

M576 1/2015

DRILLING & MILLING MACHINE

OPERATION MANUAL

HM-51

130

2014.09

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I SUMMARY

This machine tool with drilling and milling functions mainly used to metal materials and other materials processing, suit for machinery manufacturing, building decoration and mechanical repair, simplicity of operation and easy to use.

II USE AND MAINTENANCE

(Refer to chare 1.)

1.The user must read the Operation Manual carefully before operating, realize the structure, ability of every handle, the system of transmission and lubrication well.

2.Before operating, check the normal conditions of the column lock handle, the spindle sleeve and electric equipments. The ground line must be connect to the ground。

3.When the position of spindle box to the working table need to be adjusted, two clamping shaft ① locating on the right side of hoist-descend sliding must be lossed firstly, then turn the Hoist-Descend handle in front of machine, to hoist or descend the working table to the require position, finally clamp the clamping shaft ①.

4.The micro-feeding institute is applied to the machine, before using, please turn the locking bolt ③ in right side to make the handle body with micro-gear, then turn the wheel ④ in front of the head, the micro-feeding call be realized. The spindle can revolve for tapping, through the universal switch equipped on the left side of the head.

But if the power motor is single phase, such function can't be realized.

5.The handle body must be separated from micro-gear during drilling and tapping, when drilling and tapping finished, loosen the handle ⑤, the sleeve will reset auto-matically, the elastic torte can be adjusted after loosing the screw-locating in the bottom of Spindle Box and turning the spring to different position. The spindle sleeve clamping handle ⑥ should be clamped for milling To ob-tain the best effect ,please choose the 3-blade vertical milling tool, at the most; the working table must be hoisted to the nearest position to the spindle when the 2-blade milling tool is used.

6.The boring function can be realized after equipping relative accessories. It is better to apply to micro-feeding during milling and boring.

7.The spindle box can turn $\pm 90^\circ$ in vertical plane. For turning the spindle box, please firstly loosen the three locking nut connecting with spindle box, turn the spindle to the needed angle through turning micro-worm ⑧,finally please lock the nut.

The Gear box can turn $\pm 45^\circ$ in vertical plane.

8.The cross-slide of spindle box can be realized through the ram moving. for cross-sliding, please firstly loosen the two clamping bolts ⑨ locating on the right side of the ram, turn the gear shaft⑩,to move the Tam and spindle box, and tight the two clamping bolts.

9.The spindle box can turn 360° around the column in the horizontal plan to realize this, please firstly loosen the 4pcs of clamping nuts(11)under the ram, turn the ram to the suitable position, finally tight the 4 pcs of clamping nuts.

10.The spindle's turn and revolve can be realized by the switch located in right side of Hoist—descend sliding.

11.The Horizontal milling can be realized by turn the vertical spindle box 90° . The spindle box must be turn 180° when the Tool shaft and jack applied for assistance.

12. If the machine doesn't work well or have irregular noise, please immediately shut off power.

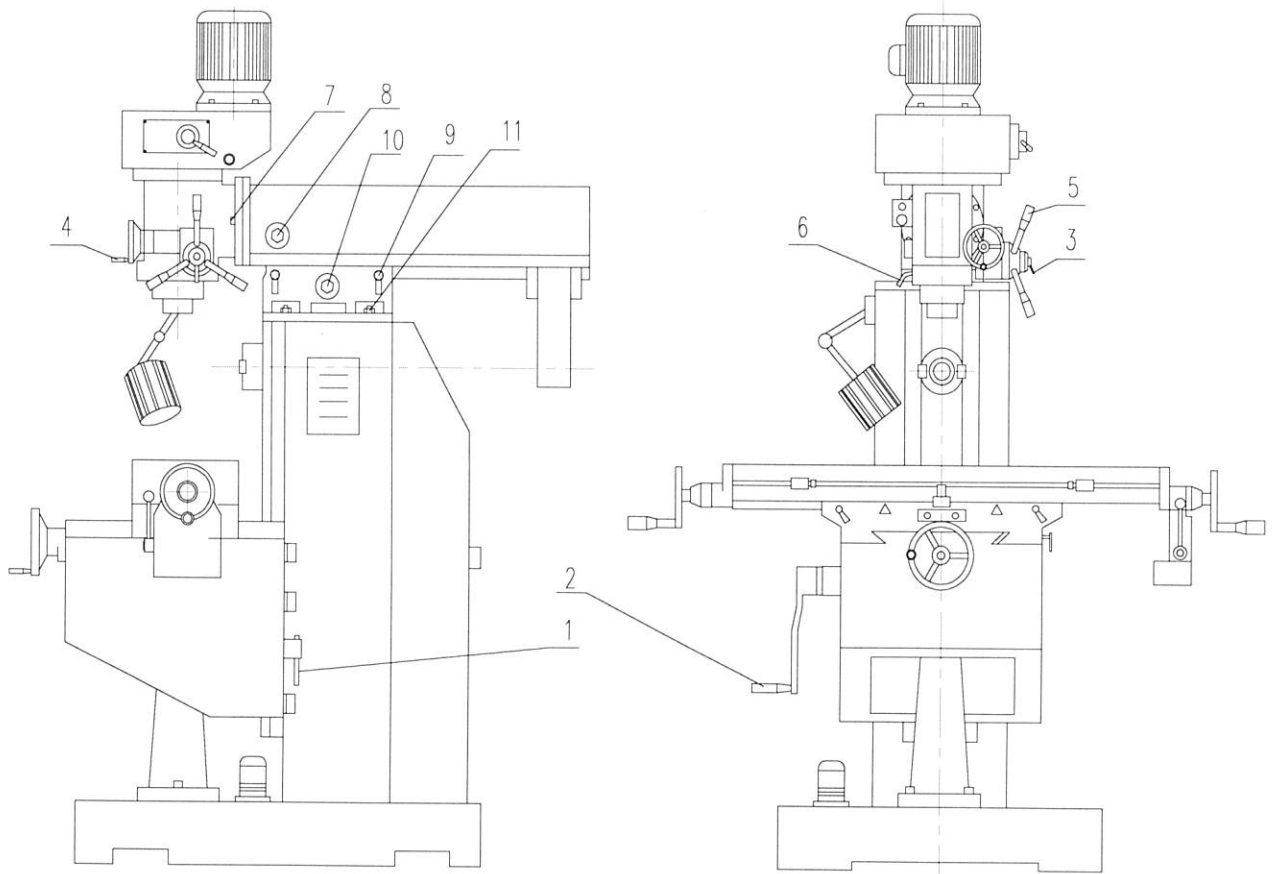


Chart 1

III MAIN PARAM

Item	Model	7550	7550W	7550CW
	Ability			
1	Max.drilling dia.	30	30	30
2	Max.horizontal Milling dia	80	80	80
3	Max.vertical milling dia	25	25	25
4	Max.tapping dia.	M16	M16	M16
5	Max.boring dia.	100	100	100
6	Spindle taper	ISO30	ISO30	ISO30
7	Spindle speed number	9	9 / 9	2 / 9
8	Spindle speed range	220-2400RPM	220-2400RPM 60-1350 RPM	80-345; 325-1600RPM 60-1350 RPM
9	Distance between Spindle and surface of column	200-500 mm	200-500 mm	200-500 mm
10	Distance between spindle and table	100-390 mm	100-390 mm	100-390 mm
11	Distance between the axis of spindle and table		0-300mm	0-300mm
12	Spindle travel	120 mm	120 mm	120 mm
13	Table size	1000X240 mm	1000X240 mm	1000X240 mm
14	Table travel	500X180 mm	500X180 mm	500X180 mm
15	Motor	YL90L-4 1.5KW.240V.1400r/min	YL90L-4 1.5KW.240V.1400r/min YL90L-4 1.5KW.240V.1400r/min	1TL0001-0ED4 1.5KW 220V 50HZ YL90L-4 50HZ 1.5KW.220V.1400r/min
16	Overall size	1250X1380X2080 mm	1380X1380X2080 mm	1380X1380X2080 mm
	NW	770kg	970kg	970kg

IV THE SYSTEM OF TRANSMISSION AND CHANGED SPEED

1. The transmission power

A. 7550 and 7550w series machine tool power transmission from the motor through a triangle belt transmission to the spindle.

