BE CAREFUL

As our product inovation, as the upgrading of products may have certain parts and the instructions are not consistent, refer to the actual product, please understanding.







Telephone service

4/5-10

4/5-12

4/5-14

BE CAREFUL

Please connect the Residual-current device before starting

Our company is not responsible for any safety accidents caused by violation of operating procedures

YGT/GTQ

4/5-10 4/5-12 4/5-14

Hydraulic CNC steel bar straightening and cutting machine

INSTRUCTION FOR USE

Certificate of conformity.

Product model: _____

Name: _____

Factory number: _____

Inspector: _____

This product has passed the inspection and is allowed to leave the factory

Date

This product has passed the inspection and is allowed to leave the factory

1、 Overview

Welcome to become a user of our factory.

Our factory specializes in the production and research of mechanical and electrical control boxes for steel bar straightening and cutting. The CNC straightening and cutting machines produced are manufactured using Japanese technology, and the products are sturdy, accurate, fast, and best-selling both domestically and internationally. They are also exported to Southeast Asia, Africa, India and other countries.

take care

Before installing, operating, using, and maintaining the machine, please be sure to read this manual thoroughly and master the knowledge related to the machine proficiently. Safety information and all precautions must be followed before use. Improper operation may cause personal injury and serious consequences of machine damage!

In addition, please keep the user manual of this product properly for easy access and reading when needed. It is essential to provide the user manual to the end user.

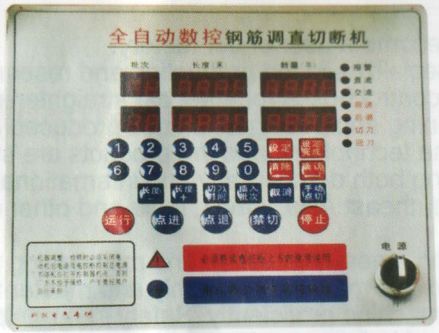
2、 Performance characteristics

1. Using microcomputer control, the steel bars (round steel, threaded steel) are automatically straightened and cut (hydraulic cutting).
2. A 'fool like' operating system that can be used immediately after understanding '123'.
3. Electronic digital ruler, without mechanical ruler, occupies a small area and is convenient for disassembly and assembly.
4. Multiple batches input length and quantity simultaneously, computer storage memory, efficient and convenient.
5. Remote shutdown within 30 meters.
6. Stable operation, low failure rate, and convenient maintenance.

3、 Main parameters

1. Straightening and cutting steel bar diameter: round steel ϕ 4–10mm ϕ 4–12mm ϕ 4–14mm
2. Cutting steel bar length: 0.3m–99m
3. Tapping speed: 31–45m/min 30m/min
4. Production per shift (calculated in 8 hours): ϕ 6 (3–4 tons); ϕ 8 (4–6 tons);
ϕ 10 (8–10 tons) ϕ 12 (10–12 tons)
5. Number of cut pieces in a single batch: 1–9999
6. Normal length error: round steel ± 10mm
7. Power supply: 380V/50HZ three-phase AC;
8. Motor: National standard copper wire 4kw (type 10)/5.5KW (type 12)/7.5KW (type 14)
9. Host size: 1500 (L) × 500mm (W) × 600mm (H)
1800 (L) × 650mm (W) × 600mm (H)

4、 CNC computer box



5、 Installation

1. Installation location requirements: A flat cement road surface or ordinary mud ground without water immersion or rain.

2. Install the host and computer box: adjust the level of the machine, and make sure that all four machine feet are stably supported on the ground, and then fix them with Wall plug; When installing on ordinary mud, a 50cm long, 18 large threaded steel can be inserted into the ground and fixed to the machine feet. The installation position of the electric control box should be fixed according to the cover picture. The installed machine should operate smoothly and minimize vibration as much as possible.

3. Installation of material distribution mechanism (self provided):

1/Material distribution bracket: installed 5–8m away from the machine.

2/Material distribution tray frame: installed 2–5m away from the machine.

When the distance is too far, a steel ring with a diameter of 15cm must be installed between the feeding port and the feeding tray frame at an interval of about 1m, to bundle the steel bars and prevent them from popping up and injuring people when they reach the tail!

4. Power installation: Connect a 380V power supply.

The power connection must be carried out by qualified professionals and the machine must be reliably grounded!

5. Requirements for discharge site: a flat cement floor; If it is an ordinary mud ground, it can be laid with relatively flat things such as star tiles, iron plates, wooden boards, etc.

6. Add hydraulic oil: 46 # high–quality anti–wear hydraulic oil (12kg in winter and 18kg in summer).

7. Test run: 1/After powering on, turn on the power switch, and the computer numerical control box will self check and return to zero.

2. Press 【 Run 】, the motor should rotate according to the arrow direction; In case of reverse rotation, two of the three–phase wires can be exchanged, and the machine shall operate stably without abnormal noise.

