System

Select intelligent MF inverter controller, full digital display, operation interface is simple, clear, convenient. Its unique functions like automatic detection, compensation, not to work when not reach the setting current value, effectively prevent loose welding. Be able to store 32 sets of different welding schedules. Fast reaction speed, high control precision, to obtain high quality welding points.



Machine Control System

English interface. Can store a variety of welding parts location procedures. Panasonic PLC as the control hub of the whole machine is responsible for reading, transmitting and controlling all kinds of signal processing, and cooperating with all kinds of external instruction transmitting signal mechanism to ensure the effective sequence of all actions of the whole machine. All kinds of automatic detection station detection, effectively eliminate the wrong action and other unsafe accidents.

◆ Main Configuration◆

No.	Items	Brand	C.O.
1	MF Transformer	Trintfar	China
2	MF Controller	Trintfar	China
4	Cylinder	Zhicheng	China
5	Solenoid Valve	SANWO	South Korea
6	PLC	Panasonic	Japan
7	Touch Screen	Weinview	China
8	Servo System	TECO	China

◆ Other Required Machines◆

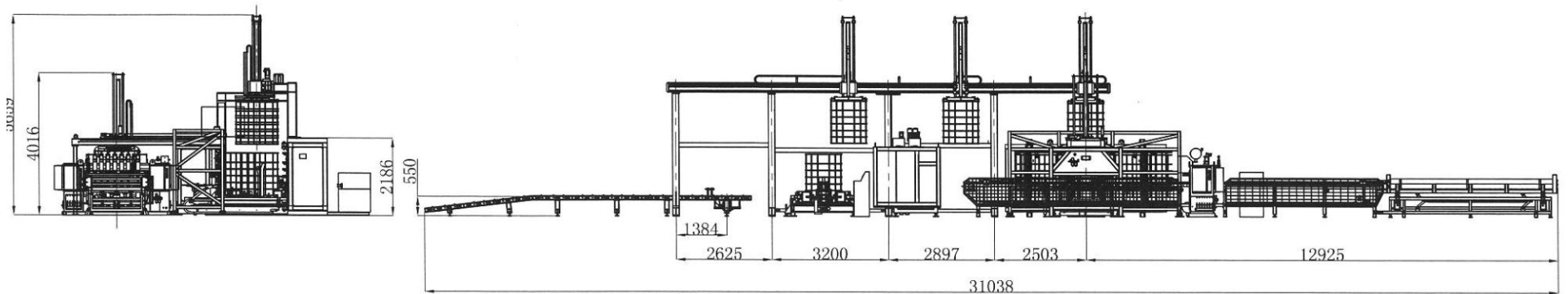


Base Pipe Bending Machine

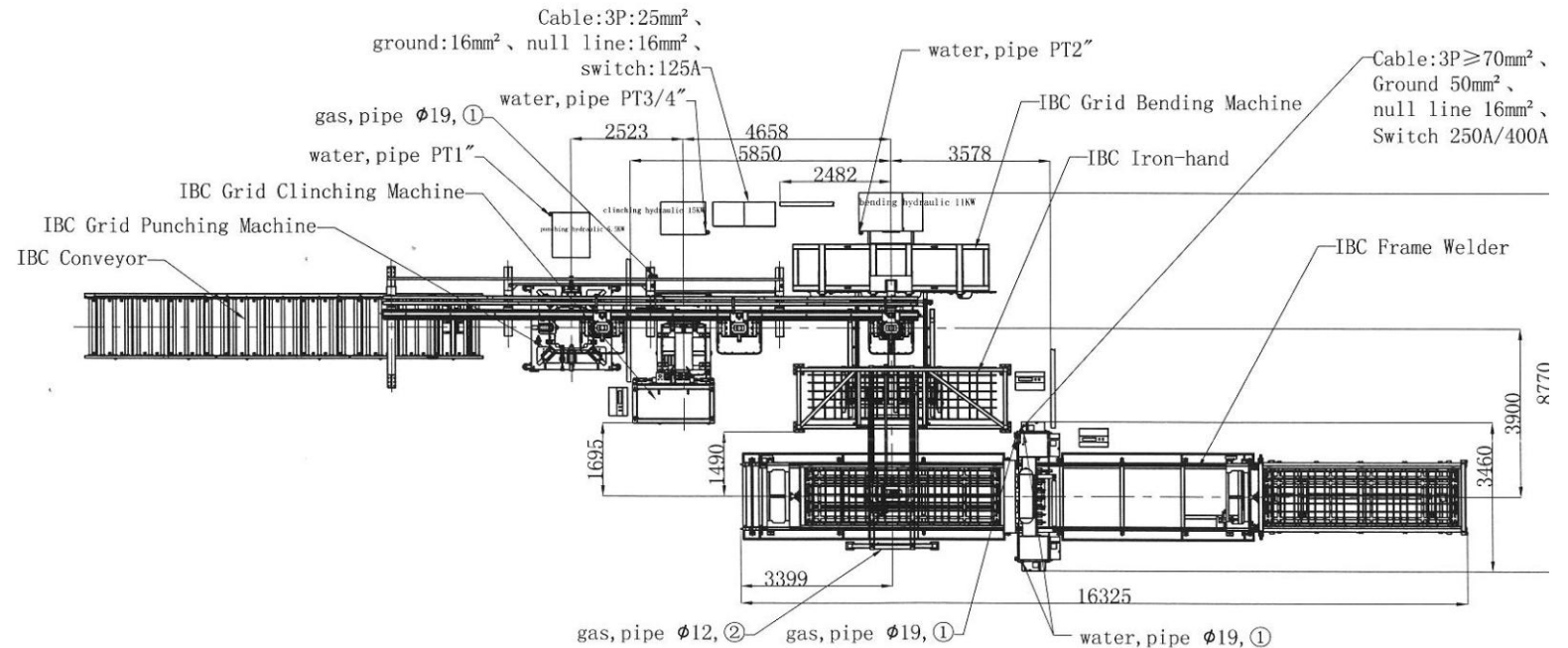


Pipe End Shrinking Machine

◆ Production Line Layout ◆



- ◆ Total plant electricity requirement: 550KW
Air Switch: more than 600A
- ◆ Water Requirement: 10-25m³/hour
- ◆ Air Requirement: 1.1m³/min
- ◆ Production Rate: 150-200pcs/8 hours
- ◆ Required Operator Number:
Manual line: 7-8 people
Automatic line: 5-6 people



Adhere to the customer as the center, for your company to provide a sound installation, commissioning, training, maintenance and other pre-sales and after-sales service. 1. 售前服务

1. Before signing the contract, the company to provide customers with a variety of production process programs, to provide technical advice and other services.

2. Debug

Our company in accordance with the contract, in the specified time to the safe transport of equipment to the user designated installation site, and send technical service engineers on-site installation. In the user installation and commissioning spare parts basically have the case, technical service engineers to install and commission the machine for users to ensure that the installation and commissioning site environment is neat, clean and orderly.

3. Training

The company provides free technical training, after installation and commissioning, in the buyer's site or the seller's domestic training and maintenance center for the buyer operator for not less than 7 days of technical training, until the operator to achieve basic normal use of the equipment, the main training content is as follows: control software use training;

Service Hotline : 15216883036

<https://www.spot-weldingmachines.com/>

**SHANGHAI TRINTFAR
INTELLIGENT EQUIPMENT
CO.,LTD.**