B.7550CW series machine spindle power transmission is from the double speed motor through the gear transmission to the spindle, horizontal axis and 7550W the same.

2. Vertical axis: when the change in speed of spindle box, opens on the sides of the cover, unscrew fastening bolt movement, moving the handle is loosened triangle, change with position, the motor and belt assembly, and then tighten the fastening bolt.

Horizontal axis: when the change in speed, open column cover, first released in vertical column nut, then loosens the adjusting nut, the belt loosening or tightening, adjust the position of the belt of the desired final tightening nut.

3. Gear, by changing the gear on the shaft and gear meshing position to realize, variable speed, cut off the power supply first, and then change. The handle to the position(A of B,C or D)you want.

4.H / V Drilling and milling machine power is transmitted from motor to spindle through V—belt and changed speed.

NOTICE: Stop motor before changing speed!

V THE LUBRICATION OF MACHINE AND ROLLING BEARING

1.Each rolling bearing to be lubricated with lubricating fat On time(prefer t0 chart-2).

2. Spindle, sleeve, column, table etc, should be lubricated at the right moment.

VI ELECTRIC SYSTEM

1.The electrical control system to be equipped in the left-side machine head . the control electrical system of horizontal spindle to be equipped under the right-front. Electrical circuit adopt the advanced international component to make up, which make the machine easy to operate and safe,

VII TRANSPORT AND ATTENTION

1. While transporting machine, must be careful to carry and put down.
2. In one year, well make promise to provide after sales service.
3. Before Use the machine, the power feed the spindle's running and the coolant's running must be the same direction. as the label . Otherwise two phase of power cord must be exchanged . (Power feed and coolant system is optional accessories)

VIII SIMPLE MALFUNCTION & OBVIATION

1. If the motor does not turn, please inspect it is right to connect wire or check electrical source.
2. If the radial run out of spindle is big with noise and heat, please inspect whether spindle is too loose, please spindle the nut on the spindle assembly to be fittest.
3. When the machine wobble. please check the motor mount and lever lock nut screw, machine head support on the spindle, if loosing, please adjust and lock.

4. It is difficult for the spindle to rise, fall or not re-placing, please inspect whether there is scrap iron and other. something in the connection between spindle sleeve and gear shaft and fatigue of spindle, If finding them, pls clean them and apply oil and adjust spring to fittest.

5. If the knee table slide carriage does not rise steadily with noise, the table is steady, pls confirm. either wedge ship loose or not ,and clean scrap iron. add oil adjust wedge ship to fittest.

6. If there is noise in gear box, please stop machine immediately to conform the position you require, then check that the on meet standard.

7. Prohibited maintaining the machine with electric.

NOTICE

I: The spindle box that transmission by the belt can be survived at 90° (by gear $\pm 45^\circ$). when operate, pls loose the three retaining nut and pay attention these nuts need only 1 pitch then swivel screw lever by socket. headsew wrench(s21-24)to make the spindle box swivel to the place required(clockwise turn the nut, the spindle box will counter clockwise turn, or otherwise),while turning pay attention to the following item:

i: While the spindle box turns from horizontal position to vertical position pls help push the upper of spindle box find gently twitter it.

ii: While the spindle box turn from vertical position to horizontal position or clinled position,pls push the upper of spindle box with hand and twitter it gently.

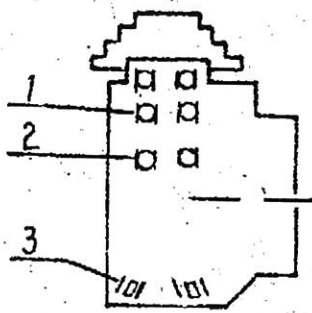
II: The rotary table (optional)can surivle at 45° when operate, first loose two screw of back way cover and the way cover. Then loose the four n1Jt. turn the table to the direction you wallt.

III: Adjust the perpendicular. between spindle and table gage magtietize on end face of spindle. Tracing pin turn 360° about dia $\phi 250-300\text{mm}$ Oil the surface of the table. This is perpendiCtllar between spindle and table if measuring range is vflriable between 0 and 0.02mm.

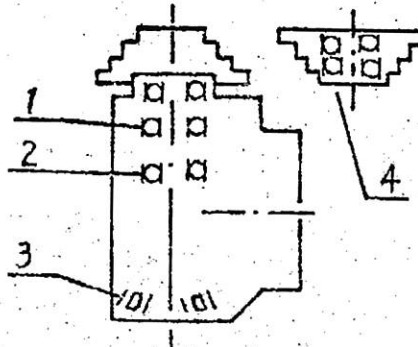
ROLLING BEARING

Item	Location points	Bearing	Model	Quantity			
				7550	7550B	7550C	7550W 7550W(B) 7550CW
1	Spindle & belt pulley	Single dustdefence radial ball bearing	60109/p6	2	2	2	2
2	Spindle sleeve	Single dustdefence radial ball bearing	60109/p6	1	1	1	1
3	Spindle sleeve	Single tapered roller bearing	2007110/p6	1	1	1	1
4	Middle wheel	Single dustdefence radial ball bearing	60103		2		2 4(B) 2
5	Spindle	single tapered roller bearings	2007111/p6				1
6	Spindle	single tapered roller bearings	7308E/p6				1
7	wheel shaft	Single dustdefence radial ball bearing	60105				2
8	I, I, III	Single dustdefence radial ball bearing	60204/p6			6	6

