

Shenzhen Hasung Precious Metals Equipment Technology Co., Ltd

CE REPORT

Prepared For :	Shenzhen Hasung Precious Metals Equipment Technology Co., Ltd 101, No.11, Jinyuan 1st road, He ' ao community, Yuanshan street, Longgang district, Shenzhen, China
Product Name:	Hydraulic press 、 Continuous casting machine 、 Rolling Mill 、 Water Chiller 、 Annealing furnace 、 Polishing machine 、 Steam cleaner
Model :	HS-300T、HS-200T、HS-150T、HS-100T、HS-50T、HS-20T、HS-500T、HS-800T、HS-1000T、HS-CC series,HS-VCC series、HS-HVCC series、HS-VHCC series、HS-5HP、HS-5.5HP、HS-8HP 、 HS-10HP 、 HS-12HP 、 HS-15HP 、 HS-20HP 、 HS-25HP,HS-30HP,HS-40HP 、 HS-50HP 、 HS-60HP 、 HS-F8HP 、 HS-F10HP、HS-F15HP、HS-F20HP、HS-F30HP、HS-M5HP、HS-M8HP、HS-M10HP,HS-M15HP、HS-H10HP、HS-H15HP、HS-H20HP 、 HS-H30HP 、 HS-H40HP 、 HS-WC series 、 HS-1139、HS-1118、HS-80L、HS-120L、HS-150L、HS-V150L、HS-250L、HS-V250L、HS-350L、HS-V350L、HS-450L、HS-V450L,HS-86、HS-88
Trademark:	N/A
Prepared By :	Shenzhen USG Technology Co., Ltd Block A Anle Industrial Zone, Hangcheng Road, Xixiang Town, Shenzhen China
Test Date:	Mar 13-Mar 27, 2025
Date of Report :	Mar 27, 2025
Report No.:	USG2025032702R

TEST REPORT	
EN 60204-1:2018	
Safety of machinery —Melting Equipment-HJ Series Part 1: General requirements	
EN ISO 12100:2010	
Safety of machinery —Basic concepts, general principles for design — Part 1: Basic terminology, methodology and Part 2: Technical principles	
Testing Laboratory Name	Shenzhen USG Technology Co., Ltd
Address	Block A Anle Industrial Zone, Hangcheng Road, Xixiang Town, Shenzhen China
Testing location	Shenzhen USG Technology Co., Ltd
Applicant's Name	Shenzhen Hasung Precious Metals Equipment Technology Co., Ltd
Address	101, No.11, Jinyuan 1st road, He' ao community, Yuanshan street, Longgang district, Shenzhen, China
Manufacturer	Shenzhen Hasung Precious Metals Equipment Technology Co., Ltd
Address	101, No.11, Jinyuan 1st road, He' ao community, Yuanshan street, Longgang district, Shenzhen, China
Standard.....	EN 60204-1:2018 EN ISO 12100:2010
Procedure deviation	N/A
Non-standard test method	N/A
Test item description	Hydraulic press
Model and/or type reference :	See attachment
Trademark	N/A
Rating(s).....	380V~ 50Hz 7.5kW
Test case verdicts	
Test case does not apply to the test object	N/A
Test item does meet the requirement	P(ass)
Test item does not meet the requirement	F(ail)

General remarks

This report shall not be reproduced except in full without the written approval of the testing laboratory.

The test results presented in this report relate only to the item(s) tested.

"(see remark #)" refers to a remark appended to the report.

"(see Annex #)" refers to an annex appended to the report.

Throughout this report a comma is used as the decimal separator.

Copy of marking plate:

 深圳市华胜贵金属设备科技有限公司 Shenzhen Hasung Precious Metals Equipment Technology Co., Ltd		
品名 Name	Continuous Casting Machine	型号 Model No.
		HS-CC3
序列号 Serial No.	HS20250325240	年份 Year
		2025
电压 Voltage	380V 50Hz	功率 Power
		10kW
官网 Web:	www.hasungtech.com www.hasungcasting.com	

 深圳市华胜贵金属设备科技有限公司 Shenzhen Hasung Precious Metals Equipment Technology Co., Ltd		
品名 Name	Hydraulic press 20T	型号 Model No.
		HS-20T
序列号 Serial No.	HS20250325241	年份 Year
		2025
电压 Voltage	380V 50Hz	功率 Power
		3.75kW
官网 Web:	www.hasungtech.com www.hasungcasting.com	



Name and address of the testing laboratory :Shenzhen USG Technology Co.,Ltd
Block A Anle Industrial Zone, Hangcheng Road,
Xixiang Town, Shenzhen China

