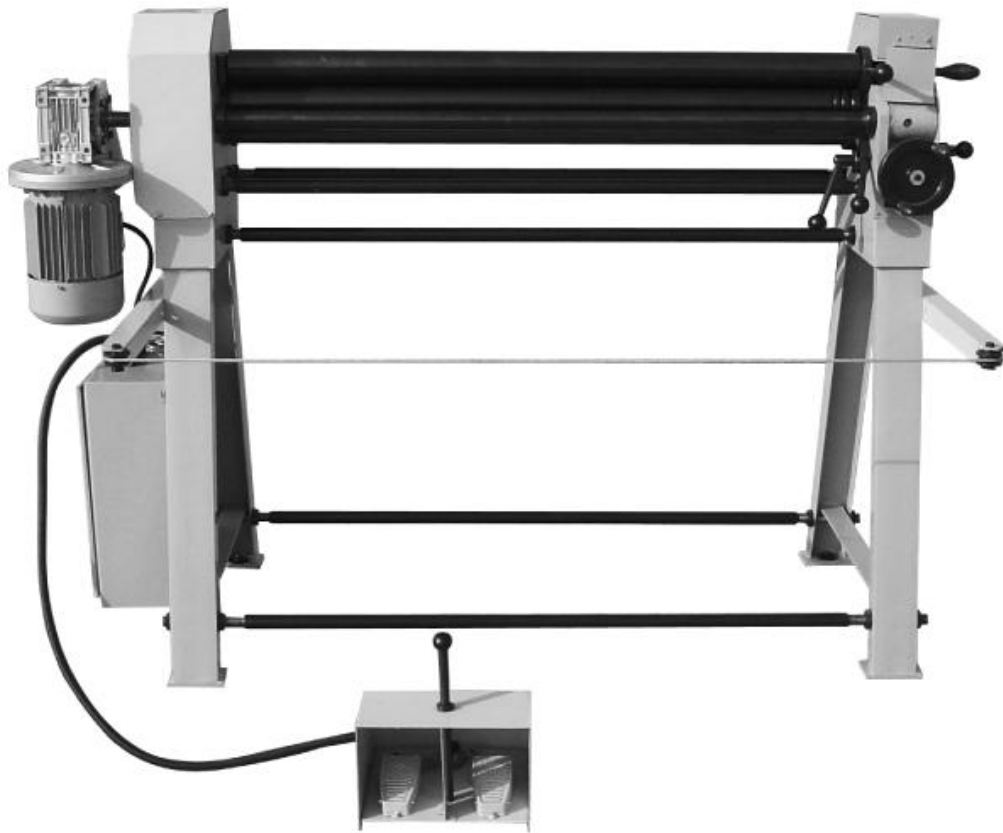


# **ELECTRIC SLIP ROLL MACHINE**

## **ESR-1020X2**



### **OPERATION MANUAL**

**Tabel of contents:**

A. Machine Structure.....Page 1

B. Machine Parts.....Page 1

C. Description.....Page1~3

D. Machinery general safety warnings.....Page 3

E. Instructions.....Page 4

F. Technical Data.....Page 5

G. Circuit Diagram.....Page 6

H.Parts list .....Page 7