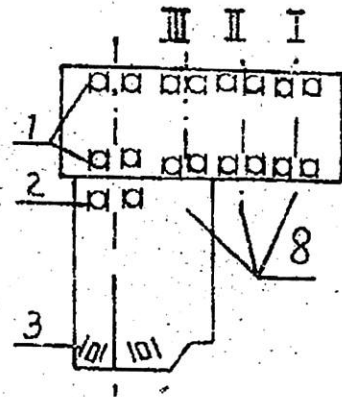
Rolling bearing position



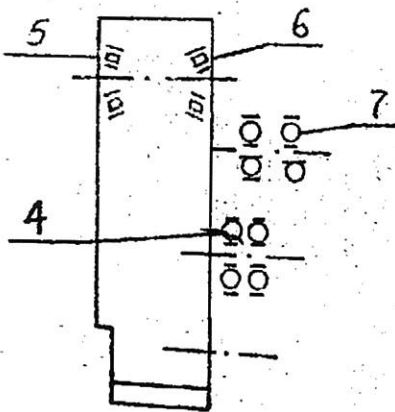
No. 2a



No. 2b



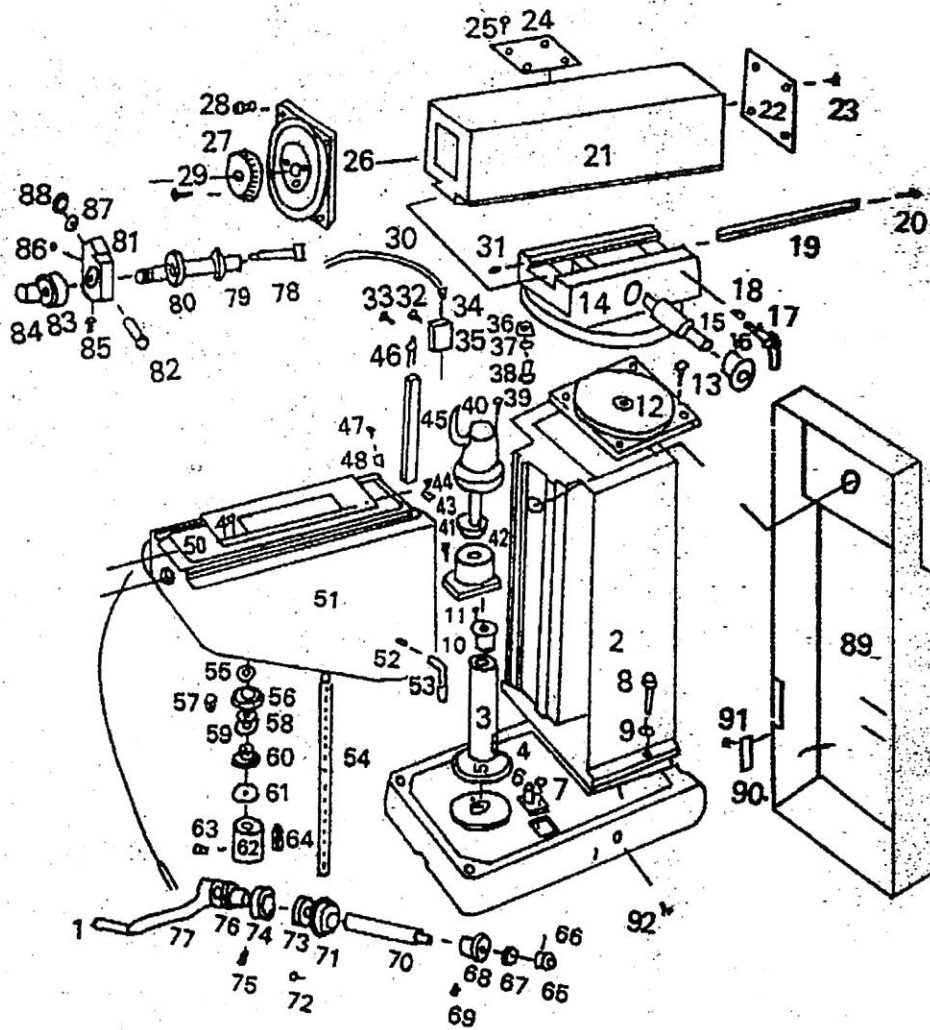
No. 2c



No. 2d

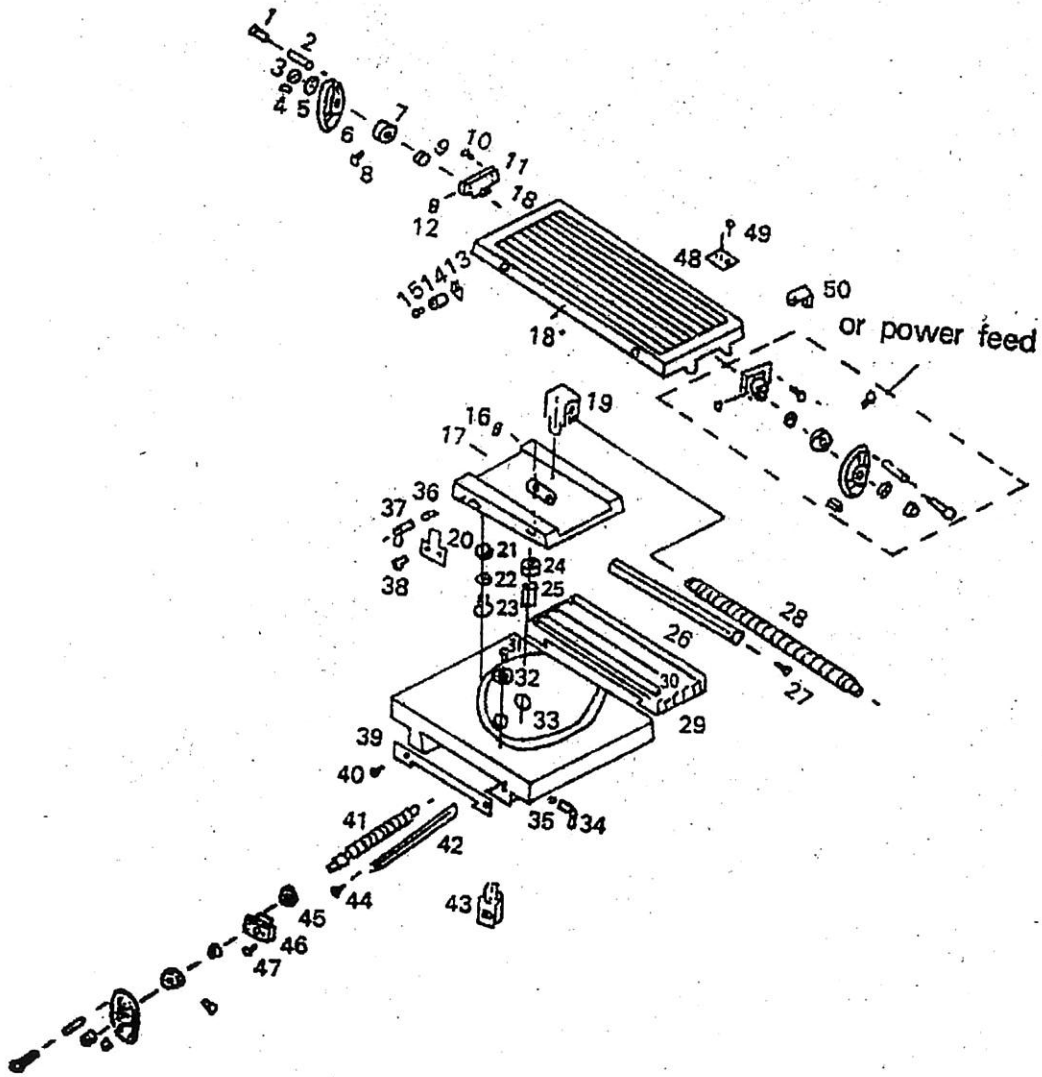
