After-sales service online installation process instruction

一、 Preparation for preliminary work

- Customer: site photos, equipment in the factory photos, equipment installation preparation photos（follow the preparation list）.
- Engineer: Determine the equipment type and establish the equipment installation and placement standard according to the customer site condition.
- Customer service: According to the time difference between the two countries, communicate with customers and engineers, and formulate the equipment installation time.

二、 equipment installation

first day:

1. Inventory of random accessories;
2. Determine the completion of the preparatory work;
3. Determine the location of the equipment placement;
4. Place the cutting water tank;
5. Install the cutting water tank feet;
6. Place high pressure pump;
7. Assembly of the Y-axis frame of the cutting platform;
8. Install the cutting platform feet;
9. Assembly of the X axis and the Y axis of the cutting platform;

(Required tools: 12MM hexagonal wrench, standard hardware tools)

the second day:

1. Cutting platform horizontal correction;
2. Cutting water tank horizontal correction;
3. Drainage pipe connection of the cutting platform water tank;
4. Operating table (CNC) assembly, cutting platform and the circuit connection of the NC system connection;
5. Line connection in the cutting platform;
6. CNC system and high pressure pump circuit connection;
7. High-pressure pump hydraulic oil addition;
8. Cutting platform water tank for water injection;

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(Required tools: laser level, height ruler (right scale), standard hardware tools

Required materials: hydraulic oil, water pipe)

the third day:

1. Cutting head installation;
2. Mini-sand tank installation;
3. Installation of cutting head high-pressure pipe;
4. Installation of the two air source and two couplets;
5. Installation of the sand supply system;
6. Connect the equipment gas source;
7. Connection of high pressure pump and high pressure pipe of cutting platform;

(Required tools: standard hardware tools)

the fourth day:

1. Installation of the cutting water and the cooling water of the high-pressure pump;
2. High pressure pump connecting power supply; CNC system connecting power supply;
3. Installation of soft water system;

(Required tools: scissors, standard hardware tools

Required materials: cable (16mm²*3+10mm²*2, 2.5mm² * 3), water pipe, water pipe connections)

the fifth day:

1. Cutting platform limit position and zero point debugging;
2. Commissioning of the effective stroke of the cutting platform;
3. Commissioning of the lubrication system;
4. Commissioning of X axis and Y axis verticality.
5. Commissioning of the high-pressure pump;
6. Commissioning of the cutting system;

(Required tools: percentage table, magnetic table seat, cast iron right-angle ruler, multimeter, commonly used hardware tools)

The sixth Day:

1. Test cutting of samples and the running-in of equipment;
2. Cut samples and inspect according to the requirements of national standards;
3. Check the production of cutting documents and simulation cutting;

the seventh day:

1. Training on how to make cutting documents

a) Make compliant DXF files with AutoCAD.
b) Use of the NCStudio (5-axis)

2. Basic use of the training software use:
   a) Power-on and shutdown of the CNC system.
   b) Use of the manual function menu.
   c) Use of the automatic function menu.
   d) Settings of the common parameters.

The eight day

Training in the practical operation part

a) Preparation work before startup.
b) Use of abrasives, including filtration, storage, and adjustment of lower sand quantity.
c) Installation of the trachea and adjustment of the air pressure.
d) Installation of sand conveying pipe.
e) Manual cutting method.
f) Automatic way of cutting method.

The ninth day

1. Check the actual operation part, and train the personnel to draw it out and cut it by themselves.
2. Review and practice of the practical operation part
   a) Practice in cutting the files
   b) Practical practice
3. Daily maintenance items;

A) Training on the solution of common faults.
b) Common faults of the cutting platform;
c) Common faults in the numerical control part;
d) Common fault of the high-pressure pump;

the tenth day

Equipment acceptance

1. Acceptance after the completion of the installation and training;
2. Signing of equipment acceptance documents (with the company or agent after-sales service engineer)
3. Take photos of the whole equipment and the nameplate photo.(Left for the equipment file)
4. Collect and record equipment problems and improvement suggestions during customer feedback.(Our company or agent after-sales service engineer)