I. Exploded Drawing .....Page 8

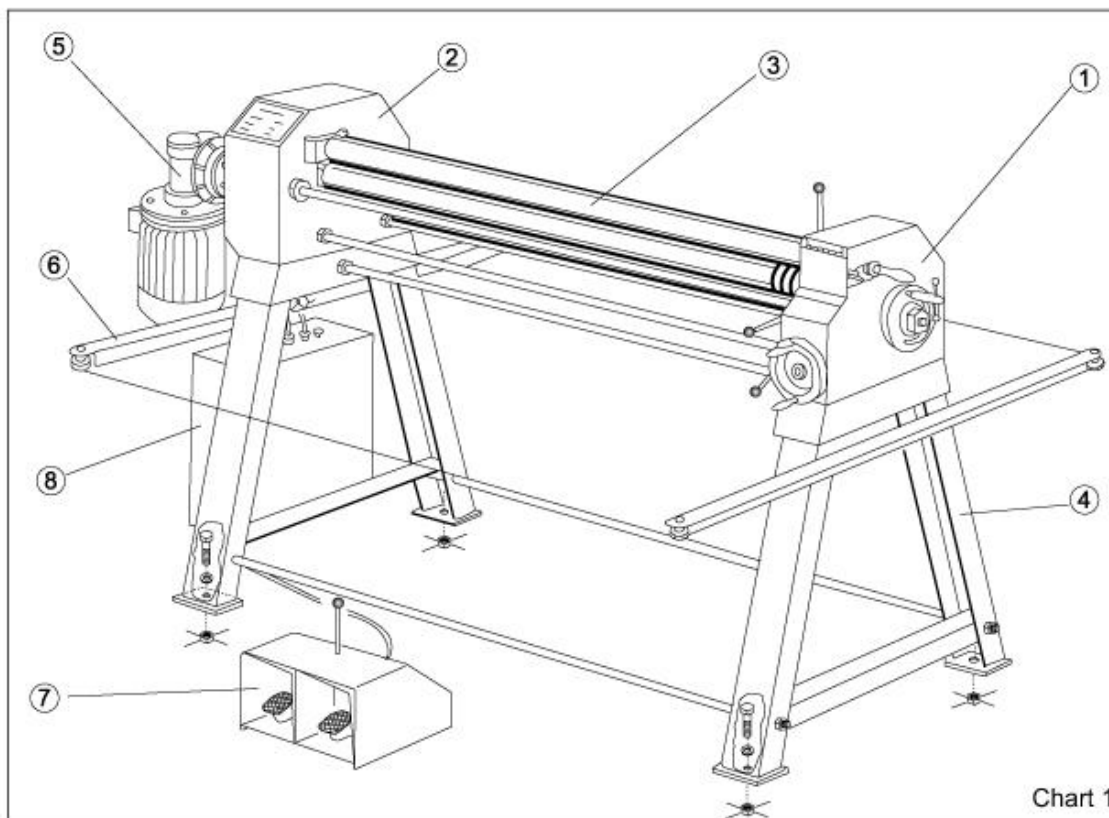
J. Packing declaration .....Page 9

## A. Machine Structure

You'd better lay the machine in a enough big space. In this circumstances, the machine can running normally and easily for operation and maintenance.

The machine is fixed on the ground by 4 piece of bolts (chart 1).

The operator should comply with the safety regulations.