Chart 2

PARTS DIVISION AND PARTS LIST.
A: COLUMN PART

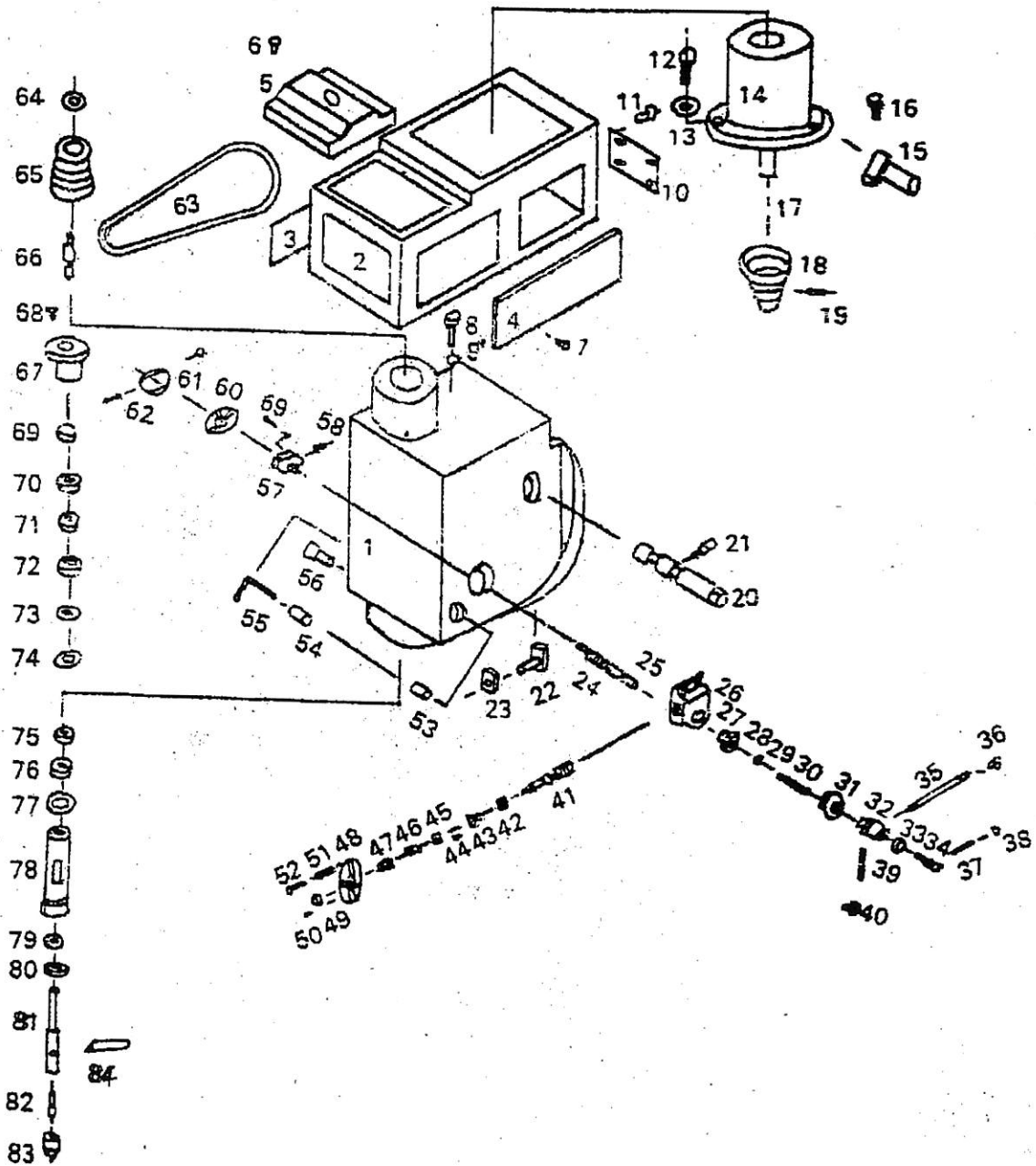


(optional accessory: coating system)

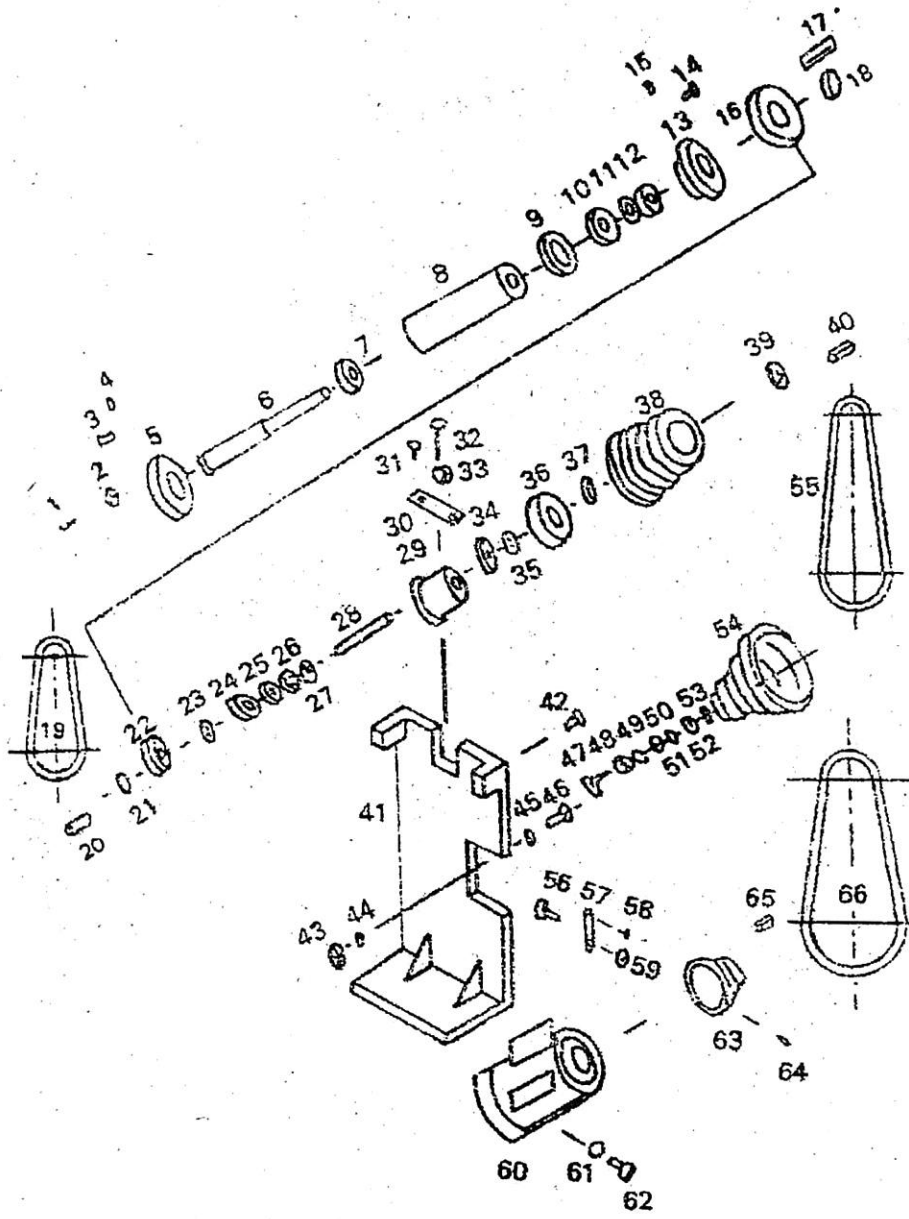
B: Rotary table (optional)



