BENCH MILL MACHINE

Instruction manual





IMPORTANT SAFETY INSTRUCTION

READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS TOOL

Operator

COMMON SENSE AND CAUTION ARE FACTORS WHICH CANNOT BE BUILT INTO ANY PRODUCT. THESE FACTORS MUST BE SUPPLIED BY THE OPERATOR. PLEASE REMEMBER:

- 1. When using electric tools, machines or equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.
- 2. Keep work area clean. Cluttered areas invite injuries.
- 3. Consider work area conditions. Do not use machines or power tools in damp, wet, or poorly lit locations. Do not expose equipment to rain, keep work area well lit. Do not use tools in the presence of flam-mable gases or liquids.
- 4. Keep children away, all children should be kept away from the work area.
- 5. Guard against electric shock. Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
- 6. Stay alert. Never operate if you are tired.
- 7. Do not operate the product if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment or reflexes might be impaired.
- 8. Do not wear loose clothing or jewelry as they can be caught in moving parts.
- 9. Wear restrictive hair covering to contain long hair.
- 10. Use eye and ear protection. Always wear.
- 11. Keep proper footing and balance at all times.
- 12. Do not reach over or across running machines.

Before operations

- 1. Be sure the switch is OFF when not in use and before plugging in.
- 2. Do not attempt to use inappropriate attachments in an attempt to exceed the tool"s capacity. Approved accessories are available from the dealer or machine maker.
- 3. Check for damaged parts, before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function.
- 4. Check for alignment and binding of all moving parts, broken parts or mounting fixtures and any other condition that may affect proper operation. Any part that is damaged should be prop early repaired or replaced by a qualified technician.
- 5. Do not use the tool if any switch does not turn off and properly

Operation

- 1. Never force the tool or attachment to do the work of a larger industrial tool. It is designed to do the job better and more safely at the rate for which it was intended.
- 2. Do not carry the tool by its power cord.
- 3. Always unplug the cord by the plug. Never yank the cord out of the wall.
- 4. Always turn off the machine before unplugging.

<u>IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE,</u> <u>DO NOT OPERATE THE TOOL!</u>

Grounding Instructions

This machine has a three-prong plug, the third prong is the ground. Plug this cord only into a three-prong receptacle. Do not attempt to defeat the protection the ground wire provides by cutting off the round prong. Cutting off the ground will result in a safety hazard and void the warranty.

DO NOT MODIFY THE PLUG IN ANY WAY. IF YOU HAVE ANY DOUBT, CALL A QUALIFIED ELECTRICIAN.

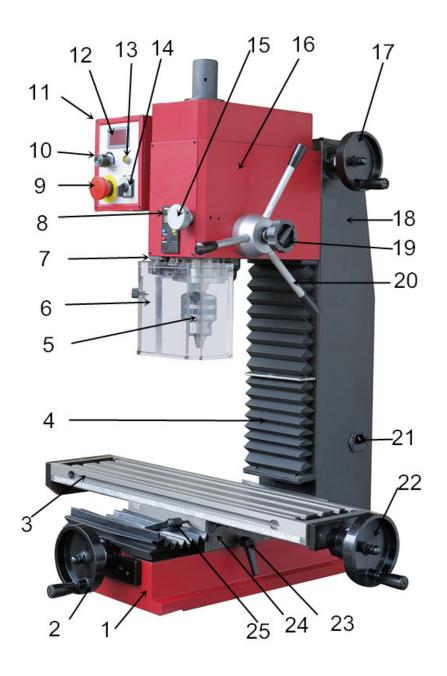
Specification:

Max. drilling capacity:	20 mm
End mill capacity	16 mm
Face mill capacity	50 mm
Throat	190 mm
Max. distance spindle to table	370 mm
Spindle taper	MT#3 or R8
Spindle speed	100-2500 rpm ±10%
Table effective size	600x140 mm
T-slot size	12 mm
Table longitudinal travel (X)	400 mm
Cross travel (Y)	190 mm
Headstock travel (Z)	290 mm
Power	750 W
Overall dimension (L*W*H)	725*620*880 mm
Packing size (L*W*H)	840*760*1060 mm
Weight (Net/Gross)	101 / 135 Kg

Unpacking & Preparing for Use

Before unpacking you must check the package carefully, to find whether it is damaged and any may have effect on the machine, please connect with the distributor in advance.

Unpacking carefully, check the species of standard accessories and the quantity to find whether it is as same as the packing list in the package.



FEATURE

1	Base	2	Cross feed handwheel
3	Long worktable	4	Fuselage (with protect cover)
5	Drill chuck with arbor	6	Protective dust guard assembly
7	Spindle sleeve locking handle	8	Depth display
9	Emergency stop switch	10	Knob with potentiometer
11	Electric control box	12	Speed display
13	Light	14	Forward/0/Reverse switch
15	Fine feeding handle	16	Spindle box
17	Vertical feed handwheel	18	Fuselage back cover
19	Fine feeding locking handle	20	Spindle control handle assembly
21	Power socket with fuse box	22	Longitudinal feed handwheel
23	Saddle locking handle	24	Saddle
25	Worktable locking handle		

Installation

CAUTION!