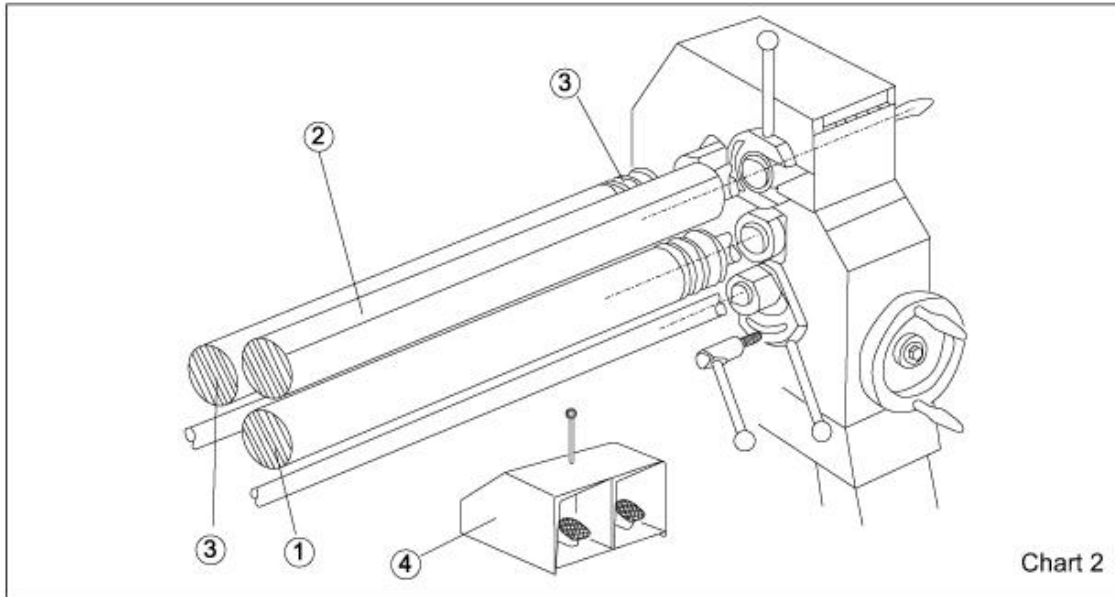
## B. Machine Parts

- |                      |                          |
|----------------------|--------------------------|
| 1. Right Bearing     | 5. Dynamic Retarder      |
| 2. Left Bearing      | 6. Safety Equipment      |
| 3. Connecting roller | 7. Pedal                 |
| 4. Stand             | 8. Electricity Equipment |

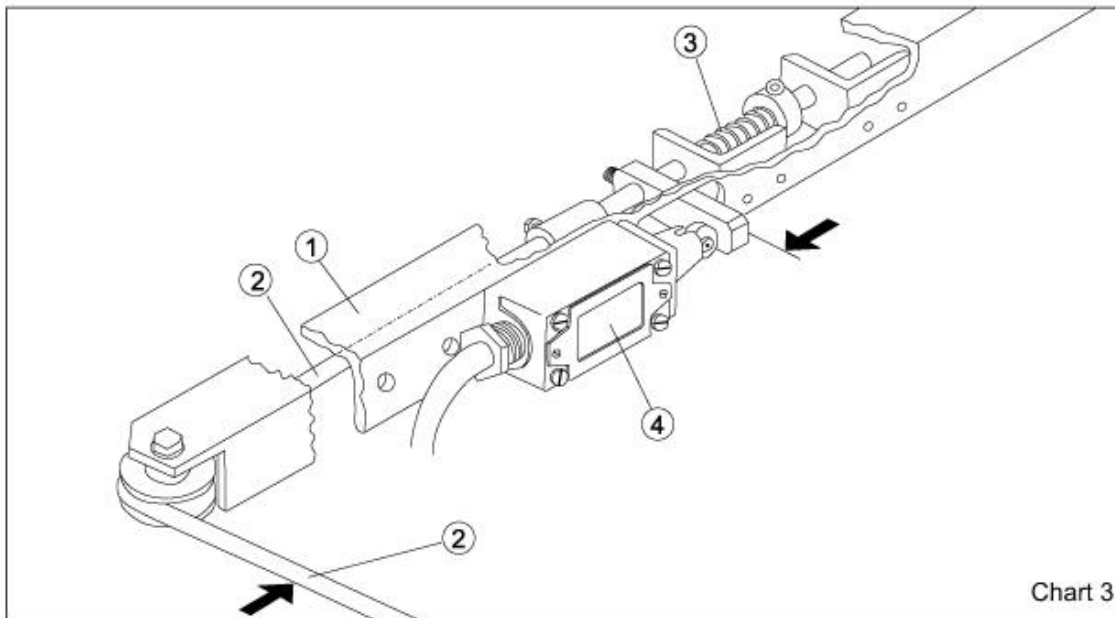
## C. Description

The machine is used in machining steel plate and bending steel wire. It's consists of three pieces of rollers, two pieces of steering rollers(chart 2, No.1 No.2), and one piece of adjustable back roller (chart 2, No.3).The back roller can bend column or taper.The lower steering roller(chart 2,No.1) and back roller(chart 2,No.3) can slot the steel wire. The awag upper roller has a long slot(chart 2,No.2) which can machining grooved steel. In the circumstances of weak voltage, in virtue of the motor

pedal, it can make the machine working forward and back.



This machine is equipped with a safety equipment. It can keep the machine away from emergency circumstances. The safety equipment consist of a stand (No.1) which is fixed up on the slip roll. A cable which is controlled by one spring is fixup on the stand, press the stand, the cable will touch one small switch, the slip roll will stop working.



The slip roll has an emergency switch(Chart 4 No.1), there are two buttons, one is start switch, another one is a stop switch.

