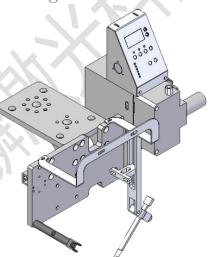
Be sure to read the manual before using the system

- > This manual is an industrial SST 30 user manual
- ➤ Read the manual carefully first to ensure the correct electrical connection

# **SS T30**

Industrial laser welding wire feeder SST 30 user manual



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- The loss caused by natural force makes the machine in the movement dangerous, the user has the responsibility to design an effective error handling and safety protection mechanism in the machine, and Qilin laser has no obligation or responsibility to be responsible for the incidental or corresponding losses caused thereby.



# Certification statement

#### The CE Certification Statement

This product has passed the European Union CE (Communate Europpene) safety, certification, has passed the corresponding conformity assessment procedures and the manufacturer's declaration of conformity, in accordance with the relevant EU directives.

#### ROHS, the certification statement

This product has been approved by the European Union legislation on restricting the use of certain Hazardous ingredients in electronic and Electrical Equipment (Restriction of Hazardous Substances) safety certification, in accordance with the relevant environmental regulations of the European Union.

#### FCC Certification statement

This product has passed the Federal Communications Commission (Federal Communications Commission) security certification and complies with the relevant safety regulations of American electronic products.





## security information

When using the system, please ensure that the operation is correct and the use safely. Some signs or words will be used to remind you of dangerous matters and some important information.

#### danger:



Represents a serious danger. In the process of use, if the operation is improper or the use method is wrong, it may lead to serious injury or even death, please users and related personnel do not operate easily, until to ensure that the operation method and the correct way of use.

#### warn:



Indicates that a danger exists. In the process of use, if the operation is improper or the use method is wrong, which may cause injury to the personnel, please do not operate easily, until you ensure that the operation method is correct and the use method is correct.

#### prudent:



Represents a product potential risk. During use, if the use method is wrong or improper operation, the product or some parts may be damaged. Please users and related personnel do not operate easily until the operation method is correct and the use method is correct.



#### important:

Represents an important information to note during the product. Please do not ignore this information, which provides effective operational help.



This label indicates laser radiation, which will generally be affixed to the product output of laser. Please, be careful of laser and safety when using such equipment.



## Receiving goods, unpacking and inspection

The product uses shock-proof soft packaging. If the package has any external damage marks, please check the damage to the equipment and notify the carrier and the carrier of the damage in written documents.



#### important:

After receiving the product, please check whether the outer package is in good condition, and check whether the product is complete and all parts are intact after unpacking. If any damage is found, please contact the Qilin Laser immediately.

Remove all the goods from the packaging, and keep the packaging materials and wiring spare parts. When dismantling the package and removing the goods,

Please be careful of the goods for safety. After removing the goods, please check if the parts are complete and intact. If any missing parts or parts are damaged, please contact Qilin Laser immediately. If any obvious damage to the equipment, do not install or debug the equipment.

SST30 The delivery list of industrial laser welding wire delivery machine is shown in the following table: (As the product will be updated and upgraded, the delivery list may also be adjusted along with it)

SST 30 Packaging list

	component	quantity	explain
1	SST 30 wire feeder assembly	1	
2	Send wire hose 1	1	
3	Send wire hose 2	1	
4	6 Core wire delivery machine wire	1	
5	wire feed rolls	2	
6	Copper copper nozzle (large)	1	
7	Copper copper nozzle (small)	4	



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# **An Overview of Chapter 1**

# The main contents of this section are:

- Introduction to the SST 30 system
- Product installation size drawing

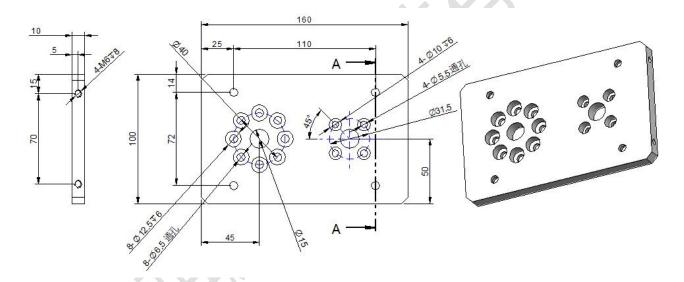


# 1.1 Introduction to the SST 30 system of the industrial laser welding wire feeder

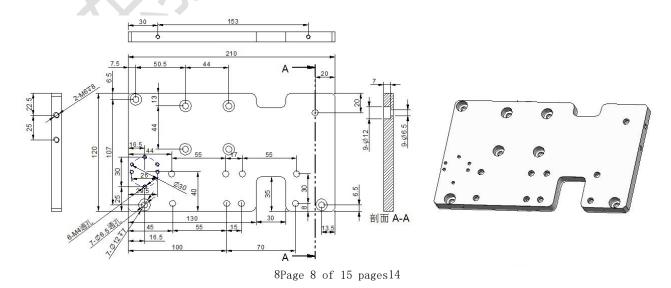
Industrial laser welding wire delivery machine SST 30 system is a control system developed for fiber laser industrial wire delivery welding and robot cooperation. It can be matched with various styles of robot wire welding, welding effect is uniform, no dragging, no lag, with high-definition CCD monitor, can achieve the welding wire melting effect clearly visible.