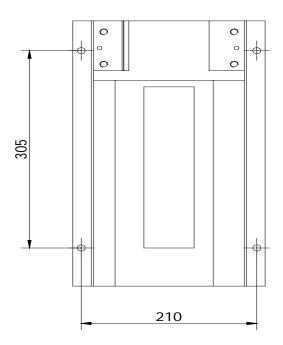
DO NOT ATTEMPT TO USE THE MACHINE UNTIL INSTALLTION IS CAMPLETED, AND ALL PRELIMINARY CHECKS HAVE BEEN MADE IN ACCORDANCE WITH THIS MANUAL.

MOUNTING THE MACHINE

The machine should be mounted on a strong, heavy workbench, of sufficient height so that you do not need to bend your back to perform normal operations.

Ensure the location is adequately lit and that you will not be working in your own shadow. We strongly recommend that the machine bolted firmly to strong workbench using the tapped holes used to secure the feet to the machine. This is to provide added stability and consequently, additional safety.

To do this, first drill four M12 clearance holes in a worktop, at the dimensions shown in the diagram opposite, and with appropriate length M10 bolts, or screws, with flat washers. (not supply, you need prepare these by yourself).



Application

This small mill machine is for milling or drilling, widely used in different places. Fine exterior, wide range of speed and easy to use.

Designed for industrial usage milling, drilling, tapping, reaming, steps and mill plane with metal and other material.

Operation

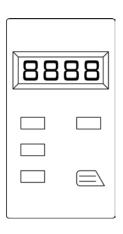
- Before starts to use this machine, operator should go through the instructions carefully so as to acquaint with the construction of the machines, the functions of the various controls and also the driving systems.
- 2. This machine uses touching button (see operation panel below), operating steps refer to the flow chart.



Operation panel



Spindle depth readout



Operating steps

- 1. Insert the electric plug into its socket. Then release the emergency stop switch by turning the red round head of the switch (A). you can see the spindle speed readout (c) will bright, it means power on.
- 2. Change the Forward/off/Reverse switch (D) to forward or reverse position, then turn the potentiometer knob (B), the spindle speed will rise as you need. You can see the speed no. On the spindle speed readout (C).
- 3. If you want to stop the spindle you can anticlockwise turn the potentiometer to the "0"

position, the spindle will stop.

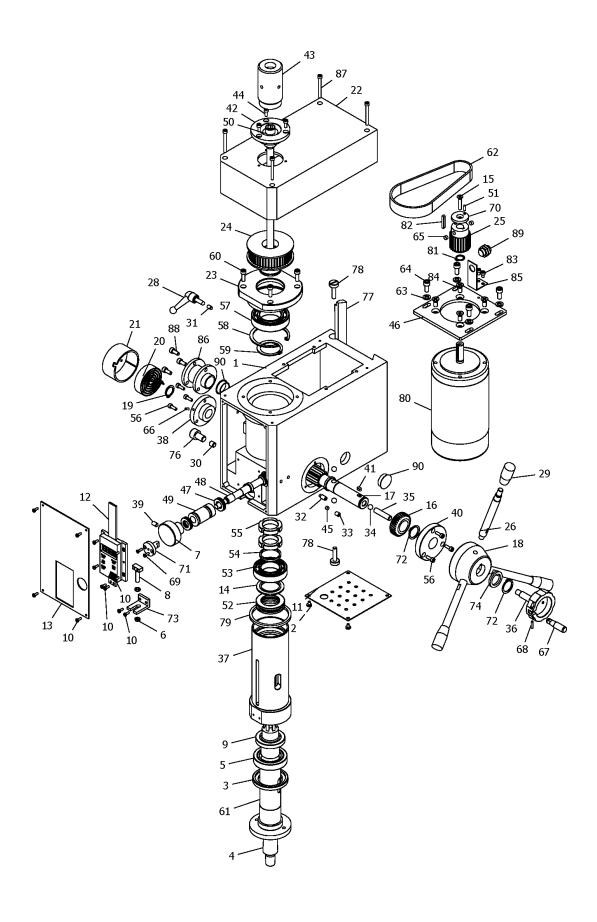
- 4. When you control the mill and need quickly stop the spindle speed, you can clap the emergency stop switch (A), as this time the fault yellow light (E) will bright. If you need restart the mill you need turn the F/O/R switch (D) to "0" position, then control as 1-2-3 steps.
- 5. Fine feeding function: When lock the Lock small handwheel (A), then the control handle (B) can not useable. Turn the fine feeding handwheel (C) the spindle will micro remove.



Notice:

After using should turn the power switch to position '0' and pull out the plug from socket.