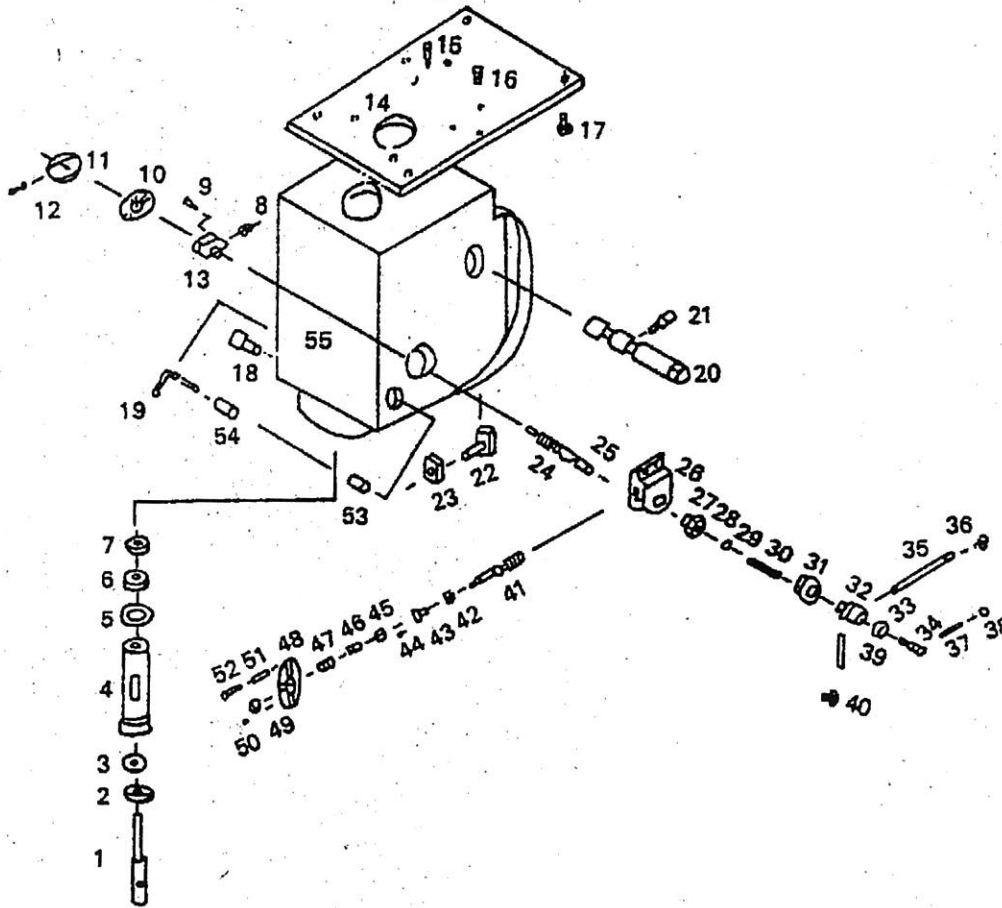
C: HEAD PART



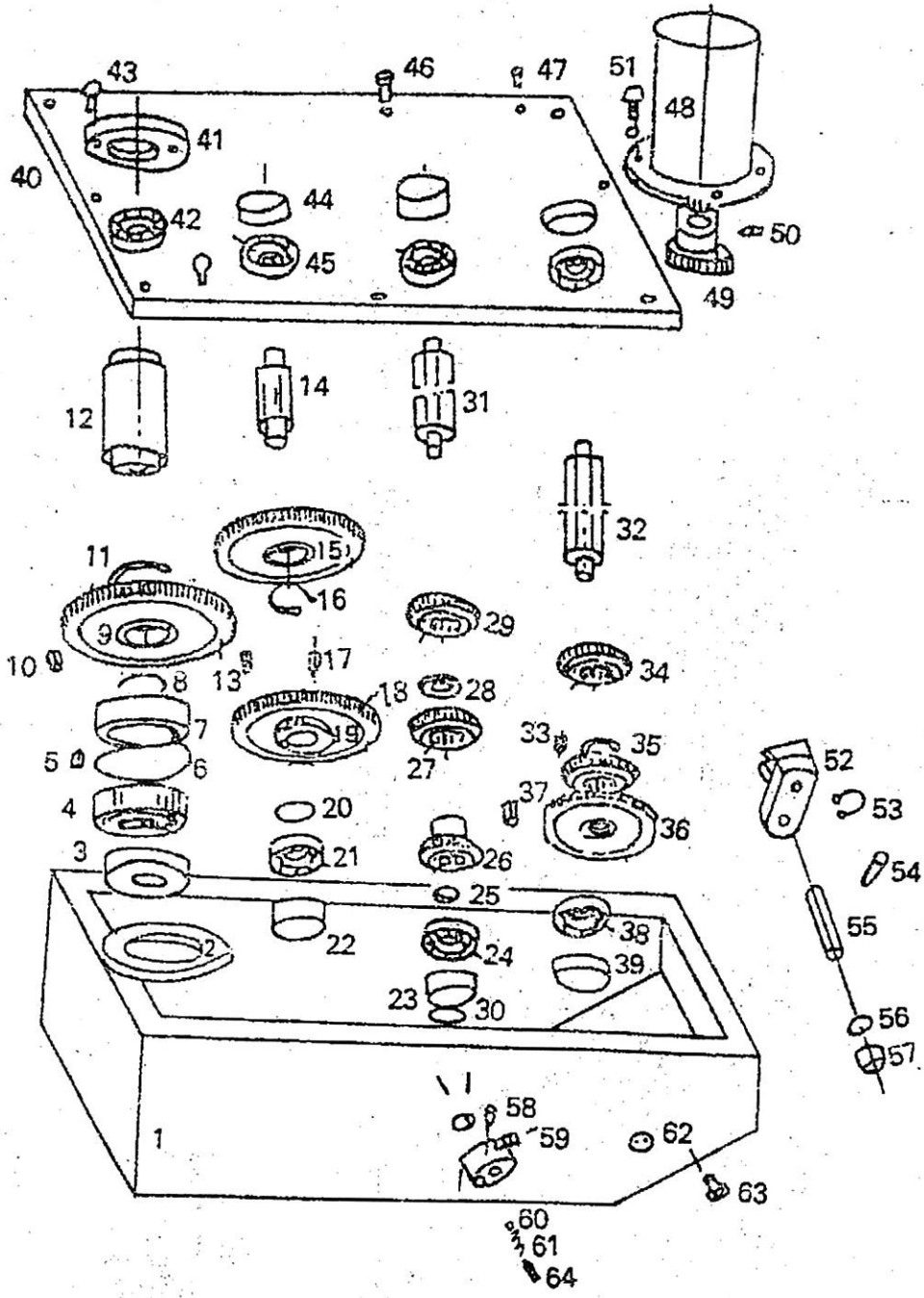
D: HORIZONTAL SOINDLE PART



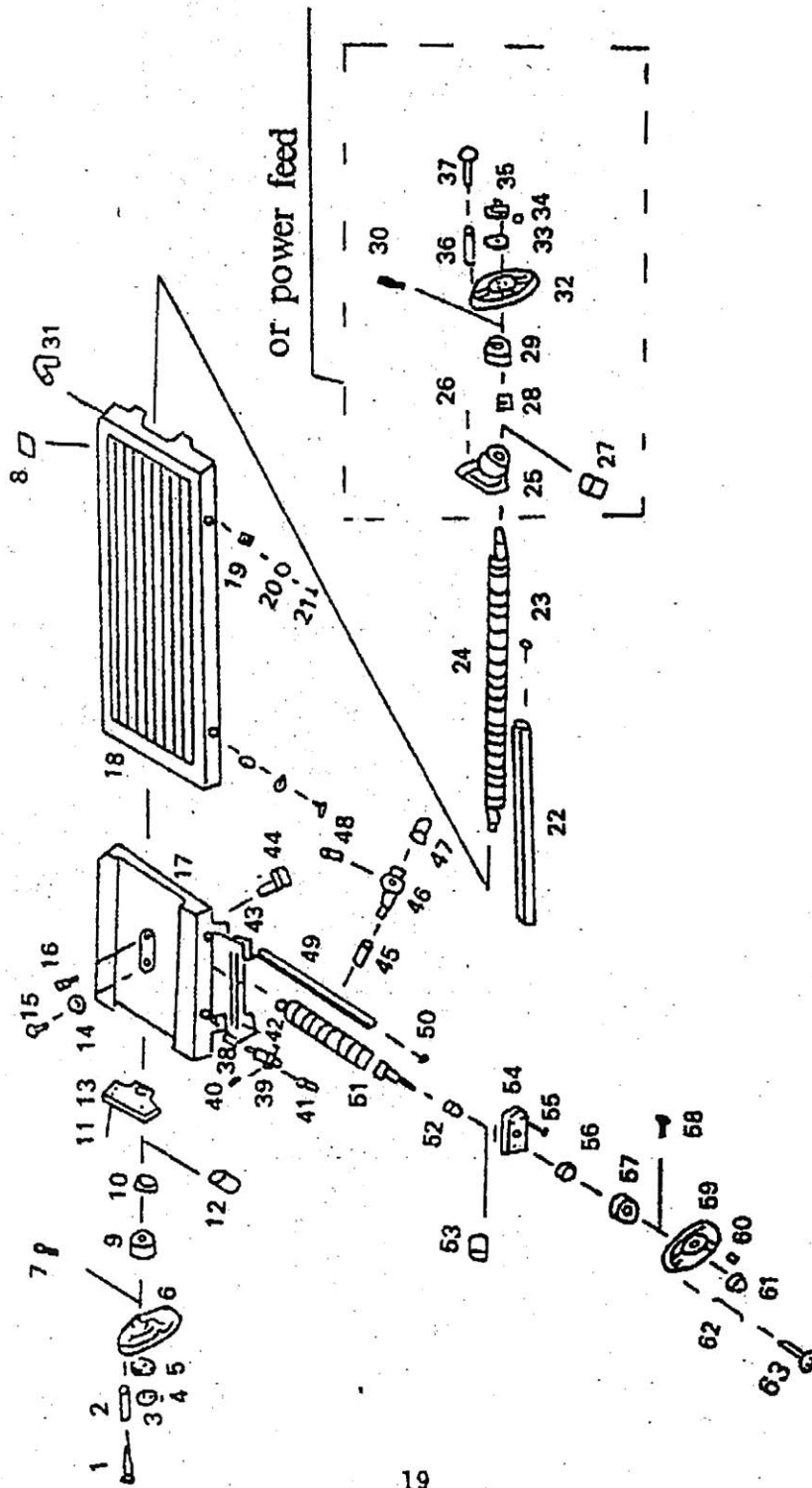
E: Gear box



F: Gear head



G: Table



NUMBERP	NAME	QUASTITY
A1	BASE	1
2	COLUMN	1
3	ELEVATING SCREW HOUSING	1
4	SCREW	4
5	WASHER	4
6	CONNECT TUBE	1
7	SCREW	2
8	BOLT	6
9	WASHER	6
10	COLLAR	1
11	SCREW	4
12	HOLD SUPPORT	1
13	SCREW	6
14	AROVND BRACKET	1
15	PEED SHAFT	1
16	COLLAR	1
17	CLAMP BOLT	2
18	CLAMP BLOCK	2
19	BEVEL IRON	1
20	SCREW	1
21	OVERARM	1
22	COVER	1
23	SCREW	4
24	COVER	1
25	SCREW	4
26	HOLD BRACKET	1
27	GEAR	1
28	SCREW	4
29	BOLT	2
30	NOZZLE	1
31	OIL CUP	2