Test by : Nico Liang Mar 26, 2025
Signature Date

Liang/Technician
Title

Review by : Zen Li Mar 26, 2025
Signature Date

Li/Project Engineer
Title

Approved by :  Mar 26, 2025
Signature Date

Bruce/Manager
Name and Title

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
4	General requirements		P
4.1	General considerations		P
4.2	Selection of equipment		P
4.2.1	General		P
	Electrical components and devices shall		--
	– be suitable for their intended use; and		P
	– conform to relevant IEC standards where such exist; and		P
	– be applied in accordance with the supplier's instructions.		P
4.2.2	Electrical equipment in compliance with the EN60204series		N/A
4.3	Electrical supply		P
4.3.1	The electrical equipment shall be designed to operate correctly with the conditions of the supply		P
	– as specified in 4.3.2 or 4.3.3, or		P
	– as otherwise specified by the user (see Annex B),or		N/A
	– as specified by the supplier in the case of a special source of supply such as an on-board generator		N/A
4.3.2	AC supplies	380 V~	P
4.3.3	DC supplies		N/A
4.3.4	Special supply systems		N/A
4.4	Physical environment and operating conditions		P
4.4.1	General		P
4.4.2	Electromagnetic compatibility (EMC)		P
	The equipment shall not generate electromagnetic disturbances above levels that are appropriate for its intended operating environment		P
	In addition, the equipment shall have a level of immunity to electromagnetic disturbances so that it can function in its intended environment.		P
4.4.3	Ambient air temperature	+5 °C and +40 °C	P
4.4.4	Humidity		P
4.4.5	Altitude		P
4.4.6	Contaminants		N/A
4.4.7	Ionizing and non-ionizing radiation		P
4.4.8	Vibration, shock, and bump		P
4.5	Transportation and storage		P
4.6	Provisions for handling		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
4.7	Installation		P
5	Incoming supply conductor terminations and devices for disconnecting and switching off		P
5.1	Incoming supply conductor terminations		P
	It is recommended that, where practicable, the electrical equipment of a machine is connected to a single incoming supply.		P
	Where another supply is necessary for certain parts of the equipment		P
	Unless a plug is provided with the machine for the connection to the supply (see 5.3.2 e), it is recommended that the supply conductors are terminated at the supply disconnecting device		P
	Where a neutral conductor is used it shall be clearly indicated in the technical documentation of the machine	Letter of “N”	P
	There shall be no connection between the neutral conductor and the protective bonding circuit inside the electrical equipment nor shall a combined PEN terminal be provided.		P
	Exception: a connection may be made between the neutral terminal and the PE terminal at the point of the connection of the power supply to the machine for TN-C systems.		N/A
	All terminals for the incoming supply connection shall be clearly identified in accordance with IEC 60445 and 16.1		P
	For the identification of the external protective conductor terminal, see 5.2.		P
5.2	Terminal for connection to the external protective earthing system		--
	For each incoming supply, a terminal shall be provided in the vicinity of the associated phase conductor terminals for connection of the machine to the external protective earthing system or to the external protective conductor, depending upon the supply distribution system		P
	The terminal shall be of such a size as to enable the connection of an external protective copper conductor with a cross-sectional area in accordance with Table 1.		P
	Where an external protective conductor of a material other than copper is used, the terminal size shall be selected accordingly		N/A
	At each incoming supply point, the terminal for connection of the external protective earthing system or the external protective conductor shall be marked or labelled with the letters PE		P
5.3	Supply disconnecting (isolating) device.		P
5.3.1	General		P
	A supply disconnecting device shall be provided		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	– for each incoming source of supply to a machine(s);		P
	– for each on-board power supply.		N/A
	The supply disconnecting device shall disconnect (isolate) the electrical equipment of the machine from the supply when required		P
	When two or more supply disconnecting devices are provided, protective interlocks for their correct operation shall also be provided in order to prevent a hazardous situation, including damage to the machine or to the work in progress		N/A
5.3.2	Type		P
	The supply disconnecting device shall be one of the following types:		--
	a) switch-disconnector, with or without fuses, in accordance with IEC 60947-3, utilization category AC-23B or DC-23B;		N/A
	b) disconnector, with or without fuses, in accordance with IEC 60947-3, that has an auxiliary contact that in all cases causes switching devices to break the load circuit before the opening of the main contacts of the disconnector		N/A
	c) a circuit-breaker suitable for isolation in accordance with IEC 60947-2;		N/A
	d) any other switching device in accordance with an IEC product standard for that device and which meets the isolation requirements of IEC60947-1 as well as a utilization category defined in the product standard as appropriate for on-load switching of motors or other inductive loads;		N/A
	e) a plug/socket combination for a flexible cable supply.		N/A
5.3.3	Requirements		P
	When the supply disconnecting device is one of the types specified in 5.3.2 a) to d) it shall fulfil all of the following requirements		--
	– isolate the electrical equipment from the supply and have one OFF (isolated) and one ON position marked with "O" and "I" (symbols IEC 60417-5008 (DB:2002-10) and IEC 60417-5007 (DB:2002-10), see 10.2.2);		P
	– have a visible contact gap or a position indicator which cannot indicate OFF (isolated) until all contacts are actually open and the requirements for the isolating function have been satisfied;		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	– have an external operating means (for example handle), (exception: power-operated switchgear need not be operable from outside the enclosure where there are other means to open it). Where the external operating means is not intended for emergency operations, it is recommended that it be coloured BLACK or GREY (see 10.7.4 and 10.8.4);		P
	– be provided with a means permitting it to be locked in the OFF (isolated) position (for example by padlocks). When so locked, remote as well as local closing shall be prevented;		P
	– disconnect all live conductors of its power supply circuit. However, for TN supply systems, the neutral conductor may or may not be disconnected except in countries where disconnection of the neutral conductor (when used) is compulsory;		P
	– have a breaking capacity sufficient to interrupt the current of the largest motor when stalled together with the sum of the normal running currents of all other motors and/or loads. The calculated breaking capacity may be reduced by the use of a proven diversity factor		P
	When the supply disconnecting device is a plug/socket combination, it shall fulfil the following requirements:		--
	– have the switching capability, or be interlocked with a switching device that has a breaking capacity, sufficient to interrupt the current of the largest motor when stalled together with the sum of the normal running currents of all other motors and/or loads. The calculated breaking capacity may be reduced by the use of a proven diversity factor. When the interlocked switching device is electrically operated (for example a contactor) it shall have an appropriate utilisation category.		N/A
	– a) to f) of 13.4.5.		N/A
	Where the supply disconnecting device is a plug/socket combination, a switching device with an appropriate utilisation category shall be provided for switching the machine on and off. This can be achieved by the use of the interlocked switching device described above.		N/A
5.3.4	Operating means		P
	The operating means (for example, a handle) of the supply disconnecting device shall be easily accessible and located between 0,6 m and 1,9 m above the servicing level.		P
5.3.5	Excepted circuits		N
	The following circuits need not be disconnected by the supply disconnecting device:		--
	– lighting circuits for lighting needed during maintenance or repair;		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	– plug and socket outlets for the exclusive connection of repair or maintenance tools and equipment (for example hand drills, test equipment);		N/A
	– undervoltage protection circuits that are only provided for automatic tripping in the event of supply failure;		P
	circuits supplying equipment that should normally remain energized for correct operation (for example temperature controlled measuring devices, product (work in progress) heaters, program storage devices);		P