Parts drawing (1/MT3) -- the spindle taper is MT3

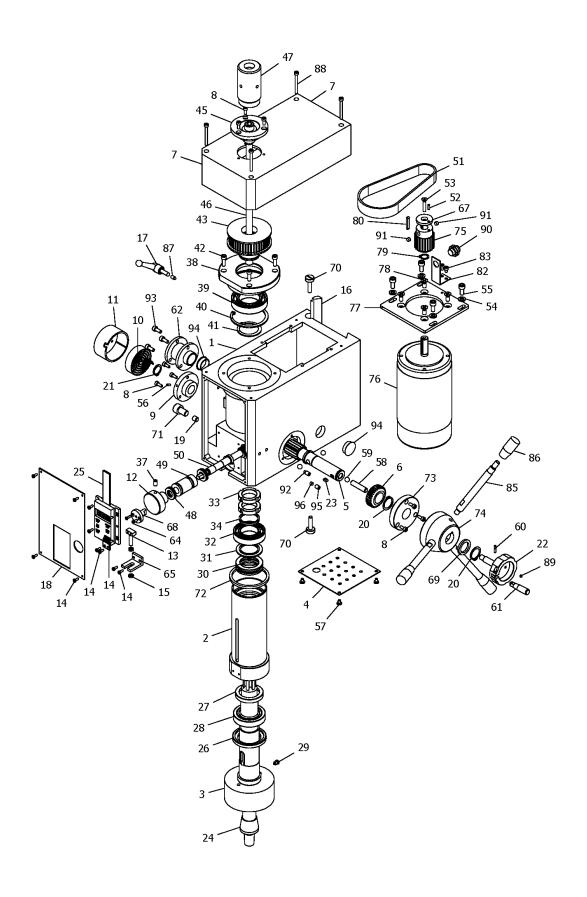


Parts list (1/MT3)--the spindle taper is MT3

Part No.	Drawing No.	Description	Q'ty
.1-1	XN3A0201	Spindle box	1
.1-2	GB 818-85 - M4 x 6	Cross recessed small pan head screw H M3*8	4
.1-3	X3C0219	Spindle below oil seal ring I	1
.1-4	X20206	B16 taper shank	1
.1-5	GB/T 297-94 - 32907	Cone roller bearing 32907	1
.1-6	GB 6172-86 - M5	Hexagon headed nut M5	2
.1-7	XN3A0218	Fine feeding handwheel	1
.1-8	X3C0217	Display square screw	1
.1-9	X3C0216	Spindle sleeve below oil seal ring II	1
.1-10	GB 818-85 - M3 x 8	Cross recessed small pan head screw Z M3*8	12
.1-11	XN3A0215	Base plate	1
.1-12	GD300-165	Display assembly	1
.1-13	XN3A0207	Panel	1
.1-14	X3C0210	Up washer II	1
.1-15	GB 819-85 - M5x25	Cross recessed counter head screws H M5*25	1
.1-16	XN3A0210	Bevel gear	1
.1-17	XN3A0204	Gear shaft	1
.1-18	XN3A0212	Handle seat	1
.1-19	GB 894.1-86 16	Check ring 16	1
.1-20	XN20243	Clock spring	1
.1-21	X3C0253	Clock spring cover	1
.1-22	XN3A0205	Pindle box cover	1
.1-23	X3C0208	Bearing seat	1
.1-24	X3C0206	Spindle timing pulley	1
.1-25	XN3A0219	Motor timing pulley	1
.1-26	X30252	Handle lever	3
.1-28	X2021800	Small handle assembly	1
.1-29	X20237	Long handle sleeve	3
.1-30	XN3A0208	Spindle sleeve locking shaft	1
.1-31	XN3A0217	Tighten the top rod	1
.1-32	GB 79-85 - M6 x 14	Slotted headless set screws round end M6*14	1
.1-33	GB 77-85 - M6 x 8	Inner six angle fastening screws-flat end M6*8	1
.1-34	GB308-89 - 8	Ball 8	3
.1-35	XN3A0224	Locking small shaft	1
.1-36	X3C0238	Worm gear locking handle	1
.1-37	X3C0213	Spindle sleeve	1
.1-38	X3C0252	Shaft gear left support flange	1
.1-39	GB 77-85 - M6 x 10	Inner six angle fastening screws-flat end M6*10	1
.1-40	XN3A0221	Shaft gear right support flange	1
.1-41	GB1096-79 4x8	Parallel key 4*8	1
.1-42	X3C0220	Spindle up dust guard I	1
.1-43	X3C0265	Spindle up dust guard II	
.1-44	GB 70-85 - M4 x 10	Hexagon round head cap screw M4*10	3
· · · ·	2= : 0 00 X . 0	Eccentric sleeve locking block	1