NUMBERP	NAME	QUASTITY
32	SCREW	2
33	BOLT	1
34	CONNECT TUBE	1
35	HOLD BRACKET	1
36	NUT	4
37	WASHER	4
38	T BOLT	4
39	BOLT	4
40	ELECTRIC PUMP	1
41	BOLT	4
42	SUPPORT	1
43	DUST COVER	1
44	SCREW	2
45	BEVEL IRON	1
46	ADJUST SCREW	1
47	SCREW	2
48	WIPER PLATE	1
49	WIPER PLATE	1
50	WIPER PLATE	2
51	KNEE	1
52	CLAMP BLOCK	2
53	CLAMP BOLT	2
54	HOIST DESCEND LEAD SCREW	1
55	CIRCULAR NUT	2
56	CONICAL GEAR	1
57	KEY	1
58	BALL BEARING	1
59	ADJUST WASHER	1
60	COLLAR	1
61	BALL BEARING	1
62	NUT	1

NUMBERP	NAME	QUASTITY
63	SCREW	1
64	KEY	1
65	CONECAL GEAR	1
66	CONICAL PIN	1
67	WASHER	1
68	COLLAR	1
69	SCREW	1
70	SHAFT	1
71	COLLAR	1
72	SCREW	4
73	BALL BEARINGP	1
74	SCALE RING	1
75	SCREW	1
76	COLLAR	1
77	HANDLE	1
78	LIFT BAR	1
79	TOOLHOLDER	2
80	CUTTER BAR COLLAR	10
81	SUPPORT	1
82	BOLT	1
83	COLLAR	1
84	NUT	1
85	SCREW	1
86	OIL CUP	1
87	WASHER	1
88	NUT	1
89	BEHIND COVER	1
90	HINGE	2
91	SCREW	16
92	SCREW	1

NO.	NAME	QUTY
B1	HANDLE	3
2	HANDLE COLLAR	3
3	NUT	3
4	KEY	3
5	WASHER	3
6	HAND WHEEL	3
7	SCALE RING	3
8	SCREW	3
9	BEARING	3
10	SCREW	10
11	SUPPORT	2
12	OIL CUP	3
13	SCREW BRACKET	2
14	DOG	2
15	SCREW	2
16	OIL CUP	2
17	ROTARY BRACKET	1
18	TABLE	1
19	NUT	1
20	LIMIT ASSEMBLY	1
21	NUT	4
22	WASHER	4
23	T-BOLT	4
24	SHAFT MOUNT	1
25	SHAFT	1
26	LONG BEVEL IRON	1
27	ADJUST SCREW	1
28	LONGITUD INAL LEAD SCREW	1
29	WAY COVER	1

NO.	NAME	QUTY
30	SCREW	2
31	SCREW	1
32	WASHER	1
33	SADDLE	1
34	SCREW	2
35	CLAMP BLOCK	2
36	CLAMP BLOCK	2
37	SCREW	2
38	SCREW	2
39	WIPER PLATE	1
40	SCREW	3
41	CROSSWISE LEAD SCREW	1
42	SHORT BEVEL IRON	1
43	NUT	1
44	ADJUST SCREW	1
45	BEARING	2
46	SUPPOT	1
47	SCREW	4
48	OIL COVER	1
49	SCREW	2
50	CONNECT TUBE	1

NUMBERP	NAME	QUASTITY
C1	SPINDLE BOX	1
2	MOTOR BASE	1
3	LEFT COVER	1
4	WRIGHT COVER	1
5	PULLEY COVER	1
6	SCREW	4
7	SCREW	4
8	BOLT	6
9	WASHER	6
10	COVER	1
11	SCREW	4
12	BOLT	2
13	WASHER	1
14	MOTOR	1
15	HANDLE	1
16	BOLT	2
17	KEY	1
18	MOTOR PULLEY	1
19	HEADLESS SEAT SCREW	1
20	WORM GEAR	1
21	PIN	1
22	T BOLT	3
23	NUT	3
24	FEED SHAFT	1
25	KEY	1
26	WORM BOX	1
27	SCREW	3
28	BEVEL GEAR	1
29	RETAINING RING	1
30	SPRING	1
31	SCALE RING	1

NUMBERP	NAME	QUASTITY
32	HANDLE BRACKET	1
33	COVER	1
34	BOLT	1
35	HANDLE BAR	3
36	KNOB	3
37	HANDLE	1
38	HANDLE COLLAR	1
39	SCALE	1
40	RIVET	2
41	WORM GEAR	1
42	BALL BEARING	1
43	SMALL COVER	1
44	SCREW	3
45	BALL BEARING	1
46	COLLAR	1
47	SCALE RING	1
48	HANDLE WHEEL	1
49	HANDLE COLLAR	1
50	HANDLE	1
51	NUT	1
52	KEY	1
53	CLAMP BLOCK	1
54	CLAMP BLOCK	1
55	CLAMP HANDLE	1
56	SCREW	1
57	SPRING SEAT	1
58	SCREW	1
59	SCREW	1
60	SPRING PLATE	1
61	SPRING CAP	1
62	SCREW	2

NUMBERP	NAME	QUASTITY
63	V BELT	1
64	NUT	1
65	SPINDLE PULLEY	1
66	SPRING SLEEVE	1
67	COLLAR	1
68	SCREW	3
69	RETAINING RING	1
70	BALL BEARING	1
71	COLLAR	1
72	BALL BEARING	1
73	RETAINING RING	1
74	RETAINING RING	1
75	PULLEY NUT	1
76	WASHER	1
77	BALL BEARING	1
78	SLEEVE	1
79	BALL BEARING	1
80	BUST COVER	1
81	SPINDLE	1
82	SPINDLE BAR	1
83	DRILL CHUCK	1
84	WEDGE SHIFTER	1

NUMBERP	NAME	QUASTITY
D1	SCREW	4
2	KEY	2.
3	SCREW	4
4	OIL CUP	1
5	COVER	1
6	SPINDLE	1
7	BALL BEARING	1
8	COLLAR	1
9	BALL BEARING	1
10	WASHER	1
11	WASHER	1
12	NUT	1.
13	COVER	1
14	SCREW	4
15	OIL CUP	1
16	SPINDLE PULLEY	2
17	KEY	1
18	RETAINING RING	1
19	V BELT	2
20	KEY	1
21	RETAINING RING	1
22	WHEEL	1
23	BALL BEARING	1
24	BALL BEARING	1
25	BALL BEARING	1
26	COLLAR	1
27	BALL BEARING	1
28	SMALL SHAFT	1
29	COLLAR	1
30	SUPPORT	1
31	SCREW	2

NUMBERP	NAME	QUASTITY
32	BOLT	1
33	NUT	1
34	RETAINING RING	1
35	RETAINING RING	1
36	NUT	2
37	RETAINING RING	1
38	PULLEY	1
39	RETAINING RING	1
40	KEY	1
41	MOTOR BASE	1
42	SCREW	6
43	NUT	1
44	WASHER	1
45	WASHER	1
46	SMALL SHAFT	1
47	CONNECT	1
48	REAINING RING	1
49	BALL BEARING	1
50	COLLAR	1
51	BALL BEARING	1
52	RETAINING RING	1
53	RETAINING RING	1
54	PULLEY	1
55	V-BELT	1
56	ADJUST SCREW	1
57	SUPPORT	1
58	SCREW	1
59	NUT	1
60	MOTOR	1
61	WASHER	4
62	BOLT	4