	– control circuits for interlocking.		P
	It is recommended, however, that such circuits be provided with their own disconnecting device.		P
	Where such a circuit is not disconnected by the supply disconnecting device:		--
	– permanent warning label(s) in accordance with 16.1 shall be appropriately placed in proximity to the supply disconnecting device;		P
	– a corresponding statement shall be included in the maintenance manual, and one or more of the following shall apply;		P
	a permanent warning label in accordance with 16.1 is affixed in proximity to each excepted circuit, or		P
	- the excepted circuit is separated from other circuits, or		P
	- the conductors are identified by colour taking into account the recommendation of 13.2.4.		P
5.4	Devices for switching off for prevention of unexpected start-up		P
	Devices for switching off for the prevention of unexpected start-up shall be provided		P
	Such devices shall be appropriate and convenient for the intended use, shall be suitably placed, and readily identifiable as to their function and purpose		P
	Means shall be provided to prevent inadvertent and/or mistaken closure of these devices either at the controller or from other locations		P
	The following devices that fulfil the isolation function may be provided for this purpose		P
	– devices described in 5.3.2,		P
	– disconnectors, withdrawable fuse links and withdrawable links only if located in an enclosed electrical operating area		P
	Devices that do not fulfil the isolation function		N/A
5.5	Devices for disconnecting electrical equipment		P
	Devices shall be provided for disconnecting (isolating) electrical equipment to enable work to be carried out when it is de-energised and isolated.		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	– appropriate and convenient for the intended use;		P
	– suitably placed;		P
	– readily identifiable as to which part(s) or circuit(s) of the equipment is served		P
	Means shall be provided to prevent inadvertent and/or mistaken closure of these devices either at the controller or from other locations		P
	In addition to the supply disconnecting device, the following devices that fulfil the isolation function may be provided for this purpose:		P
	– devices described in 5.3.2;		P
	– disconnectors, withdrawable fuse links and withdrawable links only if located in an electrical operating area (see 3.15) and relevant information is provided with the electrical equipment (see 17.2 b)9) and b)12))		P
5.6	Protection against unauthorized, inadvertent and/or mistaken connection		P
6	Protection against electric shock		P
6.1	General		P
	The electrical equipment shall provide protection of persons against electric shock from		--
	– direct contact (see 6.2 and 6.4);		P
	– indirect contact (see 6.3 and 6.4).		P
6.2	Protection against direct contact		P
6.2.1	General		P
	For each circuit or part of the electrical equipment, the measures of either 6.2.2 or 6.2.3 and, where applicable, 6.2.4 shall be applied		P
	When the equipment is located in places open to all persons, which can include children, measures of either 6.2.2 with a minimum degree of protection against direct contact corresponding to IP4X or IPXXD (see IEC 60529), or 6.2.3 shall be applied		N/A
6.2.2	Protection by enclosures		P
	Live parts shall be located inside enclosures that conform to the relevant requirements of Clauses 4, 11, and 14 and that provide protection against direct contact of at least IP2X or IPXXB		P
	Where the top surfaces of the enclosure are readily accessible, the minimum degree of protection against direct contact provided by the top surfaces shall be IP4X or IPXXD		N/A
	Opening an enclosure (i.e. opening doors, lids, covers, and the like) shall be possible only under one of the following conditions		P
	a) The use of a key or tool is necessary for access. For enclosed electrical operating areas, see IEC 60364-4-41, or IEC 60439-1 as appropriate.		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	b) The disconnection of live parts inside the enclosure before the enclosure can be opened.		N/A
6.2.3	Protection by insulation of live parts		P
	Live parts protected by insulation shall be completely covered with insulation that can only be removed by destruction.		P
	Such insulation shall be capable of withstanding the mechanical, chemical, electrical, and thermal stresses to which it can be subjected under normal operating conditions.		P
6.2.4	Protection against residual voltages		N/A
6.2.5	Protection by barriers		N/A
6.2.6	Protection by placing out of reach or protection by obstacles		N/A
6.3	Protection against indirect contact		P
6.3.1	General		P
6.3.2	Prevention of the occurrence of a touch voltage		P
6.4	Protection by the use of PELV		P
6.4.1	General requirements		P
6.4.2	Sources for PELV		P
7	Protection of equipment		P
7.1	General		P
7.2	Overcurrent protection		P
7.3	Protection of motors against overheating		P
7.4	Abnormal temperature protection		P
7.5	Protection against supply interruption or voltage reduction and subsequent restoration		P
7.6	Motor overspeed protection		P
7.7	Earth fault/residual current protection		P
7.8	Phase sequence protection.		P
7.9	Protection against overvoltages due to lightning and to switching surges		P
8	Equipotential bonding		P
8.1	General		P
8.2	Protective bonding circuit		P
8.3	Functional bonding		P
8.4	Measures to limit the effects of high leakage current		P
9	Control circuits and control functions		P
9.1	Control circuits		P
9.2	Control functionsControl functions		P
9.3	Protective interlocks		P
9.4	Control functions in the event of failure		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
10	Operator interface and machine-mounted control devices		P
10.1	General		P
10.2	Push-buttons		P
10.3	Indicator lights and displays		P
10.4	Illuminated push-buttons		P
10.5	Rotary control devices		P
10.6	Start devices		P
10.7	Emergency stop devices		P
10.8	Emergency switching off devices		P
10.9	Enabling control device		P
11	Control gear: location, mounting, and enclosures		P
11.1	General requirements		P
	All control gear shall be located and mounted so as to facilitate		P
	– its accessibility and maintenance		P
	– its protection against the external influences or conditions under which it is intended to operate;		P
	– operation and maintenance of the machine and its associated equipment		P
11.2	Location and mounting		P
11.2.1	Accessibility and maintenance		P
11.2.2	Physical separation or grouping		P
11.2.3	Heating effects		P
11.3	Degrees of protection		P
11.4	Enclosures, doors and openings		P
11.5	Access to control gear		P
12	Conductors and cables		P
12.1	General requirements		P
12.2	Conductors		P
12.3	Insulation	PVC	P
12.4	Current-carrying capacity in normal service		P
	The current-carrying capacity depends on several factors, for example insulation material, number of conductors in a cable, design (sheath), methods of installation, grouping and ambient temperature.		P
	One typical example of the current-carrying capacities for PVC insulated wiring between enclosures and individual items of equipment under steady-state conditions is given in Table 6.		P
12.5	Conductor and cable voltage drop		P
12.6	Flexible cables		P
12.7	Conductor wires, conductor bars and slip-ring assemblies		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
12.7.1	Protection against direct contact		P
	Conductor wires, conductor bars and slip-ring assemblies shall be installed or enclosed in such a way that, during normal access to the machine, protection against direct contact is achieved by the application of one of the following protective measures		P
	– protection by partial insulation of live parts, or where this is not practicable;		P
	– protection by enclosures or barriers of at least IP2X		N/A
	Conductor wires and conductor bars shall be so placed and/or protected as to:		--
	– prevent contact, especially for unprotected conductor wires and conductor bars, with conductive items such as the cords of pull-cord switches, strain-relief devices and drive chains;		P
	– prevent damage from a swinging load.		P
12.7.2	Protective conductor circuit		P
12.7.3	Protective conductor current collectors		N/A
12.7.4	Removable current collectors with a disconnect function		N/A
12.7.5	Clearances in air		P
12.7.6	Creepage distances		P
12.7.7	Conductor system sectioning		P
12.7.8	Construction and installation of conductor wire, conductor bar systems and slip-ring assemblies		P
13	Wiring practices		P
13.1	Connections and routing		P
13.1.1	General requirements		P
	All connections, especially those of the protective bonding circuit, shall be secured against accidental loosening.		P
	The means of connection shall be suitable for the cross-sectional areas and nature of the conductors being terminated		P
	Soldered connections shall only be permitted where terminals are provided that are suitable for soldering.		N/A