Part No.	Drawing No.	Description	
.1-46	XN3A0206	Motor connect plate	1
.1-47	GB273.2-87-单排 7/70	Thrust ball bearing single 7/70	2
.1-48	XN3A0209	Worm shaft	1
.1-49	XN3A0203	Worm eccentric sleeve	1
.1-50	X3C021100	Tighten the top rod	1
.1-51	GB 119-86 - A 3 x 10	Round pin A3*10	1
.1-52	GB 301-84 - 8106	Thrust ball bearing single 8106	1
.1-53	GB 278-89 - 80106	Deep groove ball bearing 80106	1
.1-54	X3C0209	Up washer	1
.1-55	GB 810-76	Slotted round nut	2
.1-56	GB 70-85 - M4 x 12	Hexagon round head cap screw M4*12	6
.1-57	GB 278-89 - 80107	Deep groove ball bearing 80107	1
.1-58	GB 893.1 - 62	Check ring 62	1
.1-59	GB 894.1 - 35	Check ring 35	1
.1-60	GB 70-85 - M5 x 16	Hexagon round head cap screw M5*16	4
.1-61	X3C0212	Spindle MT3	1
.1-62	HTD-M5 385(77 齿)	Timing belt	1
.1-63	GB 97.1-85 - 6	Washer 6	4
.1-64	GB 70-85 - M6 x 14	Hexagon round head cap screw M6*14	4
.1-65	YE023003	Φ6 Magnet steel	2
.1-66	GB 879-86 - 3 x 8	Spring round pin 3*8	1
.1-67	X3C0237	Assist small handle	1
.1-68	GB 119-86 - A 3 x 14	Round pin A3*14	1
.1-69	GB 819-85 - M3x10	Cross recessed counter head screws H M3*10	2
.1-70	XN3A0220	Washer	1
.1-71	XN3A0213	Spindle sleeve position shaft	1
.1-72	GB 894.1-86 20	Check ring 20	2
.1-73	XN3A0214	Display fixed bracket	1
.1-74	XN3A0222	Adjust washer	1
.1-76	GB 70-85 - M10 x 16	Hexagon round head cap screw M10*16	1
.1-77	XN3A0202	Bevel wedge	1
.1-78	XN3A0223	Wedge screw	2
.1-79	XN3A0226	Sleeve limited washer	1
.1-80	ZYT-750	750W DC motor	1
.1-81	GB 894.1 - 12	Check ring 12	1
.1-82	GB1096-79 4x25	Parallel key 4*25	1
.1-83	GB 70-85 - M4 x 6	Hexagon round head cap screw M4*6	2
.1-84	GB 819-85 - M6x14	Cross recessed counter head screws H M6*14	4
.1-85	XN3A0225	Probe bracket	1
.1-86	XN3A0211	Attechment bracket	1
1-87	GB 70-85 M4 x 40	Hexagon round head cap screw M4*40	
.1-88	GB 5781-86 - M5x12	Hexagon headed bolt M5*12	3
1-89	XN3A02500	Probe subassembly	1
1-90	φ22	Plug	2

Parts drawing (2/R8) -- the spindle taper is R8

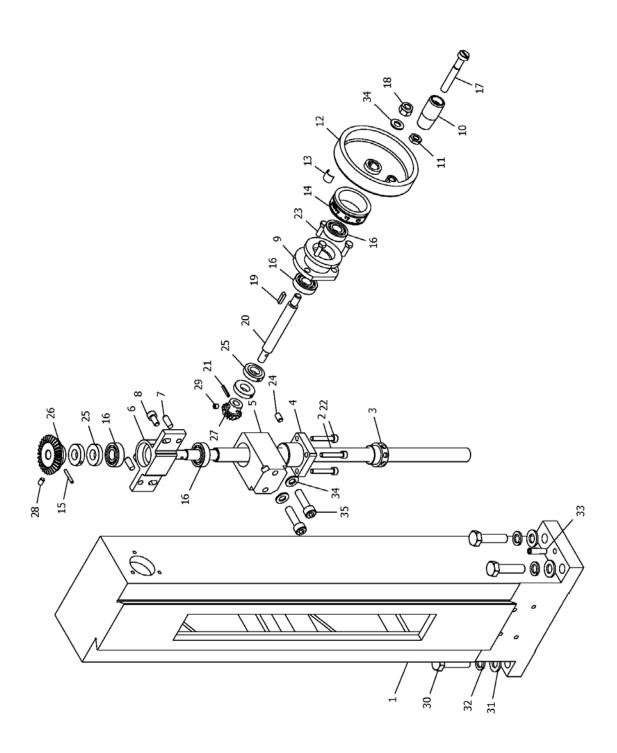


Parts list (2/R8) -- the spindle taper is R8.

Part No.	Drawing No.	Description	Q'ty
.2-1	XN3A0201	Spindle box	1
.2-2	X3C02A02	R8 spindle sleeve	1
.2-3	X3C02A01	R8 spindle	1
.2-4	XN3A0215	Base plate	1
.2-5	XN3A0204	Gear shaft	1
.2-6	XN3A0210	Bevel gear	1
.2-7	XN3A0205	Spindle box cover	1
.2-8	GB 70-85 - M4 x 10	Hexagon socket head cap screw M4*10	9
.2-9	X3C0252	Shaft gear left support flange	1
.2-10	XN20243	Clock spring	1
.2-11	X3C0253	Clock spring cover	1
.2-12	XN3A0218	Fine feeding handwheel	1
.2-13	X3C0217	Square screw	1
.2-14	GB 818-85 - M3 x 8	Cross recessed small pan head screw Z M3*8	12
.2-15	GB 6172-86 - M5	Hex nut M5	2
.2-16	XN3A0202	Bevel wedge	1
.2-17	X2021800	Small handle assembly	1
.2-18	XN3A0207	Panel	1
.2-19	XN3A0208	Spindle sleeve locking shaft	1
.2-20	GB 894.1 - 20	Check ring 20	2
.2-21	GB 894.1-86 16	Check ring 16	1
.2-22	X3C0238	Worm gear locking handle	1
.2-23	GB1096-79 4x10	Parallel key 4*10	1
.2-24	X302A04	JT6 taper shank	1
.2-25	GD300-165	The digital display module	1
.2-26	X3C0219	Spindle below oil seal ring I	1
.2-27	X3C0216	Spindle sleeve below oil seal ring II	1
.2-28	GB/T 297-94 - 32907	Cone roller bearing 32907	1
.2-29	X3C02A03	Shoulder cylindrical key	1
.2-30	GB 301-84 - 8106	Thrust ball bearing 8106	1
.2-31	X3C0210	Up washer II	1
.2-32	GB 278-89 - 80106	Deep groove ball bearing 80106	1
.2-33	GB 810-76	Slotted round nut	2
.2-34	X3C0209	Up washer	1
.2-37	GB 77-85 - M6 x 10	Inner six angle locking screws M6*10	1
.2-38	X3C0208	Bearing seat	1
.2-39	GB 278-89 - 80107	Deep groove ball bearing 80107	1
.2-40	GB 893.1 - 62	Check ring 62	1
.2-41	GB 894.1 - 35	Check ring 35	1
.2-42	GB 70-85 - M5 x 16	Hexagon socket head cap screw M5*16	
.2-43	X3C0206	Spindle timing pulley	
.2-45	X3C0220	Spindle up dust guard I	
.2-46	X3C021100	Locking bolt assembly	1 1
	X3C0265	Spindle up dust guard II	