NUMBERP	NAME	QUASTITY
63	MOTOR WHEEL	1
64	SCREW	1
65	KEY	1
66	V-BELT	1

E: GEAR BOX

NO.	NAME	QUTY
E1	SPINDLE	1
2	DUST COVER	1
3	BEARING	1
4	SLEEVE	1
5	BEARING	1
6	WASHER	1
7	NUT	1
8	SCREW	1
9	SCREW	1
10	SPRING PLATE	1
11	SPRING CAP	1
12	SCREW	1
13	SPRING SEAT	1
14	BASE	1
15	PIN	2
16	SCREW	6
17	SCREW	6
18	BOLT	1
19	CLAMP HANDLE	1
20	WORM GEAR	1
21	SCREW	1
22	T-BOLT	3
23	NUT	3
24	FEED SHAFT	1
25	KEY	1
26	WORM BOX	1
27	SCREW	3
28	BEVEL GEAR	1
29	CRESCENT RING	1
30	SPRING	1

NO.	NAME	QUTY
31	SCALE RING	1
32	HANDLE BRACKET	1
33	COVER	1
34	BOLT	1
35	HANDLE BAR	3
36	KNOB	3
37	HANDLE	1
38	HANDLE COLLAR	1
39	SCALE	1
40	RIVET	2
41	WORM GEAR	1
42	BEARING	1
43	SMALL COVER	1
44	SCREW	3
45	BEARING	1
46	COLLAR	1
47	SCALE RING	1
48	HANDLE WHEEL	1
49	HANDLE	1
50	HANDLE	1
51	NUT	1
52	KEY	1
53	CLAMP BLOCK	1
54	CLAMP HANDLE	1
55	BOX	1

GEAR HEAD

NO.	NAME	QUTY
F1	BOX	1
2	COLLAR	1
3	OIL SEAL	1
4	BALL BEARING	1
5	SCREW	1
6	O—RING	1
7	COLLAR	1
8	RETAINING RING	1
9	GEAR	1
10	KEY	1
11	RETAINING RING	1
12	SHAFT	1
13	KEY	1
14	DRIVING SHAFT	1
15	GEAR	1
16	RETAINING RING	1
17	SCREW	1
18	GEAR	1
19	GEAR	1
20	O—RING	2
21	BALL BEARING	1
22	COLLAR	1
23	COLLAR	1
24	BALL BEARING	1
25	RETAINING RING	1
26	GEAR	1
27	GEAR	1
28	COLLAR	1
29	GEAR	1
30	O—RING	1

NO.	NAME	QUTY
31	DRIVING SHAFT	1
32	DRIVING SHAFT	1
33	SCREW	1
34	GEAR	1
35	GEAR	1
36	GEAR	1
37	KEY	1
38	BEARING	1
39	COLLAR	1
40	BOX COVER	1
41	COLLAR	1
42	BEARING	1
43	SCREW	4
44	COLLAR	3
45	BEARING	3
46	SCREW	6
47	PIN	2
48	MOTOR	1
49	GEAR	1
50	SCREW	1
51	BOLT	4
52	LIFTFORK	2
53	CRESCENT RING	2
54	PIN	2
55	SHAFT	2
56	O-RING	2
57	COLLAR	2
58	PIN	2
59	HANDLE	2
60	BALL	2
61	SPRING	1
62	OIL POSITION	1
63	BOLT	1
64	SCREW	2

NO.	NAME	QUTY
G1	HANDLE	1
2	HANDLE COLLAR	1
3	NUT	1
4	KEY	1
5	WASHER	1
6	HAND WHEEL	1
7	SCREW	1
8	OIL COVER	1
9	SCALE RING	1
10	BALL BEARING	1
11	SCREW	1
12	OIL CUP	1
13	SUPPORT	1
14	WASHER	1
15	SCREW	1
16	NUT	1
17	SADDLE	1
18	TABLE	1
19	SCREW BRACKET	2
20	DOG	2
21	SCREW	2
22	LONG BEVEL IRON	1
23	ADJUST SCREW	1
24	BALL SCREW	1
25	SUPPORT	1
26	SCREW	4
27	OIL CUP	1
28	BALL BEARING	1
29	SCALE RING	1

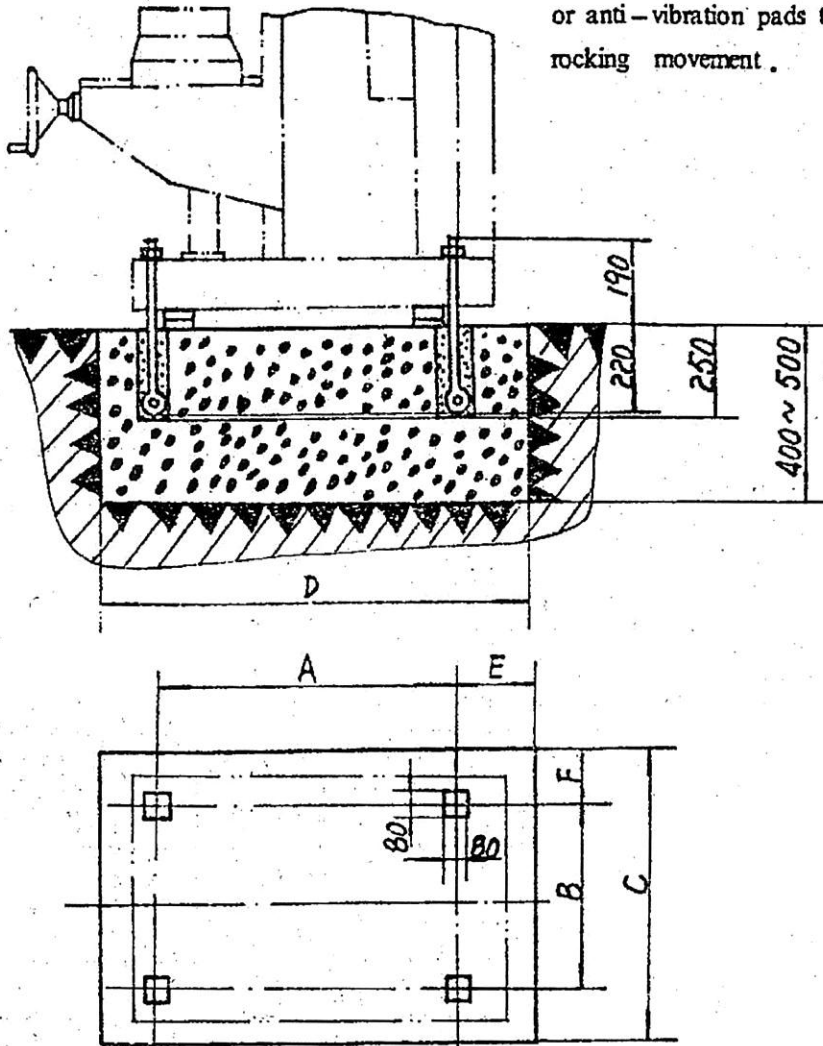
NO.	NAME	QTY
30	SCREW	1
G31	CONNECT TUBE	1
32	HAND WHEEL	1
33	WASHER	1
34	KEY	1
35	NUT	1
36	HADLE COLLAR	1
37	HANDLE	2
38	CLAMP BLOCK	2
39	PIN	2
40	SCREW	2
41	HAND BOARD	2
42	SCREW	3
43	WIPER PLATE	2
44	NUT	1
45	CLAMP BLOCK	2
46	SCREW	2
47	HAMDBOARD	2
48	PIN	2
49	BEVEL IRON	1
50	ADJUST SCREW	1
51	BALL SCREW	1
52	BALL BEARING	1
53	OIL CUP	1
54	SUPPORT	1
55	SCREW	4
56	BALL BEARING	1
57	SCALE RING	1
58	SCREW	1