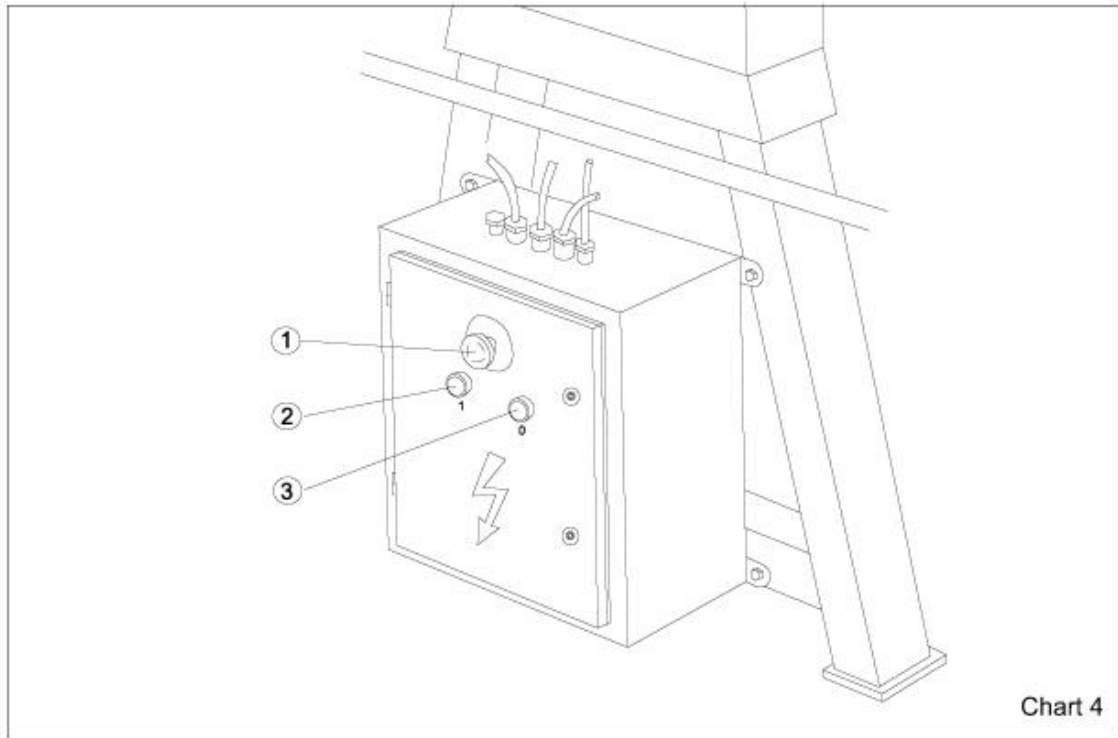


Chart 4

#### **D. Machinery general safety warnings**

1. Misuse of this machine can cause serious injury. For safety, machine must be set up, used and serviced properly. Read, understand and follow instructions in the operator's and parts manual which was shipped with your machine.
2. Wear proper apparel. No loose clothing or jewelry which can get caught in moving parts. Gloves and rubber soled footwear is recommended for best footing.
3. Do not overreach. Failure to maintain proper working position can cause you to fall into the machine or cause your clothing to get caught - pulling you into the machine.
4. Keep guards in place and in proper working order. Do not operate the machine with guards removed.
5. Avoid dangerous working environments. Do not use stationary machine tools in wet or damp locations. Keep work areas clean and well lit.
6. Avoid accidental starts by being sure the start switch is "OFF" before plugging in the machine.
7. Never leave the machine running while unattended. Machine shall be shut off whenever it is not in operation.
8. Disconnect electrical power before servicing. Whenever changing accessories or general maintenance is done on the machine, electrical power to the machine must be disconnected before work is done.
9. Machinery must be anchored to the floor.
10. Use the right tool. Don't force a tool or attachment to do a job it was not designed for.
11. Keep hands in sight and clear of all moving parts and rolling surfaces.
12. All visitors should be kept at a safe distance from the work area. Make workshop completely safe by using padlocks, master switches, or by removing starter keys.
13. Know the tool you are using - its application, limitations, and potential hazards.

14. General Electrical Cautions :This machine should be grounded in accordance with the National Electrical Code and local codes and ordinances. This work should be done by a qualified electrician. The machine should be grounded to protect the user from electrical shock.