Part No.	Drawing No.	Description	Q'ty
.2-48	GB273.2-87-7/70	Thrust ball bearing single 7/70	2
.2-49	XN3A0203	Worm eccentric sleeve	1
.2-50	XN3A0209	Worm shaft	1
.2-51	HTD-M5 385 (77T)	Timing belt	1
.2-52	GB 119-86 - A 3 x 10	Round pin A3*10	1
.2-53	GB 819-85 - M5x25	Cross recessed counter head screws M5*25	1
.2-54	GB 97.1-85 - 6	Washer 6	4
.2-55	GB 70-85 - M6 x 14	Hexagon socket head cap screw M6*14	4
.2-56	GB 879-86 - 3 x 8	Spring round pin 3*8	1
.2-57	GB 818-85 - M4 x 6	Cross recessed small head screws M4*6	4
.2-58	XN3A0224	Locking small shaft	1
.2-59	GB308-89 - 8	Ball 8	3
.2-60	GB 119-86 - A 3 x 14	Round pin A3*14	1
.2-61	X3C0237	Assist small handle	1
.2-62	XN3A0211	Attachment bracket	1
.2-64	GB 819-85 - M3x10	Cross recessed counter head screws M3*12	2
.2-65	XN3A0214	Display fixed bracket	1
.2-67	XN3A0214 XN3A0220	Washer	1
.2-68	XN3A0220 XN3A0213	Spindle sleeve position shaft	1
.2-69	XN3A0213 XN3A0222	Adjust washer	1
.2-09	XN3A0222 XN3A0223	-	2
.2-70	GB 70-85 - M10 x 16	Wedge screw	1
.2-71		Hexagon socket head cap screw M10*16 Sleeve limit washer	_
	XN3A0226		1
.2-73	XN3A0221	Shaft gear right support flange	1
.2-74	XN3A0212	Handle seat	1
.2-75	XN3A0219	Motor timing pulley	1
.2-76	ZYT-750	750W DC motor	1
.2-77	XN3A0206	Motor connect plate	1
.2-78	GB 819-85 - M6x14	Cross recessed counter head screws M6*14	4
.2-79	GB 894.1 - 12	Check ring 12	1
.2-80	GB1096-79 4x25	Parallel key 4*25	1
.2-82	XN3A0225	Probe bracket	1
.2-83	GB 70-85 - M4 x 6	Hexagon socket head cap screw M4*6	2
.2-84	RSD-27	Probe	1
.2-85	X30252	Handle lever	3
.2-86	X20237	Long handle sleeve	3
.2-87	XN3A0217	Tighten the top rod	1
2-88	GB 70-85 M4 x 40	Hexagon socket head cap screw M4*40	4
2-89	YE023005	Ø4x2magnet	1
2-90	XN3A02500	Probe subassemply	1
2-91	YE023003	Ø6 magnetic steel	2
2-92	GB 79-85 - M6 x 12	Set screw M6*12	1
2-93	GB 5781-86 - M5x12	Hexagon headed bolt M5*12	3
2-94	φ22	End cap	2
2-95	GB 77-85 - M6 x 8	Inner six angle locking screws M6*8	1
2-96	XN3A0216	Eccentric sleeve locking block	1

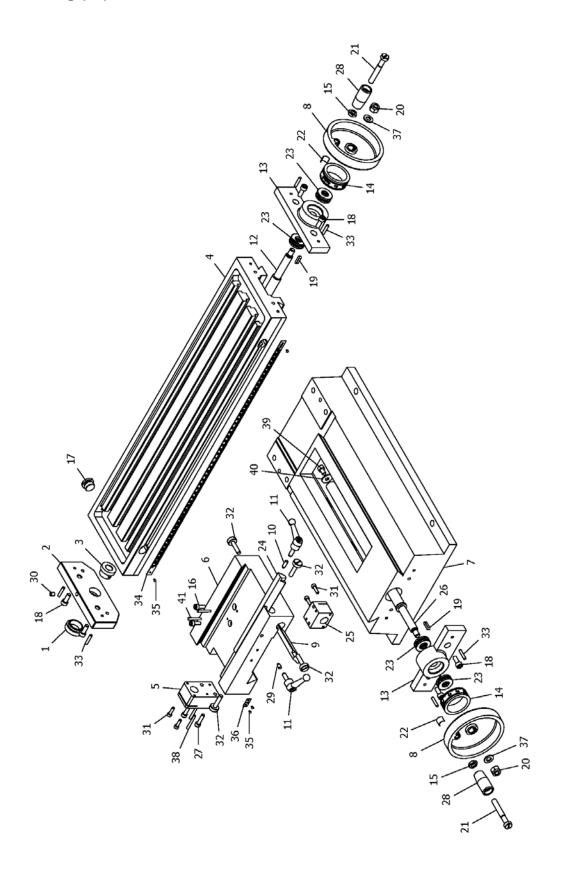
Parts drawing (3)



Parts list (3) --- note: The no. With "*" means the part showing in metric.