	Terminals on terminal blocks shall be plainly marked or labelled to correspond with markings on the diagrams.		P
	Where an incorrect electrical connection (for example, arising from replacement of devices) can be a source of risk and it is not practicable to reduce the possibility of incorrect connection by design measures, the conductors and/or terminations shall be identified in accordance with 13.2.1.		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	The installation of flexible conduits and cables shall be such that liquids shall drain away from the fittings.		P
	Means of retaining conductor strands shall be provided when terminating conductors at devices or terminals that are not equipped with this facility. Solder shall not be used for that purpose.		P
	Shielded conductors shall be so terminated as to prevent fraying of strands and to permit easy disconnection		N/A
	Identification tags shall be legible, permanent, and appropriate for the physical environment.		P
	Terminal blocks shall be mounted and wired so that the internal and external wiring does not cross over the terminals		P
13.1.2	Conductor and cable runs		P
	Conductors and cables shall be run from terminal to terminal without splices or joints.		P
	Connections using plug/socket combinations with suitable protection against accidental disconnection are not considered to be joints for the purpose of this Subclause.		N/A
13.1.3	Conductors of different circuits		P
	Conductors of different circuits may be laid side by side, may occupy the same duct		P
13.1.4	Connection between pick-up and pick-up converter of an inductive power supply system		P
13.2	Identification of conductors		P
13.2.1	General requirements		P
	Each conductor shall be identifiable at each termination in accordance with the technical documentation		P
13.2.2	Identification of the protective conductor		P
13.2.3	Identification of the neutral conductor		P
13.2.4	Identification by colour		P
13.3	Wiring inside enclosures		P
	Conductors inside enclosures shall be supported where necessary to keep them in place.		P
	Non-metallic ducts shall be permitted only when they are made with a flame-retardant insulating material		N/A
	Connections to devices mounted on doors or to other movable parts shall be made using flexible conductors in accordance with 12.2 and 12.6 to allow for the frequent movement of the par		P
	The conductors shall be anchored to the fixed part and to the movable part independently of the electrical connection		P
	Conductors and cables that do not run in ducts shall be adequately supported.		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	Terminal blocks or plug/socket combinations shall be used for control wiring that extends beyond the enclosure. For plug/socket combinations, see also 13.4.5 and 13.4.6.		N/A
	Power cables and cables of measuring circuits may be directly connected to the terminals of the devices for which the connections were intended.		P
13.4	Wiring outside enclosures		P
13.4.1	General requirements		P
	The means of introduction of cables or ducts with their individual glands, bushings, etc., into an enclosure shall ensure that the degree of protection is not reduced		P
13.4.2	External ducts		P
13.4.3	Connection to moving elements of the machine		P
13.4.4	Interconnection of devices on the machine		P
13.4.5	Plug/socket combinations		N/A
13.4.6	Dismantling for shipment		P
13.4.7	Additional conductors		P
13.5	Ducts, connection boxes and other boxes		P
13.5.1	General requirements		P
	Ducts shall provide a degree of protection suitable for the application		P
	All sharp edges, flash, burrs, rough surfaces, or threads with which the insulation of the conductors can come in contact shall be removed from ducts and fittings.		P
	Where necessary, additional protection consisting of a flame-retardant, oil-resistant insulating material shall be provided to protect conductor insulation		P
	Drain holes of 6 mm diameter are permitted in cable trunking systems, connection boxes, and other boxes used for wiring purposes that can be subject to accumulations of oil or moisture		N/A
	In order to prevent confusion of conduits with oil, air, or water piping, it is recommended that the conduits be either physically separated or suitably identified.		P
	Ducts and cable trays shall be rigidly supported and positioned at a sufficient distance from moving parts and in such a manner so as to minimize the possibility of damage or wear.		
	Ducts shall be provided only for mechanical protection		P
	Cable trays that are partially covered should not be considered to be ducts or cable trunking systems		N/A
13.5.2	Percentage fill of ducts		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	Consideration of the percentage fill of ducts should be based on the straightness and length of the duct and the flexibility of the conductors.		P
	It is recommended that the dimensions and arrangement of the ducts be such as to facilitate the insertion of the conductors and cables.		P
13.5.3	Rigid metal conduit and fittings		P
	Rigid metal conduit and fittings shall be of galvanized steel or of a corrosion-resistant material suitable for the conditions		N
	The use of dissimilar metals in contact that can cause galvanic action should be avoided.		N
	Conduits shall be securely held in place and supported at each end.		N
13.5.4	Flexible metal conduit and fittings		P
	A flexible metal conduit shall consist of a flexible metal tubing or woven wire armour. It shall be suitable for the expected physical environment.		P
	Fittings shall be compatible with the conduit and appropriate for the application.		P
13.5.5	Flexible non-metallic conduit and fittings		P
	Flexible non-metallic conduit shall be resistant to kinking and shall have physical characteristics similar to those of the sheath of multiconductor cables.		P
	The conduit shall be suitable for use in the expected physical environment.		P
	Fittings shall be compatible with the conduit and appropriate for the application.		P
13.5.6	Cable trunking systems		P
13.5.7	Machine compartments and cable trunking systems		P
13.5.8	Connection boxes and other boxes		P
	Connection boxes and other boxes used for wiring purposes shall be accessible for maintenance.		P
	Those boxes shall provide protection against the ingress of solid bodies and liquids, taking into account the external influences under which the machine is intended to operate		P
	Those boxes shall not have opened but unused knockouts nor any other openings and shall be so constructed as to exclude materials such as dust, flyings, oil, and coolant.		P
13.5.9	Motor connection boxes	Certified motor	P
14	Electric motors and associated equipment		P
14.1	General requirements		P
	Electric motors should conform to the relevant parts of IEC 60034 series.		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	The protection requirements for motors and associated equipment are given in 7.2 for overcurrent protection, in 7.3 for overload protection, and in 7.6 for overspeed protection		P
	As many controllers do not switch off the supply to a motor when it is at rest, care shall be taken to ensure compliance with the requirements of 5.3, 5.4, 5.5, 7.5, 7.6 and 9.4.		P
	Motor control equipment shall be located and mounted in accordance with Clause 11.		P
14.2	Motor enclosures.		P
	It is recommended that motor enclosures be chosen from those included in IEC 60034-5.		P
14.3	Motor dimensions		P
	As far as is practicable, the dimensions of motors shall conform to those given in the IEC 60072 series		P
14.4	Motor mounting and compartments		P
14.5	Criteria for motor selection		P
14.6	Protective devices for mechanical brakes		P
15.1	Accessories		P
	Where the machine or its associated equipment is provided with socket-outlets that are intended to be used for accessory equipment		P
15.2	Local lighting of the machine and equipment		P
15.2.1	General		P
	Connections to the protective bonding circuit shall be in accordance with 8.2.2.		P
	The ON/OFF switch shall not be incorporated in the lampholder or in the flexible connecting cords.		P
	Stroboscopic effects from lights shall be avoided by the selection of appropriate luminaires		P
	Where fixed lighting is provided in an enclosure, electromagnetic compatibility should be taken into account using the principles outlined in 4.4.2.		P
15.2.2	Supply		P
	The nominal voltage of the local lighting circuit shall not exceed 250 V between conductors. A voltage not exceeding 50 V between conductors is recommended.		P
	Lighting circuits shall be supplied from one of the following sources		P
15.2.3	Protection		P
	Local lighting circuits shall be protected in accordance with 7.2.6.		P
15.2.4	Fittings		P
	Adjustable lighting fittings shall be suitable for the physical environment		P
	The lampholders shall be		--