NO.	NAME	QUTY
59	HANDLE WHEEL	1
60	KEY	1
61	NUT	1
62	HANDLE COLLAR	1
63	HANDLE BAR	1

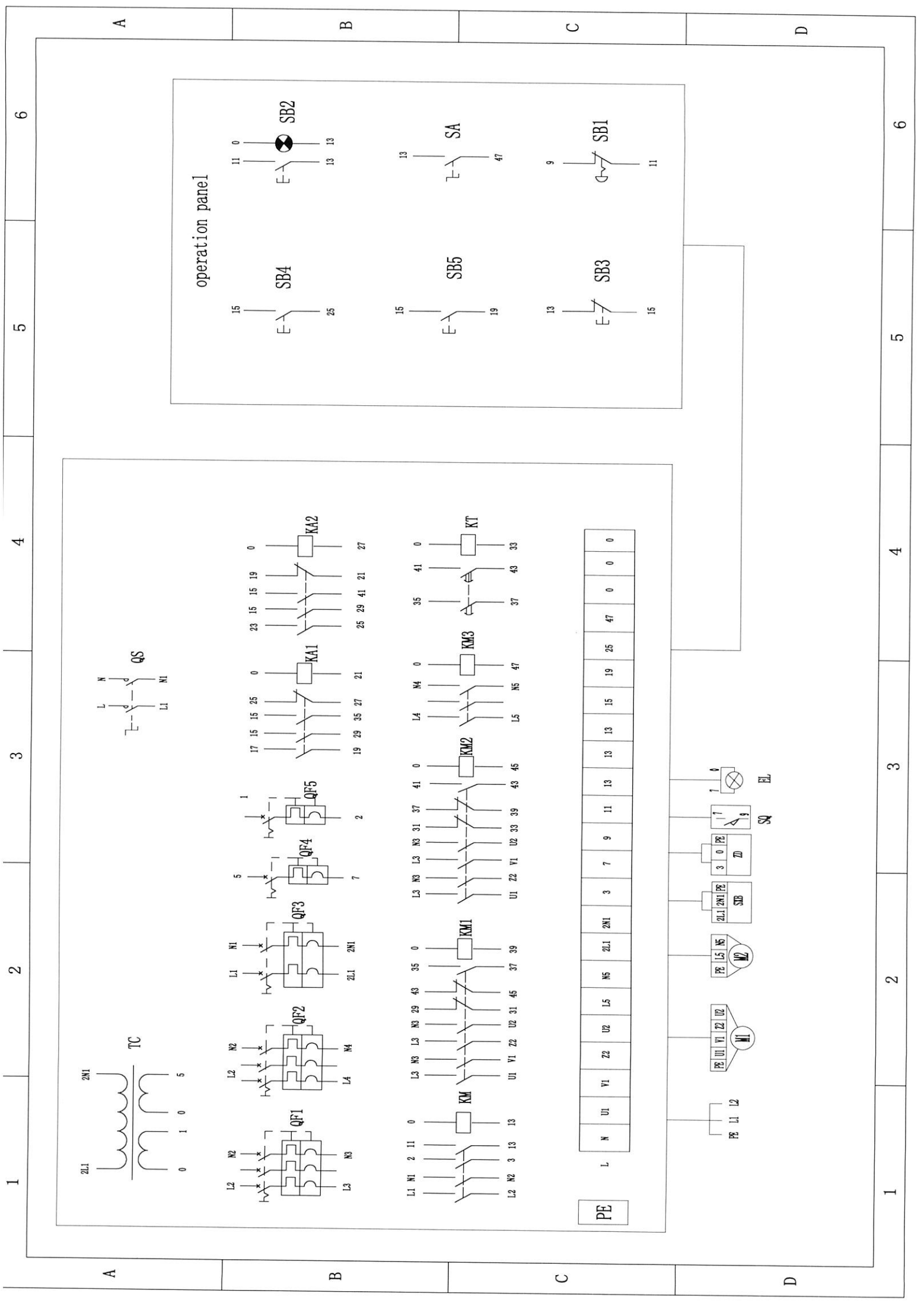
Installation

FOUNDAFION PLAN

Ideally this machine should be bolted to a concrete foundation. The machine should be placed on a solid level floor or anti-vibration pads to prevent any rocking movement.



MODEL	A	B	C	D	E	F
ZX7550	678	445	745	1110	220	150
ZX7550W ZX7550CW	835	450	750	1275	220	150



1 2 3 4 5 6

1 2 3 4 5 6

A

B

C

D

operation panel

ZX7550 Components

No.	Code	Name	Models and specifications	Number
1	QS	Combination Switch	HZ12-25/08 25A	1
2	QF1	Circuit breaker	DZ108 8-12.5A	1
3	QF2	Circuit breaker	DZ108 0.4-0.63A	1
4	QF3	Circuit breaker	DZ47-63/2P 6A	1
5	QF4	Circuit breaker	DZ47-63/1P 6A	1
6	QF5	Circuit breaker	DZ47-63/1P 3A	1
7	KM KM1 KM2	AC contactor	CJX1-12/22 AC24V 50Hz	3
8	KM3	AC contactor	CJX1-9/22 AC24V 50Hz	1
9	TC	Control transformer	JBK3-300VA AC240V/110V 24V	1
10	SXB	The DRO	SDS 2MS-B AC100-240V 50-60Hz	1
11	ZD	Walk the knife	AL-310S AC110V 50-60Hz	1
12	EL	Work Light	JC34A AC24V 50w	1
13	KA1 KA2	Relays	HH54P AC24V 50Hz	2
14	KT	Time Relay	ST3PA-A AC24V 50Hz	1
15	SB1	Emergency stop Button	3SB6160-1HB20-1CA0	1
16	SB2 SB4 SB5	Button switch	3SB6163-0DB40-1BA0	3
17	SB3	Button switch	3SB6160-0AB20-1CA0	1
18	SA	Rotary Switches	3SB6160-2AA10-1BA0	1
19	SQ1	Limit switch	LXW16-16/1C2	1
20	M1	vertical Spindle motor	YL90L-4 240V 50Hz 1.5kw	1
21	M2	Coolant pump	YOB-12TH AC240V 50Hz 40w	1

DRILLING&MILLING MACHINE

QUALITY CERTIFICATE

Accuracy Testing List				
1	flatness	A Horizontal B Cross	0.04/1000 0.04/1000	0.04 0.04
2	Work flatness		0.04/200	0.03
3	Run out of spindle bore	A. End spindle face B. 300mm to spindle face	0.02 0.04	0.02 0.03
4	Kick of spindle		0.02	0.02
5	The perpendicular between spindle and table	A Longitudinal B cross	0.10/200 0.10/200	0.04 0.03
6	The perpendicular between vertical movement of spindle and table	A longitudinal B Cross	0.10/100 0.10/100	0.08 0.09
7	The parallelism between the work flatness and table	A Longitudinal B Cross	0.05/200 0.05/200	0.04 0.03
8	The straightness of basis "T"		0.03/200	0.03
9	The parallelism between basis "T" and table		0.15/200	0.17
10	The perpendicular between longitudinal move of table and cross move of table.		0.10/200	0.03
11	straightness of vertical movement of knee	A longitudinal B Cross	0.05/200	0.04
12	The perpendicular between bedway and vertical guideway	A longitudinal B Cross	0.10/200 0.10/200	0.02 0.04
13	The parallelism between table and ram moving		0.10/200	0.04
14	The parallelism between table and rotating plate rotate	left 30° 0° right 30°	0.10/200	
15	The parallelism between spindle and work-table		0.10/200	
16	The parallelism between cross move of work table and spindle	A longitudinal B Cross	0.10/200 0.10/200	
17	The parallelism between the guideway of ram and spindle	A longitudinal B Cross	0.10/200 0.10/200	
18	Coaxialism between the hole of surporthilt and axis of spindle	A longitudinal B Cross	0.10 0.10	

ZX7550 PACKING LIST

NO.	NAME	MODEL	Quantity
1	Drilling and milling machine		1
2	Drill chuck	16mm	1
3	Extension rod of drill chuck		1
4	Milling chuck		1
5	Flat tongs	QH160	1
6	Pull rod	M12	1
7	Adjustable sets	ISO30—MT3 ISO30—MT2	2
8	Boring rod		1
9	wrench	S=14-17	1
10	Shake handle		1
11	Operation manual		1
12	Certificate of conformity		1
13	packing list		1