Part No.	Drawing No.	Description	Q'ty
.3-1	XN3A0901	Column	1
.3-2*	XN3A0903A	Metric rise and down leadscrew	1
.3-3*	XN3A0908A	Metric rise and down locking nut	1
.3-4*	XN3A0907A	Metric rise and down leadscrew nut	1
.3-5	XN3A0904	Column nut support	1
.3-6	XN3A0911	Leadscrew support	1
.3-7	GB 118-86 - 6 x 16	Taper pins with internal thread 6*16	2
.3-8	GB 70-85 - M6 x 12	Hexagon socket head cap screw M6*12	2
.3-9	XN3A0910	Rise and down support seat	1
.3-10	C2A0307	Handle	1
.3-11	GB 6172-86 M8	Hex nut M8	1
.3-12	X3111800	Handle wheel	1
.3-13	X31145	Spring piece	1
.3-14*	XN3A0909A	Metric rise and down scale dial	1
.3-15	GB 879-86 - 3 x 20	Spring round pin 3*20	1
.3-16	GB/T 276-94 - 6001	Deep groove ball bearing 6001	4
.3-17	GB 65-85x55	Slotted large cheese head screws 85*55	1
.3-18	GB 889-86 M8	Hex locking nut M8	1
.3-19	GB1096-79 4x16	Parallet key 4*16	1
.3-20	XN3A0902	Rise and down shaft	
.3-21	GB 879-86 - 3 x 16	Spring round pin 3*16	
.3-22	GB 70-85 - M5 x 30	Hexagon socket head cap screw M5*20	
.3-23	GB 5781-86 - M5x16	Hexagon headed bolt M5*16	3
.3-24	GB 77-85 - M6 x 10	Inner six angle locking screws-flast end M6*10	1
.3-25	XN3A0912	Locking nut	4
.3-26	XN3A0914	Big bevel gear wheel	1
.3-27	XN3A0913	Small bevel gear wheel	1
.3-28	GB 78-85 - M5 x 8	Inner six angle locking screws-cone end M5*8	1
.3-29	GB 78-85 - M5 x 5	Inner six angle locking screws-cone end M5*5	
.3-30	GB 5780-86 - M10x40	Hexagon headed bolt M10*40	
.3-31	GB 97.1-85 - 10	Washer 10	
.3-32	GB 859-87 - 10	Spring washer 10	
.3-33	GB 118-86 - 6 x 24	Taper pins with internal thread 6*24	
.3-34	GB 97.1-85 - 8	Washer 8	1
.3-35	GB 70-85 - M8 x 30	Hexagon socket head cap screw M8*30	2

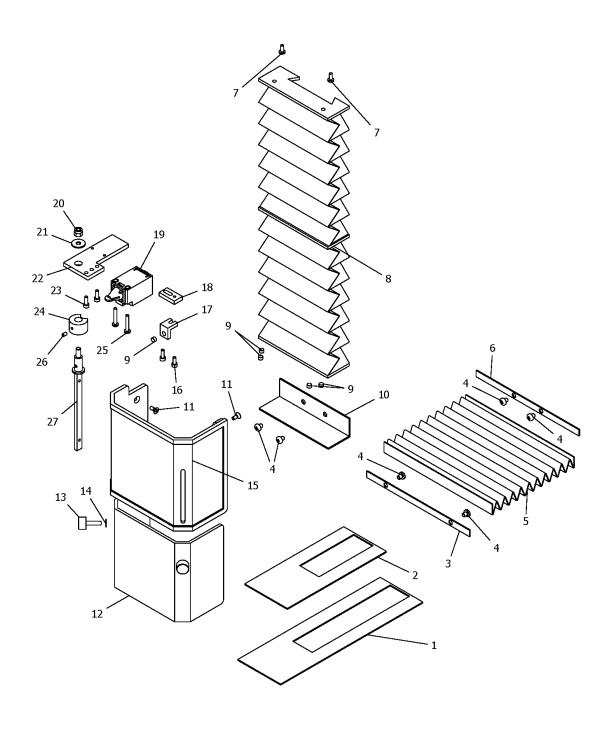
Parts drawing (4)



Parts list (4) --- note: The no. With "*" means the part showing in metric.