## E. Instructions

Please open the start-up handle ( No.3 ) and control handle ( No.4 ) before curving. Separate the upper roller ( No.2 ) with the lower roller ( No.1). Insert the steel plate between the two rollers, by the assistance of the control handle ( No.4 ), the lower roller moves towards the upper roller until touches the plate, then block off the nether roller by using the winding handle ( No.3 ), the upper roller is also prevented by the winding handle ( No.5 ), then the pedal ( No.6 ) pushes the steel plate out of the two rollers, and it will be received by the back roller ( No.7 ) and bended in the radius adjusted beforehand. The bending radius changes along with the movement of the back roller, which is operated by the controlling wheel ( No.8 ), so the plate will be bended gradually. The upper roller becomes relaxed by the assistance of the winding handle ( No.5 ) after finishing bending, the handle sways ahead, the sleeve plate will be separated.

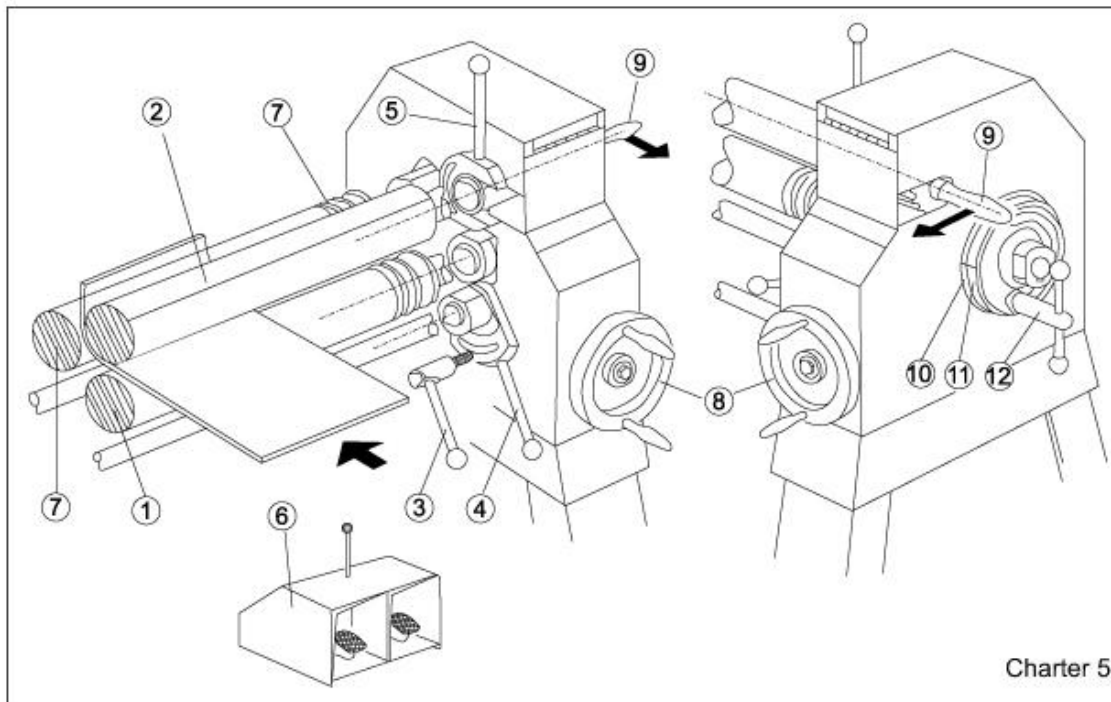
### Warning:

Please pay attention to the trough of the flange ( No.10 , No.11 ) when bending cylindraneously, please adjust accordingly.

When binding coniformly, the screw ( No.12 ) may become less crowded.

The back roller will slant and the screw will be adjusted and fixed again through the fix of the controlling wheel ( No.8 ).