It is strictly prohibited to reverse the motor for a long time (exceeding 10 seconds), as prolonged reverse rotation may cause irreparable damage to the oil pump!

6、 Use (operator must read before use)

For your and others' safety:

1/The machine must be kept and used by a dedicated person! 2. Before starting the machine, it is necessary to familiarize yourself with the operation!

Before opening the machine for adjustment or maintenance, the power must be turned off and live operation is strictly prohibited!

During production, no one is allowed within 3 meters from the material distribution mechanism to the feeding port on both sides to prevent the steel bars from popping out and injuring people!

During the operation of the machine, a dedicated person is required to take care of it. If there are any abnormalities, the machine must be immediately shut down and powered off!

Machine maintenance:

1/CNC instruments are dustproof, moisture–proof, rainproof, high–temperature resistant, and sun resistant.

2. Protect the wires and prohibit water immersion and rolling. 3. Add lubricating oil to the trolley guide rail once a day.

4/It must be turned off when not in use for a long time or during lightning strikes!

5. Regularly check the hydraulic oil level, and immerse the filter at least 3–4cm. Pay attention to keeping the hydraulic oil clean and replace it every 6–12 months!

Specific operation:

1. Length and quantity settings:

After turning on the machine and returning to zero, press [Set], the batch will display "1", and the length number window will flash

2/Enter the length and press [Confirm]; Example: Enter 3.85m, press [3], [8], [5], [Confirm] (note: when the value does not need to be changed, press [Confirm]; if the input is incorrect, press [Return] to return one digit; press [Cancel] to return;

3/Enter the quantity and press [Confirm]; Example: Enter 288 entries, [2] [8] [8] [Confirm].

4. Enter the length and quantity of all batches according to the steps (up to 20 batches);

After the last batch quantity is confirmed, press' Set Complete ', all windows will display zero, and the setting is complete.

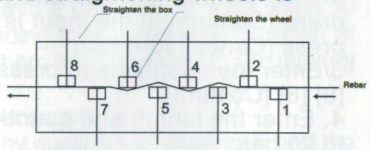
2. Automatic production:

After setting, place the steel bars that need to be straightened, press [Run], and the machine can automatically produce according to the set length and quantity. After each batch is completed, it will automatically stop and sound and light alarms for 3 seconds. After stopping, press [Run] to continue producing the next batch of steel bars.

3. Reinforcement winding treatment:

When the steel bar is wrapped, press [Stop]; After cutting off the winding part, follow the steps of "thread end treatment" to straighten and remove the steel bars from the machine.

4. End of line processing:
It takes two people to operate! No one is allowed within 3 meters of the end of the casting and line to prevent steel bars from injuring people!
1/The steel bar reaches the tail, and after stopping the machine, press [No Cutting], and the display will be "==========";
2. Use wire cutters to clamp the steel bars tightly at the outlet, press 【 Jog Forward 】, and straighten the steel bars without cutting them;
3. After stopping the machine, press 【 No cutting 】, the display and cutting function will return to normal, and the iron can be released to continue production.
5. Pointing function:
During operation, if it is necessary to manually cut the steel bars, press the 【 Cutting Time 】 cutting action to automatically cut the steel bars.
6. Correction: When there is an error in length, it can be corrected:
For example, during the production process, if the measured length of the steel bar is 3 centimeters, the correction is completed according to the length – [3] [confirm].
During the production process, the measured length of the steel bar was 3 centimeters shorter: according to [length+] [3] [confirmation], the correction was completed.
7. Straightening of steel bars:
1. The straightening principle of steel bars: When the steel bars pass through the high-speed rotating straightening frame, four pairs of straightening wheels repeatedly adjust the steel bars to achieve straightening; While straightening, produce the power to move the steel bars forward.
2. The basic principle of straightening: the steel bars pass through the middle, and the first (12) and second (78) pairs of straightening wheels are tightened to import and export the steel bars; The middle two pairs of (34,56) straightening wheels are adjusted tighter to soften and straighten the steel bars.
1. When opening the machine cover for adjustment, be sure to stop the motor first, and then turn off the machine power to avoid danger!
2. Be sure to tighten the adjusting nut after adjustment.
3. The relative relationship between steel bars and straightening wheels is shown in the following figure:



7、 Common problems and troubleshooting

number	question	reason	Troubleshooting
1	Uneven casting	1. The straightening wheel pressure iron is not tight enough	Re adjustment, fore and aft adjustment, tighter in the middle
		2. The steel bar is not on the centerline of the straightening frame	Relax and readjust
		3. New machine straightening wheel not worn in	Try again after a few days of grinding in
		4. The steel bars are too hard and of poor quality	Replace with high-quality steel bars and try again
		5. Some straightening wheels do not rotate	Straightening wheel shaft damaged, replace bearing
		6. Straightening wheel severely worn	Replace with a new wheel (300-500 tons need to be replaced)

number	question	reason		Troubleshooting
2	Iron twisting	1. Straightening wheel pressure iron too tight		Relax the straightening wheel
		2. Some straightening wheels do not rotate		The straightening wheel bearing is damaged, replace the bearing
		3. The discharge port of the straightening frame is blocked by mud and iron powder		It is easy to appear in rainy days, please clean it up and try again
		4. Cutting head, hitting the head	1/The travel switch wheel is not in contact with the lever, and the trolley travel is too large	Try again
			2. The travel switch is broken	1/Replace the travel switch
			3/The tool head trolley moves outward unevenly	2: When replacing the non travel switch, reduce the cutting time to check if there are any foreign objects on the guide rail and if the car bearings are damaged.
		5. No material distribution mechanism installed		Place the iron in the material distribution mechanism and try again
3	Uneven casting speed without casting iron. Time fast and time slow	1. The straightening wheel pressure iron is not tight enough		Tighten the straightening wheel
		2. Some straightening wheels do not rotate		The straightening wheel bearing is damaged, replace the bearing
		3. The discharge port of the straightening frame is blocked by mud and iron powder		It is easy to appear in rainy days, please clean it up and try again
4	Scratches on the steel bars during casting	1. The straightening wheel of the new machine is not worn in		After running in for a few days, the fault will disappear automatically
		2. The feed sleeve scratches the steel bars		After running in for a few days, the fault will disappear automatically
		3. Some straightening wheels are too tight on the pressure iron		Relax the straightening wheel
		4. Some straightening wheels do not rotate		The straightening wheel bearing is damaged, replace the bearing
5	The length is not accurate, but the casting is neat	1. The length is too long		Correct according to [length -]
		2. The length is too short		Press [length+] to make corrections
6	The length is not accurate, and there is a significant difference in the length of the cast iron	1. The connecting hose of the meter encoder is loose		Replace the connecting hose
		2. The spring on the electronic ruler is too loose		Replace or shorten some and try again
		3. Improper feeding		Place the iron in the material distribution mechanism and try again
		4. The upper or lower wheels of the length measurement do not rotate smoothly		Replacing bearings
		5. The upper and lower wheels are worn during length measurement, and there is contact between the upper and lower wheels		Replace the length measuring upper and lower wheels
		6. Reinforcement does not pass through the middle of the length measuring wheel		Readjust the position of the electronic ruler
		7. The meter encoder or computer board is damaged		Contact the dealer or manufacturer for replacement

7	The steel bars are straight without cutting (length and quantity), and the operation is as follows: do not release the iron. Press the [Run] button when the machine is empty, and press the [Cutter] button after the machine is running.	1. The solenoid valve light (located at the rear) does not flash	Loose wiring	Check if all connectors from the solenoid valve to the computer board are loose and reconnect them
			The computer board is broken	Contact the dealer or manufacturer for replacement
		2. The solenoid valve light (located at the rear) is flashing	New machine without hydraulic oil added	Add enough hydraulic oil and try again
			The solenoid valve coil is burnt out	Contact the dealer or manufacturer for replacement
			The internal valve core of the solenoid valve is blocked	After disassembling and cleaning the foreign object, reassemble it, taking care to reassemble it as before.
			The solenoid valve is broken	Contact the dealer or manufacturer for replacement
8	Go straight without cutting off (length numbers do not go)	1. The connecting hose of the meter encoder is broken		Replace the connecting hose
		2. Length data loss		Factory Reset
		3. Loose or damaged wiring of the meter encoder		Reconnect or replace with a new component
		4. The computer board is damaged		Contact the dealer or manufacturer for replacement
9	Cutting weakness	The oil pump sucks in air and after running for a few minutes, the hydraulic oil turns white	Insufficient hydraulic oil	The hydraulic oil must pass through the filter
			Loose oil inlet pipe joint	Add enough and try again. Tighten it and try again
		2. The pressure adjustment of the pressure valve is too small or damaged		Adjust the pressure appropriately or replace it: Attention! If the pressure adjustment is ineffective, it must be adjusted back to its original position!
		3. Internal leakage of oil pump		Replace the "3" shaped oil seal inside the oil pump
		4. The oil seal of the cutting head cylinder is damaged		Replace the oil seal of the same model and try again
		5. After running for a period of time in summer, the oil overheats		Insufficient hydraulic oil, add hydraulic oil
		6. In winter, the weather becomes cold and the oil solidifies, making it difficult to cut it off when it is first started.		Operate the engine empty for a period of time, increase the oil temperature, and then switch again
				The hydraulic oil is unqualified, replace it with 46 # anti wear hydraulic oil
		7. Blade wear		Replacing the blade