Part No.	Drawing No.	Description	Q'ty
.4-1	X31136	The left bracket cover	1
.4-2	XN3A1106	Left cover	1
.4-3	X31131	Longitudinal leadscrew rod bracket left sleeve	1
.4-4	XN3A1102	Work table	1
.4-5*	XN3A1113A	Metric longitudinal leadscrew nut	1
.4-6	XN3A1103	Saddle	1
.4-7	XN3A1101	Base	1
.4-8	X3111800	Handwheel	2
.4-9	XN3A1105	Cross bevel wedge	1
.4-10	XN3A1109	Longitudinal wedge locking crown bar	1
.4-11	X2021800	Small handle assembly	2
.4-12*	XN3A1110A	Metric longjitudinal leadscrew	1
.4-13	XN3A1108	Longitudinal\cross leadscrew bearing seat	2
.4-14*	XN3A1112A	Metric longitudinal/cross scale dial	2
.4-15	GB 6172-86 M8	Hexagon nut M8	2
.4-16	GB 70-85 - M5 x 14	Hexagon socket head cap screw M5*14	2
.4-17	X31144	Plug	1
.4-18	GB 70-85 - M6 x 16	Hexagon socket head cap screw M6*16	6
.4-19	GB1096-79 4x16	Parallet key 4*16	2
.4-20	GB 889-86 M8	Hexagon locking nut M8	2
.4-21	GB 65-85x55	Slotted large cheese head screws 85*55	2
.4-22	X31145	Sping piece	2
.4-23	GB 301-84 - 8101	Thrust ball bearing 8101	4
.4-24	XN3A1111	Longjitudinal bevel wedge	
.4-25*	XN3A1107A	Metric cross leadscrew nut	
.4-26*	XN3A1104A	Metric cross leadscrew	1
.4-27	GB 70-85 - M5 x 20	Hexagon socket head cap screw M5*20	2
.4-28	C2A0307	Handle	2
.4-29	XN3A0217	Tighten the top rod	1
.4-30	JBT7940.4-95 6	Pressure with pressure column oil cup 6	1
.4-31	GB 70-85 - M4 x 14	Hexagon socket head cap screw M4*14	4
.4-32	XN3A0223	Wedge screw	4
.4-33	GB 119-86 - A 4 x 20	Round pin A4*20	6
.4-34	XN3A1114	Scale height	1
.4-35	GB827-86 2x3	Label rivet 2*3	4
.4-36	C5C0315	Zero lebel	1
.4-37	GB 97.1-85 - 8	Washer 8	2
4-38	GB 117-86 - A 3 x 30	Taper pin A3*30	2
4-39	GB 70-85 - M6 x 10	Hexagon socket head cap screw M6*10	1
4-40	GB 96-85 - 6	Washer 6	
4-41	GB 117-86 - B 3 x 26	Taper pin B3*26	2

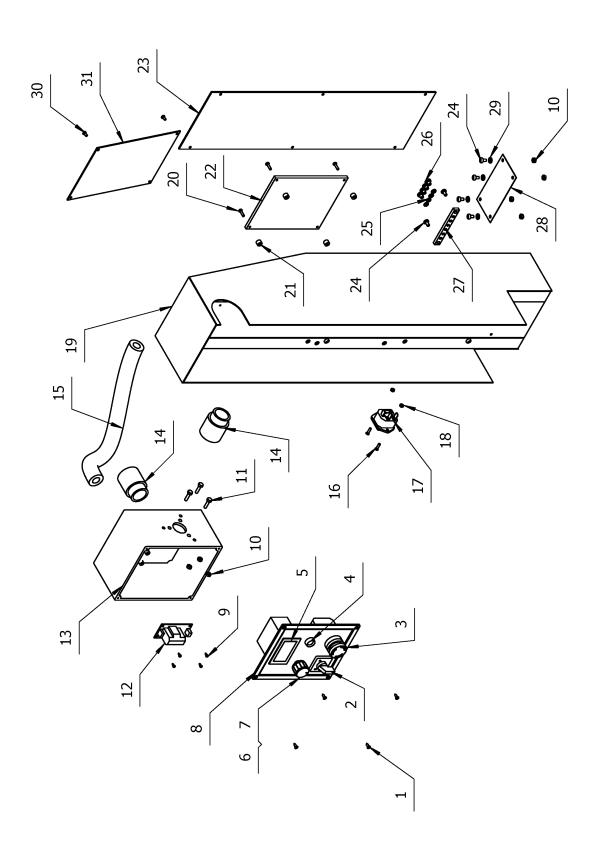
Parts drawing (5)



Parts list (5) (Note: some type without the protective guard assembled)

Part No.	Drawing No.	Description	Q'ty
.5-1	XN3A2305	Splash guard I	1
.5-2	XN3A2304	Splash guard II	1
.5-3	X20002	Filler strip	1
.5-4	GB 818-85 - M4*6	Cross recessed counter head screws M5*6	6
.5-5	X20003	Dust guard	1
.5-6	X20004	Dead plate	1
.5-7	GB 818-85 - M4*10	Cross recessed counter head screws M4*10	2
.5-8	XN3A2302	Rise and down guideway cover	1
.5-9	YE023003	Ø6 Magnet steel	5
.5-10	XN3A2303	Shield baffle	1
.5-11	GB 819-85 - M4x10	Cross recessed counter head screws M4*10	3
.5-12	X3C23C0401	The inner shield	1
.5-13	GB 835-88 - M5x20	Knurled screws M5*20	2
.5-14	GB 97.1-85 - 5	Washer 5	2
.5-15	X3C23C03	Outer protective cover	1
.5-16	GB 70-85 - M4 x 10	Hexagon socket head cap screw M4*10	1
.5-17	X12304	Block	1
.5-18	XN3A2301	Connecting plate	1
.5-19	QKS7-5	Safety limit switch	1
.5-20	GB 889-86 - M6	Hexagon locking nut M6	1
.5-21	GB 96-85 - 6	Washer 6	1
.5-22	X3C23C01	Support plate	1
.5-23	GB 70-85 - M4 x 12	Hexagon socket head cap screw M4*12	
.5-24	X3C23C05	Spacer bush	
.5-25	GB 818-85 - M4 x 25	Cross recessed counter head screws M4*25	
.5-26	GB 78-85 - M4 x 6	Inner six angle locking screw-cone end metric M4*6	
.5-27	X3C23C02	Rotate shaft	