When binding coniformly, the two troughs of the flanges should not be in line. ( contrary to the cylindraneous bending )

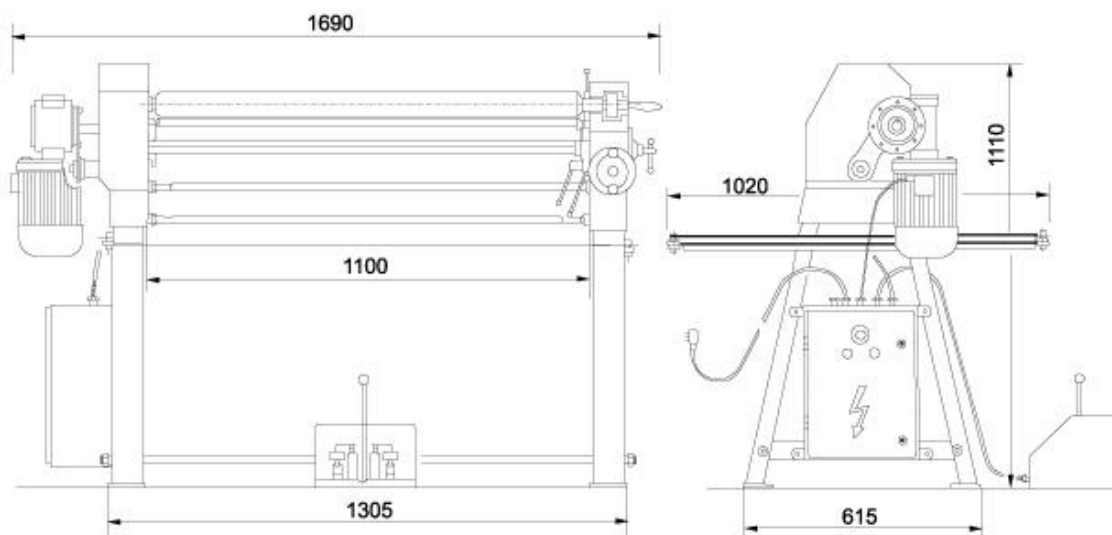


## F. Technical data

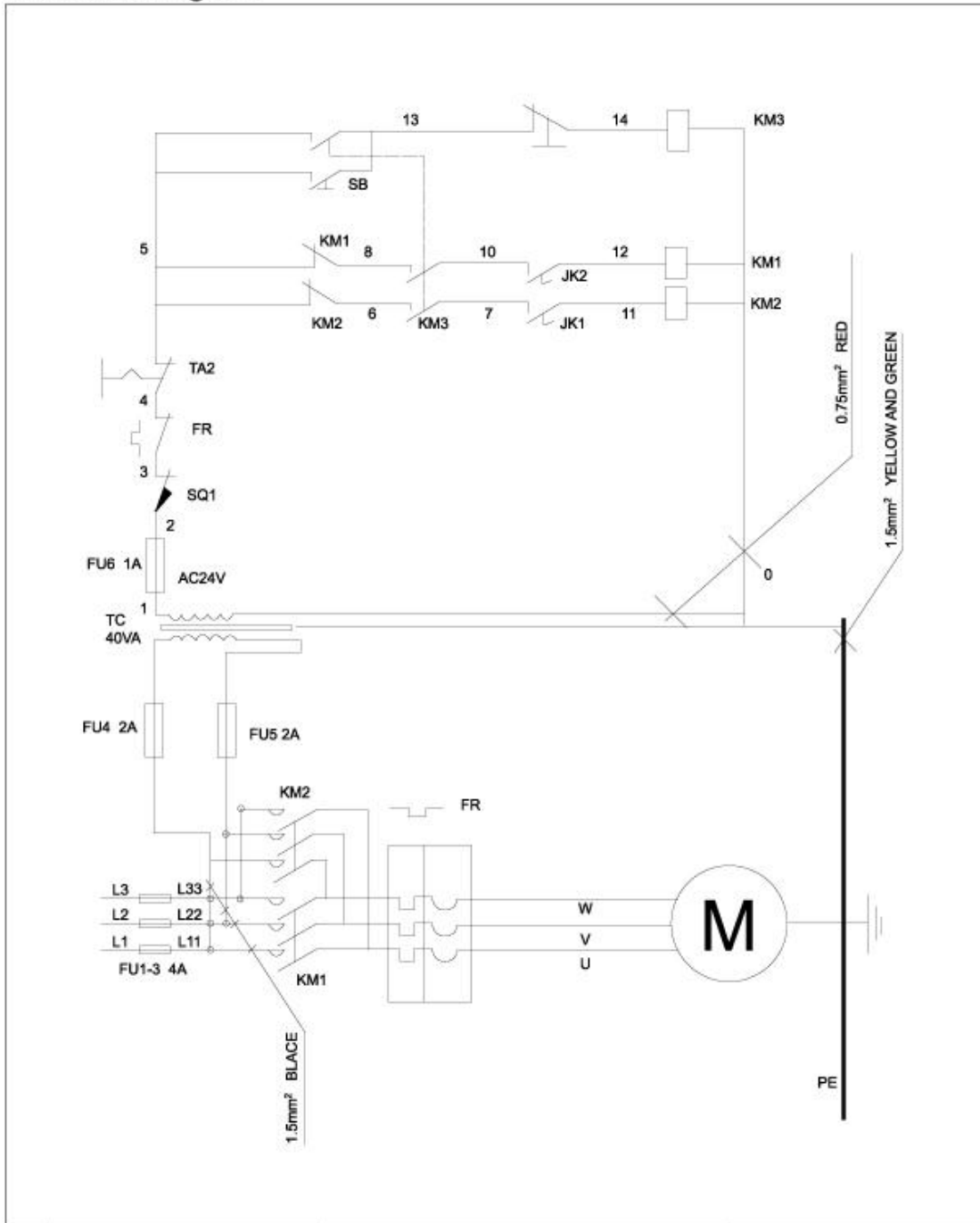
Rollers diameter	59.5mm
Biggest steel strength	1.5mm
Biggest steel width	1000mm
Minimum bending radius	35mm
Steel wire diameter	8-14mm
Working speed	4.9m/min
Motor power	0.75KW
rotate speed	1420U/min
Voltage supplied	380V
Current frequency	50HZ