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	– in accordance with the relevant IEC standard;	Certified lampholder	P
	– constructed with an insulating material protecting the lamp cap so as to prevent unintentional contact		P
	Reflectors shall be supported by a bracket and not by the lampholder.		N/A
16	Marking, warning signs and reference designations		P
16.1	General		P
	Warning signs, nameplates, markings, and identification plates shall be of sufficient durability to withstand the physical environment involved.		P
16.2	Warning signs		P
16.2.1	Electric shock hazard		P
	Enclosures that do not otherwise clearly show that they contain electrical equipment that can give rise to a risk of electric shock shall be marked with the graphical symbol IEC 60417-5036		P
	The warning sign shall be plainly visible on the enclosure door or cover.		P
	The warning sign may be omitted (see also 6.2.2b)) for:		N/A
16.2.2	Hot surfaces hazard		N/A
16.3	Functional identification		P
	Control devices, visual indicators, and displays (particularly those related to safety) shall be clearly and durably marked with regard to their functions either on or adjacent to the item.		P
	Such markings may be as agreed between the user and the supplier of the equipment		P
16.4	Marking of equipment		P
	Equipment (for example controlgear assemblies) shall be legibly and durably marked in a way that is plainly visible after the equipment is installed.		P
	A nameplate giving the following information shall be attached to the enclosure adjacent to each incoming supply		P
16.5	Reference designations		P
	All enclosures, assemblies, control devices, and components shall be plainly identified with the same reference designation as shown in the technical documentation.		P
17	Technical documentation		P
17.1	General		P
	The information necessary for installation, operation, and maintenance of the electrical equipment of a machine shall be supplied in the appropriate forms		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	The information provided may vary with the complexity of the electrical equipment. For very simple equipment, the relevant information may be contained in one document, provided that the document shows all the devices of the electrical equipment and enables the connections to the supply network to be made.		N/A
17.2	Information to be provided		P
	The information provided with the electrical equipment shall include:		--
	a) A main document (parts list or list of documents);		P
	b) Complementary documents including:		P
	1) a clear, comprehensive description of the equipment, installation and mounting, and the connection to the electrical supply(ies);		P
	2) electrical supply(ies) requirements;		P
	3) information on the physical environment (for example lighting, vibration, atmospheric contaminants) where appropriate;		P
	4) overview (block) diagram(s) where appropriate;		P
	5) circuit diagram(s);		P
	6) information (as applicable) on:		P
	programming, as necessary for use of the equipment;		P
	sequence of operation(s);		P
	frequency and method of functional testing;		P
	guidance on the adjustment, maintenance, and repair, particularly of the protective devices and circuits;		P
	recommended spare parts list; and		P
	list of tools supplied.		P
	7) a description (including interconnection diagrams) of the safeguards, interlocking functions, and interlocking of guards against hazards, particularly for machines operating in a co-ordinated manner;		P
	8) a description of the safeguarding and of the means provided where it is necessary to suspend the safeguarding (for example for setting or maintenance), (see 9.2.4)		P
	9) instructions on the procedures for securing the machine for safe maintenance; (see also 17.8);		P
	10) information on handling, transportation and storage;		P
	11) information regarding load currents, peak starting currents and permitted voltage drops, as applicable;		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	12) information on the residual risks due to the protection measures adopted, indication of whether any particular training is required and specification of any necessary personal protective equipment.		P
17.3	Requirements applicable to all documentation		P
17.4	Installation documents		P
	In complex cases, it may be necessary to refer to the assembly drawings for details.		P
	The recommended position, type, and cross-sectional areas of the supply cables to be installed on site shall be clearly indicated.		P
	The data necessary for choosing the type, characteristics, rated currents, and setting of the overcurrent protective device(s) for the supply conductors to the electrical equipment of the machine shall be stated (see 7.2.2).		P
	Where necessary, the size, purpose, and location of any ducts in the foundation that are to be provided by the user shall be detailed		P
	The size, type, and purpose of ducts, cable trays, or cable supports between the machine and the associated equipment that are to be provided by the user shall be detailed		P
	Where necessary, the diagram shall indicate where space is required for the removal or servicing of the electrical equipment.		N/A
	In addition, where it is appropriate, an interconnection diagram or table shall be provided		N/A
17.5	Overview diagrams and function diagrams		P
	Function diagrams may be provided as either part of, or in addition to, the overview diagram.		P
17.6	Circuit diagrams		P
	A circuit diagram(s) shall be provided.		P
	Where appropriate, a diagram showing the terminals for interface connections shall be provided.		P
	Switch symbols shall be shown on the electromechanical diagrams with all supplies turned off		P
	Conductors shall be identified in accordance with 13.2.		P
	Circuits shall be shown in such a way as to facilitate the understanding of their function as well as maintenance and fault location.		P
17.7	Operating manual		P
	The technical documentation shall contain an operating manual detailing proper procedures for set-up and use of the electrical equipment.		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
	Where the operation of the equipment can be programmed, detailed information on methods of programming, equipment required, program verification, and additional safety procedures (where required) shall be provided.		N/A
17.8	Maintenance manual		P
	The technical documentation shall contain a maintenance manual detailing proper procedures for adjustment, servicing and preventive inspection, and repair.		P
	Recommendations on maintenance/service intervals and records should be part of that manual.		P
	Where methods for the verification of proper operation are provided (for example software testing programs), the use of those methods shall be detailed.		N/A
17.9	Parts list		P
18	Verification		P
18.1	General		P
	This part of IEC 60204 gives general requirements for the electrical equipment of machines		P
	The extent of verification will be given in the dedicated product standard for a particular machine.		P
	Where there is no dedicated product standard for the machine, the verifications shall always include the items a), b) and f)		P
	and may include one or more of the items c) to e):		N/A
	a) verification that the electrical equipment complies with its technical documentation;		P
	b) in case of protection against indirect contact by automatic disconnection, conditions for protection by automatic disconnection shall be verified according to 18.2;		NA
	c) insulation resistance test (see 18.3);		P
	d) voltage test (see 18.4);		N/A
	e) protection against residual voltage (see 18.5);		N/A
	f) functional tests (see 18.6).		N/A
	When these tests are performed, it is recommended that they follow the sequence listed above.		P
	When the electrical equipment is modified, the requirements stated in 18.7 shall apply.		P
	The results of the verification shall be documented.		P
18.2	Verification of conditions for protection by automatic disconnection of supply		N/A
18.3	Insulation resistance tests		P