10	The operation without returning the knife is as follows: without releasing the iron, press the [Run] button when the machine is empty, and then press the [Cutter] button when the machine is running.	1. The solenoid valve light (forward) does not flash	Loose control circuit	Check all connectors from the solenoid valve to the computer board for looseness and reconnect them
			The computer board is broken	Contact the dealer or manufacturer for replacement
			The solenoid valve coil is burnt out	Contact the dealer or manufacturer for replacement
		1. The solenoid valve light (front) is flashing	The internal valve core of the solenoid valve is blocked	After disassembling and cleaning the foreign object, reassemble it, taking care to reassemble it as before.
			The solenoid valve is broken	Contact the dealer or manufacturer for replacement
			The blade oil seal is damaged	Replace the oil seal of the same model
11	Incision bending	1. Blade wear		Replacing the blade
		2. Excessive tool pitch during cutting		Replace qualified blades
12	The motor runs and does not rotate when reversing	1. There is wiring detachment inside the computer box		Replace wiring
		2. The AC contactor inside the computer box is damaged		Replace with a new contactor of the same model
		3. The computer board is damaged		Contact the dealer or manufacturer for replacement
13	The motor does not rotate and there is a buzzing sound during operation	380V lacks one phase of power		Check if the power supply line and wiring terminals are loose
		The AC contactor inside the computer box is broken		Replace with a new contactor of the same model
14	The motor does not rotate and runs completely silently	Press [Run] or [Back] without AC contactor sound	1. The plug on the computer motherboard is loose	Reinsert
			2. The computer motherboard is broken	Contact the dealer or manufacturer for replacement
		There is a sound of AC contactor closing when pressing [Run] or [Back]	1. The AC contactor inside the computer box is damaged	Replace with a new contactor of the same model
			2. The motor is burnt out	Replace the motor
15	No display	The AC light is not on	Burn insurance	replace
			Poor wiring	Reconnect
			transformer	Replace the transformer of the same model
		The AC light is on, and the 5V light is also on	The computer motherboard is broken	Contact the dealer or manufacturer for replacement
		The AC light is on, and the 5V light is not on	After disconnecting the encoder cable, it can be turned on	Replace encoder

8、 Internal parameter settings

1. Adjustment of cutting time: After turning on the machine and returning to zero, press 【 1 】, 【 3 】, 【 5 】

The batch window displays "11", the length window displays "t1", and the quantity window displays "0.160" flashing (default value), indicating that the cutting time is 0.180 seconds. Press the number key to make changes, and press [Confirm] to proceed to the next step.

The batch window displays "22", the length window displays "t2", and the quantity window displays 0.180 flashing (default value), indicating that the tool return time is 0.180 seconds. Press the number key to change it, and press the [Confirm] key to end.

2. Internal settings (non professionals should not set them randomly): When the power on self-test does not return to zero, long press and hold the [Set] button, and after a few seconds

The batch window displays "11", the length window displays "1", and the quantity window displays "0.180" flashing (default value), indicating that the cutting time is 0.180 seconds. Press the number key to make changes, and press [Confirm] to proceed to the next step.

The batch window displays "22", the length window displays "t2", and the quantity window displays "0.180" flashing (default value), indicating that the tool return time is 0.180 seconds. Press the number key to change it, and press the [Confirm] key to proceed to the next step. The batch window displays "44", the length window displays "L", and the quantity window displays "0.19" flashing (default value), indicating a head length of 0.19m. This value is related to the first length, and can be changed by pressing the number keys. Press [Confirm] to proceed to the next step.

The batch window displays "55", the length window displays "S", and the quantity window displays "0.078" flashing (default value), indicating an amplification factor of 0.078 seconds. This value is related to accuracy and can be changed by pressing the number key. Press the [Confirm] key to proceed to the next step.

The batch window displays "66", the length window displays "t4", and the quantity window displays "0.300" flashing (default value), indicating a motor delay stop time of 0.3 seconds. Press the number key to change it, and press [Confirm] to end.

3. Restore factory settings:

When the power on self-test does not return to zero, long press and hold 【 5 】. After a few seconds, the batch window displays "8", the length window displays "0", and the quantity window displays "8". Enter 【 8 】, 【 8 】, 【 8 】, and 【 8 】 in the length window, press 【 confirm 】, and after a few seconds, self check will return to zero, and all parameters will return to factory settings.

9、 Installation List

main engine	remote control	hose	spring	wrench	instructions	Certificate of conformity	Warranty Card
1		10cm	2	1	1	1	1

10、 Dealer Contact Information

Product Quality Assurance Form

User unit name			
Detailed address			
telephone		zip code	
Equipment model			
Equipment number		Warranty period	
Purchase date			
Invoice number			
Sales unit name			
Signature (seal) of sales unit		User signature (seal)	