### Dimension

-Length	1690mm
-Width	1020mm
-Height	1110mm
-Net weight	260kgs



### G. Circuit Diagram



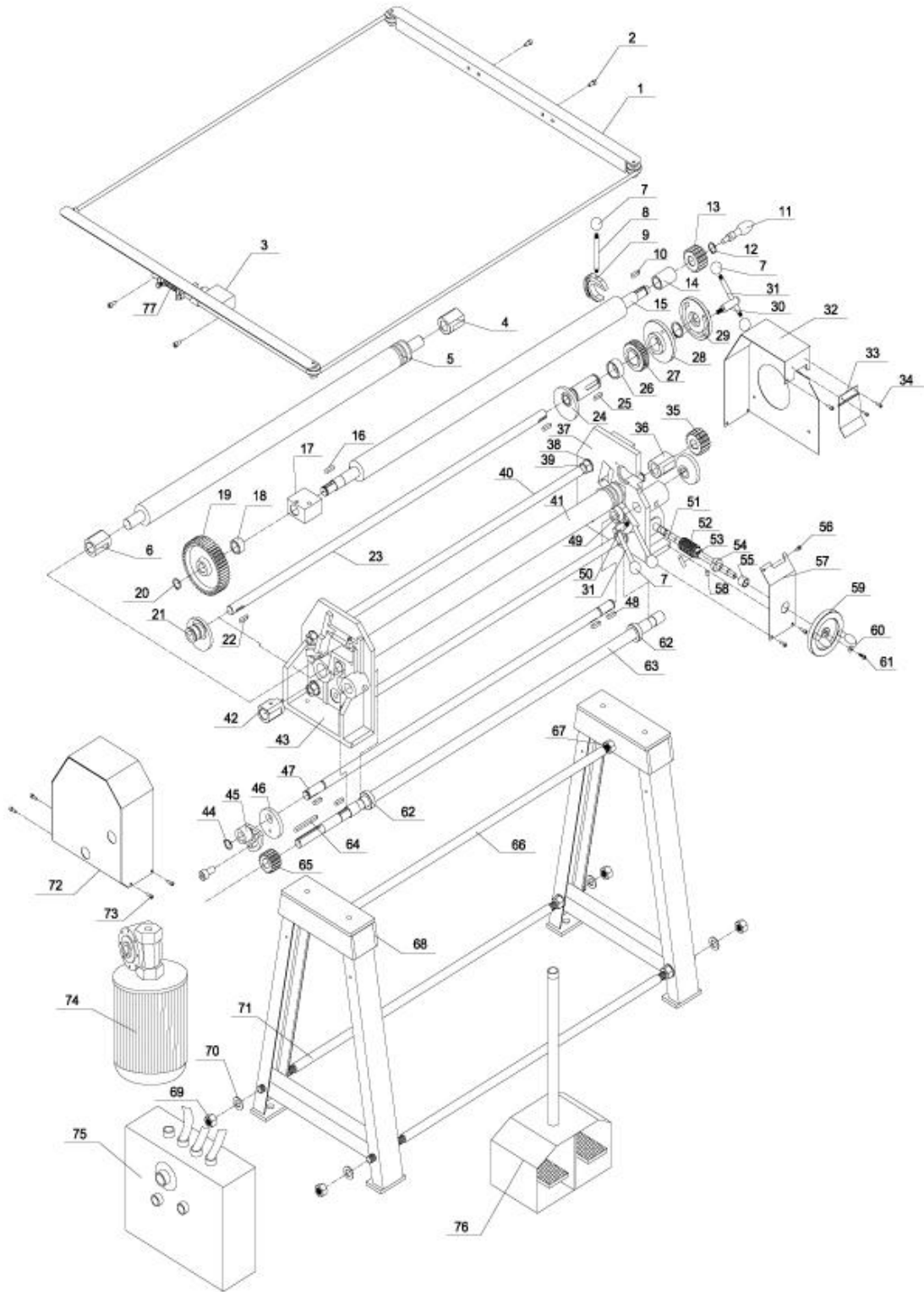
6		ESR 1020 × 2	Drawn
5			Checked
4			
3		Circuit diagram	Diagram
2			No. J1020-00
1			