EN 60204-1:2018			
Clause	Requirement – Test	Result	Verdict
18.4	Voltage tests		P
18.5	Protection against residual voltages		N/A
18.6	Functional tests		P
18.7	Retesting		P

EN ISO 12100:2010			
Clause	Requirement - Test	Result	Verdict
4	Hazards to be taken into account when designing machinery		P
4.1	General		P
4.2	Mechanical hazard		P
4.3	Electrical hazard		P
4.4	Thermal hazard		P
4.5	Hazard generated by noise		P
4.6	Hazards generated by vibration		P
4.7	Hazards generated by radiation		P
4.8	Hazards generated by materials and substances		P
4.9	Hazards generated by neglecting ergonomic principles in machine design		P
4.10	Slipping, tripping and falling hazards		P
4.11	Hazard combinations		P
4.12	Hazards associated with the environment in which the machine is used		P
5	Strategy for risk reduction		P
5.1	General provisions		P
5.2	Specification of the limits of the machine		P
5.3	Hazard identification, risk estimation and risk evaluation		P
5.4	Elimination of hazards or reduction of risk by protective measures		P
5.5	Achievement of risk reduction objectives		P

EN ISO 12100:2010			
Clause	Requirement - Test	Result	Verdict
4	Hazards to be taken into account when designing machinery		P
4.1	General		P
4.2	Consideration of geometrical factors and physical aspects		P
4.3	Taking into account the general technical knowledge regarding machine design		P
4.4	Choice of an appropriate technology		P
4.5	Applying the principle of the positive mechanical action of a component on another component		P
4.6	Provisions for stability		P
4.7	Provisions for maintainability		P
4.8	Observing ergonomic principles		P
4.9	Preventing electrical hazard		P
4.10	Preventing hazards from pneumatic and hydraulic equipment		P
4.11	Applying inherently safe design measures to control system		P
4.12	Minimizing the probability of failure of safety functions		P
4.13	Limiting exposure to hazards through reliability of equipment		P
4.14	Limiting exposure to hazards through mechanization or automation of loading (feeding) /unloading (removal) operations		P
4.15	Limiting exposure to hazards through location of the setting and maintenance points outside of danger zones		P
5	Safeguarding and complementary protective measures		P
5.1	General		P
5.2	Selection and implementation of guards and protective devices		P
5.3	Requirements for the design of guards and protective devices		P
5.4	Safeguarding for reducing emissions		P
5.5	Complementary protective measures		P
6	Information for use		P
6.1	General requirements		P
6.2	Location and nature of the information for use		P
6.3	Signals and warning devices		P
6.4	Markings, signs (pictograms), written warnings		P
6.5	Accompanying documents (in particular, instruction handbook)		-