Parts drawing (6)



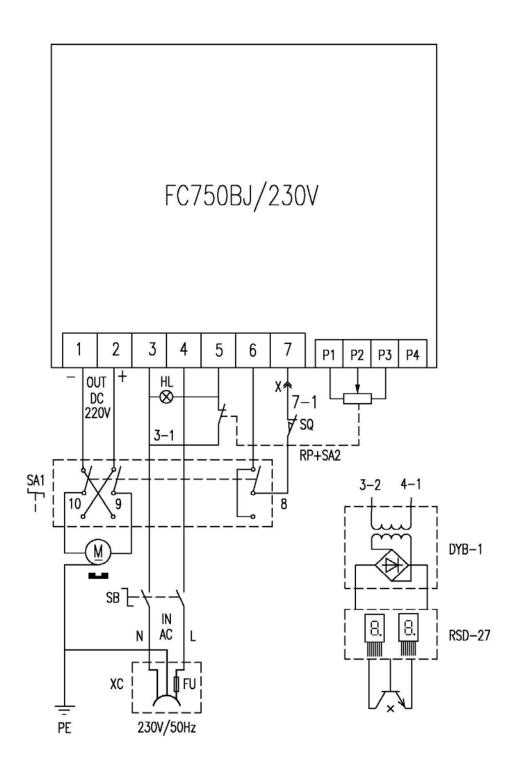
Parts list (6)

Part No.	Drawing No.	Description	Q'ty
.6-1	GB 846-85 - ST2.9 x 9.5	Tapping screw	4
.6-2	ZH-A	Change-over switch	1
.6-3	HY57B	Emergency stop	1
.6-4	M14	Lampholder	1
.6-5	RSD-27	Digital readout	1
.6-6	WH24-1	4.7K Potentionmeter	1
.6-7	φ23	Knob	1
.6-8	XN3A1802	Electric box cover	1
.6-9	GB 845- ST2.2 x 6.5	Tapping screw	4
.6-10	GB 6170-86 - M4	Hexagon headed nut M4	7
.6-11	GB 5781-86 - M4x16	Hexagon headed bolt M4*16	3
.6-12	DYB-01	Power panel	1
	DYB-01	Power panel	1
.6-13	XN3A1801	Electric box	1
.6-14	WQG-M30B/AD28.5	Tube connecter	2
.6-15	WY-PP AD28.5	Tube	1
.6-16	GB 819-85 - M3x12	Cross recessed counter head screws M3*12	2
.6-17	DB-14F	Power socket	1
.6-18	GB 6170-86 - M3	Hexagon headed nut M3	2
.6-19	XN3A180300	Back cover	1
.6-20	GB 818-85 - M3 x 12	Cross recessed small pan head screw M3*12	4
.6-21	CJ9525B18102	Foot-pad	4
.6-22	XMT-2375	PC board	1
	XMT-1175	PC board	1
.6-23	XN3A1804	Back cover	1
.6-24	GB 818-85 - M4 x 8	Cross recessed small pan head screw M4*8	6
.6-25	GB 93-87 - M5	Spring spacer	4
.6-26	GB 818-85 - M5 x 6	Cross recessed small pan head screw M5*6	4
.6-27	X3C1802	Grounding bar	1
.6-28	X3C1806	Blow dust gauze	1
.6-29	GB 97.1-85 - 4	Washer	4

Packing List

No.	Name	Description	Q'ty	Remarks
1	Bench Mill	type: X2.7 or SX2.7	1 set	
2	Fuse	110V/20A or 230V/10A	1 pce.	
3	Manual	manual	1 pce.	
4	Double end wrench	S1*S2: 8*10、14*17、17*19	each 1	
5	L hex wrench	S: 3、4、5、6、8	each 1	
6	U wrench assembly	X3C004	1 pce.	
7	Oil cup		1 pce.	
8	T nut	X22001	2 pcs.	
9	L hex wrench assembly	X3C2003	1 件	
Bel	ow parts usually fixed o	on the machine (According to	choice of M	T3 or R8)
10*	B16 drill chuck	J2113/ 1-13mm / B16	1 pce.	
11*	MT3 taper shank	X20206	1 pce.	MTO to up a
12*	locking bolt assembly	X3C021100(X3C021101)	1 pce.	MT3 type
13*	slanting wedge	X3C2002	1 pce.	
14*	JT6 drill chuck	3-16mm / JT6	1 pce.	
15*	R8 taper shank	X302A04(A)	1 pce.	R8 type
16*	locking bolt assembly	X3C021101B (7/16")	1 pce.	

Circuit drawing (for 230V machine only)



Circuit drawing (for 110V machine only)