## H. Parts List of ESR-1020X2

Part #	Description	Qty	Part #	Description	Qty
1	Guardrail	1	40	Fixed Shaft	3
2	Screw	4	41	Roller	1
3	Switch	1	42	Bushing	1
4	Bushing	1	43	Left Frame	1
5	Roller	1	44	Ring	1
6	Bushing	1	45	Eccentric Plate	1
7	Knob of Handle	5	46	Fixed Plate	1
8	Pole of Handle	1	47	Adjusting Shaft	1
9	Fixed block	1	48	Key	3
10	Key	1	49	Adjusting Plate	1
11	Handle	1	50	Fixed Screw Rod	1
12	Ring	1	51	Worm Shaft	1
13	Gear	1	52	Worm Rod	1
14	Bushing	1	53	Pin Shaft	1
15	Roller	1	54	Bushing	1
16	Key	1	55	Bushing	1
17	Block	1	56	Screw	6
18	Bushing	1	57	Stopping Block	1
19	Big Gear	1	58	Fixing Screw	1
20	Ring	1	59	Hand Wheel	1
21	Eccentric Plate	1	60	Washer	1
22	Key	1	61	Screw	1
23	Adjusting Shaft	1	62	Bushing	2
24	Eccentric Plate	1	63	Shaft	1
25	Key	1	64	Key	1
26	Bushing	1	65	Gear	1
27	Worm Wheel	1	66	Fixed Shaft	1
28	Fixed Plate	1	67	Bolt	4
29	Adjusting Plate	1	68	Stand	2
30	Fixed Screw Rod	1	69	Bolt	8
31	Pole of Handle	3	70	Washer	8
32	Protecting Cover	1	71	Supporting Shaft	2
33	Protecting Board	1	72	Left Protecting Cover	1
34	Screw	1	73	Screw	4
35	Gear	1	74	Motor	1
36	Bushing	1	75	Electric Box	1
37	Right Frame	1	76	Footable Control Box	1
38	Washer	12	77	Spring	1
39	Bolt	12			

# I. Exploded Drawing of ESR-1020 × 2



## **J. Packing declaration**

No.		Description	Quantity
1	Electril slip roll	Machine, type ESR-1020 × 2	1
2		Operating manual	1

**Note:** This manual is only for your reference. Owing to the continuous improvement of the machine, changes may be made at any time without obligation on notice.