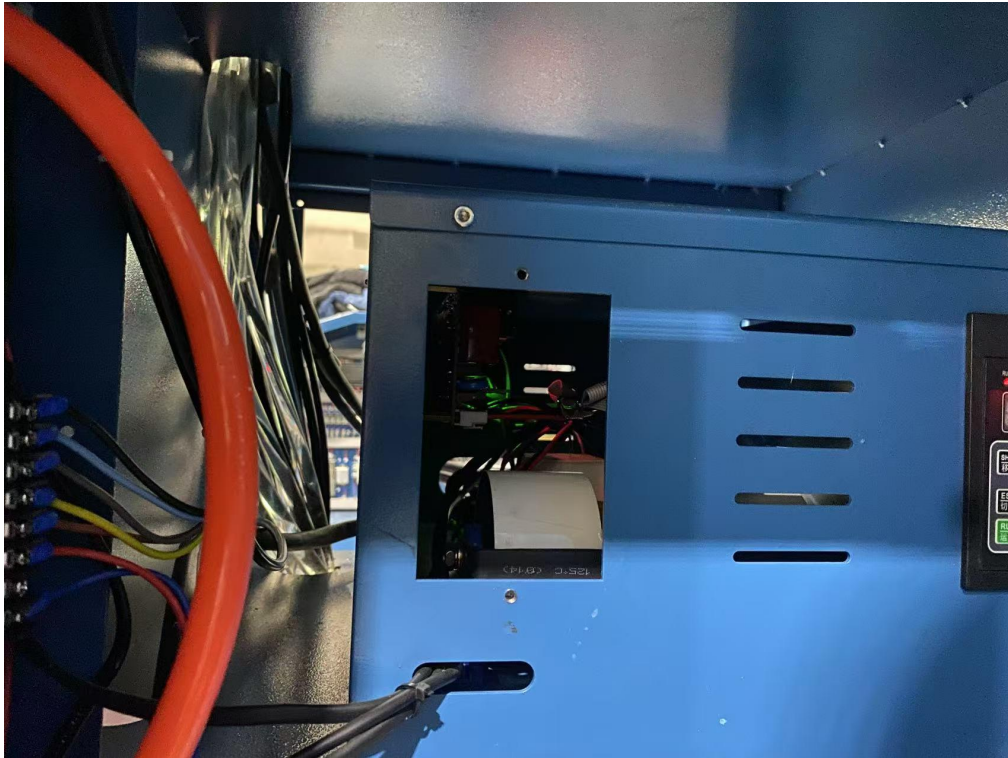
Photo General Appearance of the EUT



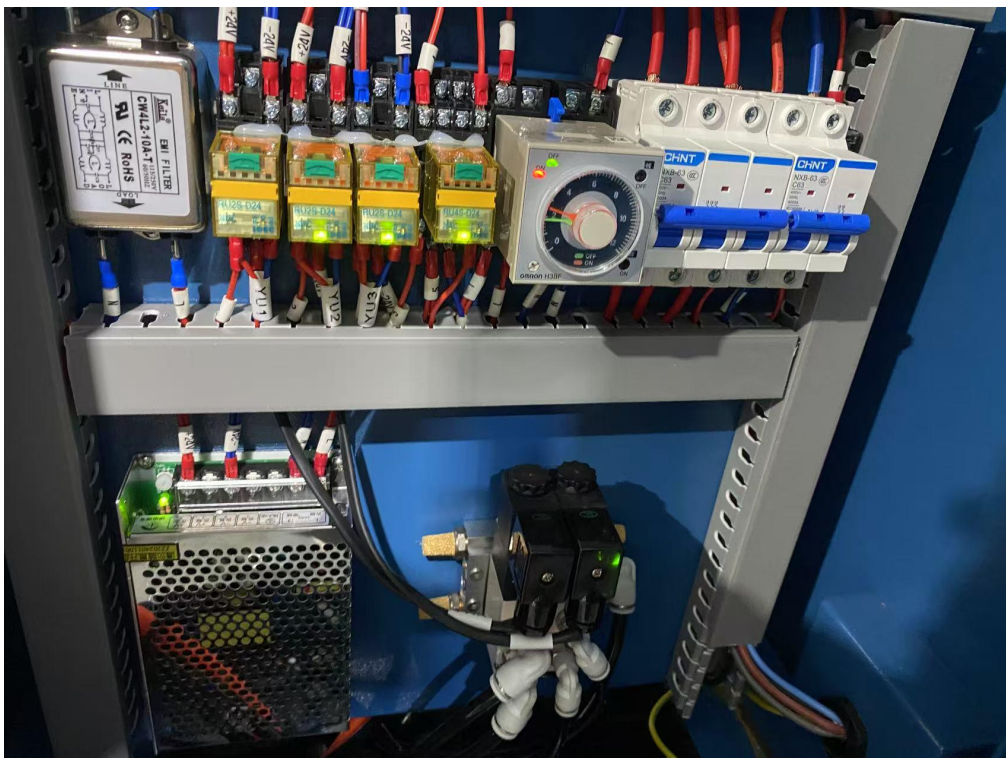










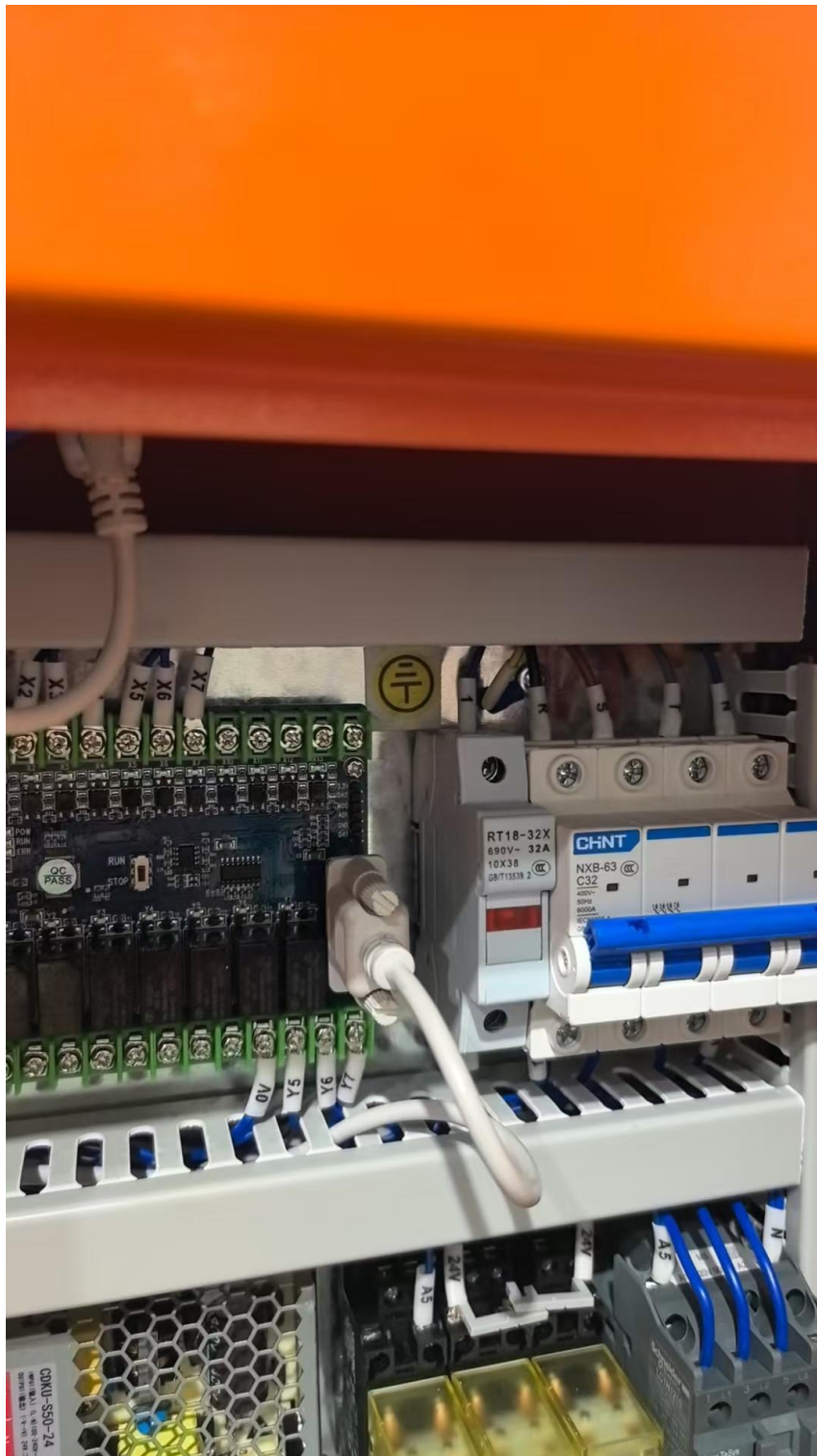














质量管理体系认证证书

证书编号: 47724Q10313R0S

兹证明

深圳市华胜贵金属设备科技有限公司

统一社会信用代码: 91440300MA5FQE3T6L

注册地址: 深圳市龙岗区园山街道荷坳社区金源一路 11 号厂房 101

经营地址: 深圳市龙岗区园山街道荷坳社区金源一路 11 号厂房

建立的质量管理体系符合标准
GB/T 19001-2016/ISO 9001:2015

通过认证范围如下:

金属成型熔炼铸造设备的生产和销售

首次发证日期: 2024年 08 月 30 日

本次发证日期: 2024年 08 月 30 日

有效期至: 2027年 08 月 29 日

第一次监督
合格贴标处

第二次监督
合格贴标处

第三次监督
合格贴标处



中国认可
国际互认
管理体系
MANAGEMENT SYSTEM
CNAS C317-M



本证书颁发后, 3 年有效期内要至少接受 2 次监督审核, 证书即时有效性可通过网站 (www.bsicert.com) 查询。

本证书信息可在国家认证认可监督管理委员会官方网站 (www.cnca.gov.cn) 上查询。

百胜国际认证 (深圳) 有限公司

地址: 深圳市龙华区民治街道民新社区鑫茂公寓写字楼 B3008A



QUALITY MANAGEMENT SYSTEM CERTIFICATE

Certificate No.: 47724Q10313R0S

We hereby certify that
**Shenzhen Hasung Precious Metals Equipment
Technology Co., Ltd**

Unified Social Credit Code: 91440300MA5FQE3T6L

Registered Address: Plant 101, No.11, Jinyuan Road, Heao Community,
Yuanshan Street, Longgang District, Shenzhen

Business Address: No.11, Jinyuan Road, Heao Community, Yuanshan Street,
Longgang District, Shenzhen

by reason of its
Quality Management System
has been awarded this certificate for compliance with the standard
GB/T 19001-2016 / ISO 9001:2015

The Quality Management System Applies in the following area:

**Production and sales of metal forming,
melting and casting equipment**

Certified since: Aug.30, 2024

Valid from: Aug.30, 2024

Valid until: Aug.29, 2027

First supervision
of qualified labeling
location location

Second supervision
of qualified labeling
location location

Third supervision
of qualified labeling
location location



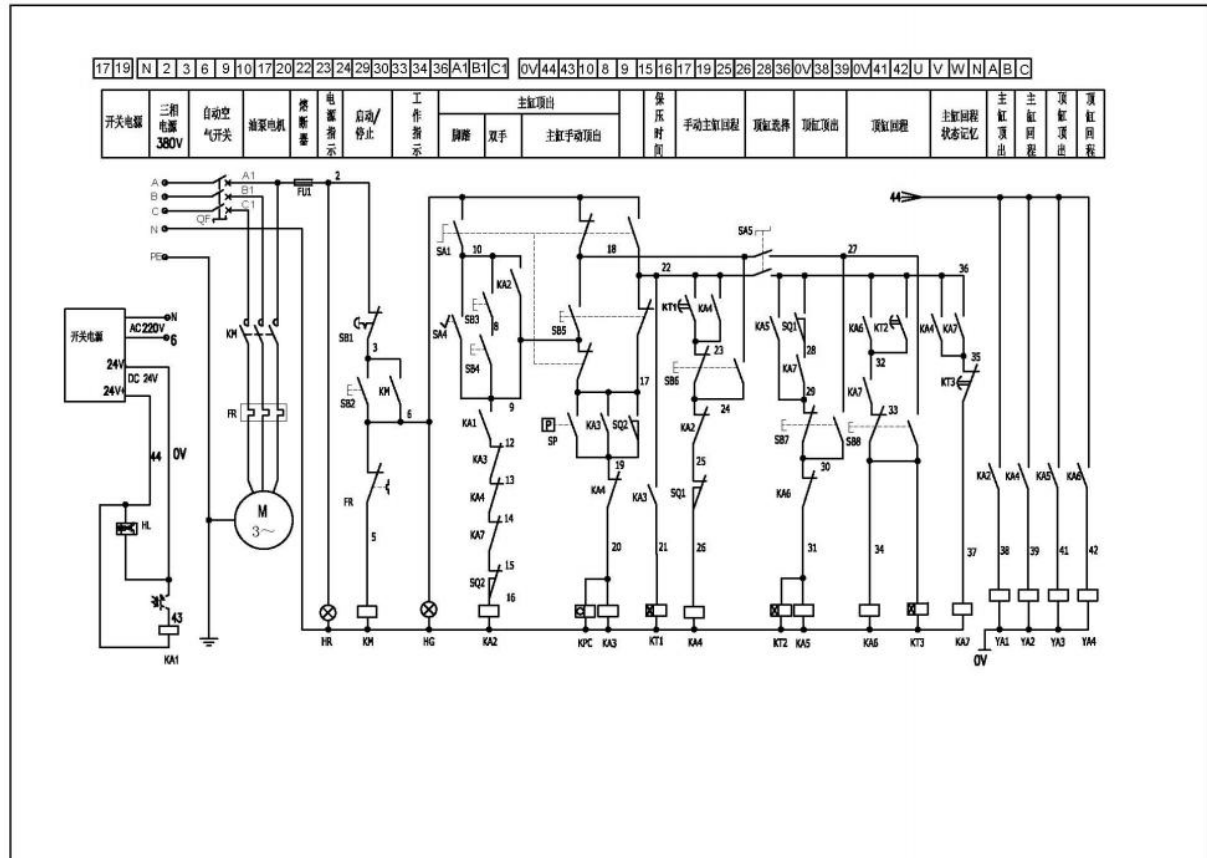
中国认可
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管理体系
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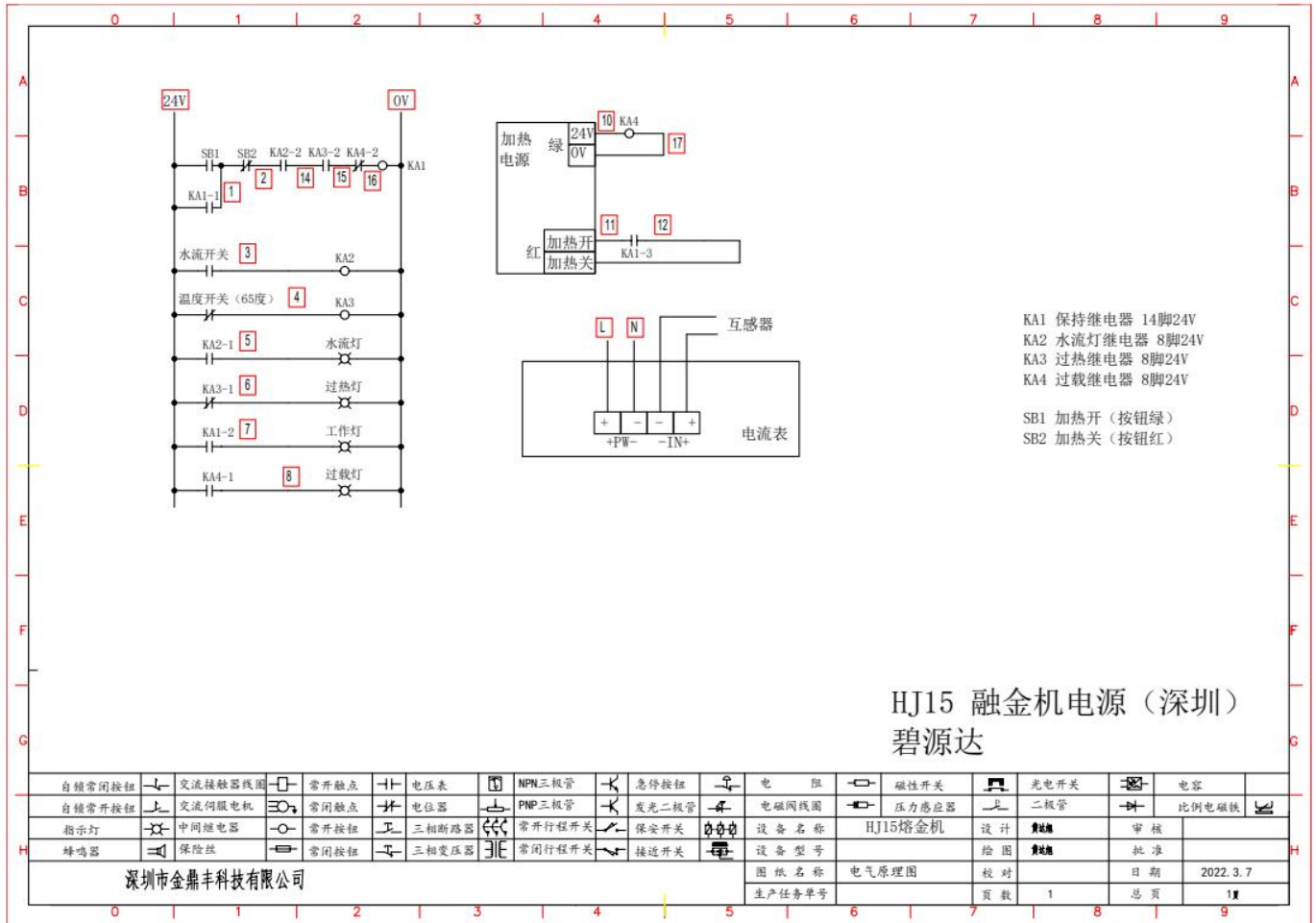


After this certificate is issued, there should be at least 2 surveillance audits within the 3 year period of validity, the current validity of the certificate can be checked on (www.bsicert.com).
The certificate information is available on the official website of the National Certification and Accreditation Administration (www.cnca.gov.cn).

Baisheng International Certification Shenzhen Company Limited

Address: B3008A, Xinmao Apartment Office Building, Minxin Community, Minzhi Street, Longhua District, Shenzhen





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