# 1.2 Product installation size drawing

#### Robot backplane:



#### Laser head backplane:





# Chapter 2. System installation and use

# The main contents of this section are:

- Silk delivery machine wiring
- SST 30 send-wire and wiring diagram
- Human-machine interface function
- Installation instructions of the wire delivery structure



# 2.1 Wire feeder wiring





External control box connection port Connecting port of wire feeder control box

pin	signal	definition	explain
1	24V	Power supply output end of wire feeder	Wfeeder 24V + power interface
2	GND	GND	GND
3	TX	Silk feeder and board card communication port	The wire transmitter communicates with the control system on TX signals
4	RX	Silk feeder and board card communication port	The wire feeder communicates the RX signals with the control system
5	SS_1	Wfeeder trigger signal 1	When short circuit SS_1 and SS_2
6	SS_2	Wfeeder trigger signal 2	When short circuit SS_1 and SS_2

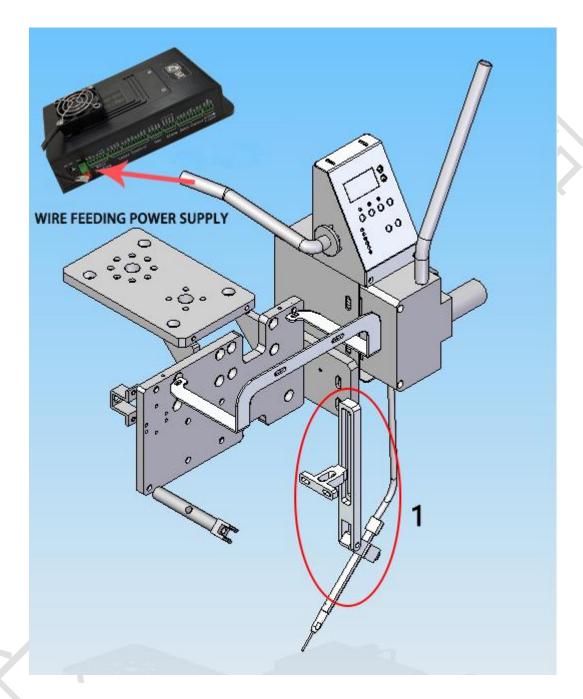


#### important:

Do not connect any instructions in the control box to other lines.



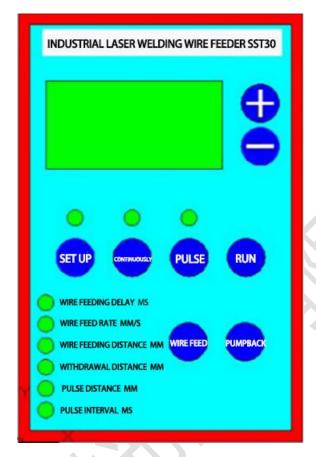
# 2.2 SST 30 send-wire wiring diagram



Note: "1" in the above picture is used to show the installation effect. This wire delivery fixture is not in the list of accessories, it is the standard welding torch head. If you only purchase this wire delivery machine, "1" in the above picture.



### 2.3 Human-machine interface function



## Function Settings:

- ① Silk delay: turn on the laser, and then start the wire
- 2 Wire feeder speed: the running speed of the wire feeder
- 3 Silk filling distance: the filament compensation distance after the pulback stops
- 4 Return distance: after the wire stops, the wire draws back distance
- ⑤ Pulse distance: the welding distance of the pulse in the pulse mode
- 6 Pulse interval: the interval of the pulse time in the pulse mode

SET UP

: Wfeeder setting function

T

: Feed machine adjustment +

: feeding machine adjustment-

## Silk delivery machine operation:

RUN

: After the parameters are set, simulate the running parts

WIRE FEED

Manual quick delivery



: manual quick withdrawal

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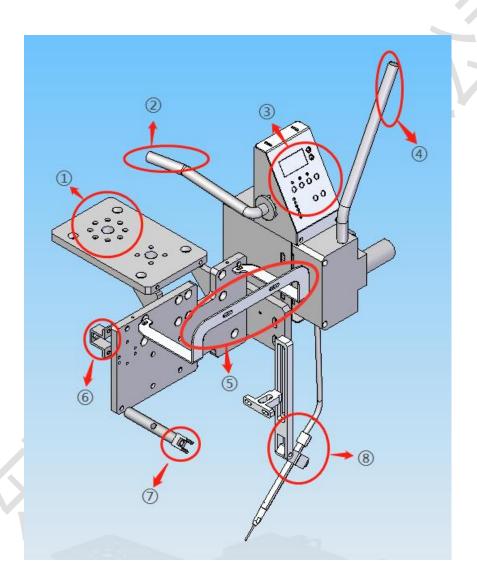
#### Mode Settings:

PULSE

: Pulse welding mode of wire feeder

continuous welding mode of wire feeder

# 2.4 Installation instructions of the wire delivery structure



1): Robot installation hole

③: control panel of wire feeding machine

⑤: installation monitor link board

7: Fixed position of blue light

2: control box link set cable

4: Feed hose

6: blue light installation position

8: wire delivery fixture



# Quality assurance description:

The warranty period of this product is 12 months, starting from the delivery date. If there is any fault of the product during the warranty period, Can be sent back to our company, free maintenance, free of labor costs. Appearance parts (cavity) and consumables (copper nozzle, Stainless steel pipe, such as easy wastage products) is not in the warranty range.

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If you have any comments or suggestions on the product and instructions during use, please call for consultation.

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