EXCEED KOREA CO., LTD.

M T S - 2 3

OPERATING MANUAL

EXCEED

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2.0 ***SPECIFICATIONS***

		Unit : MM
WIRE DIAMETER:		Ø0.5 ~ 2.3
COILING PIN DIAMETER :		Maximum 30Ø
	COLLET CHUCK JACK IN SIZE	16Ø
WIRE LENGTH :		Maximum 200MM
COILING AXIS :	Rotation numbers Main rotation number	Maximum 50times
	Numbers of forward auxiliary rotation	Maximum 360°
	Numbers of backward auxiliary rotation	Maximum 360°
	Inserting setting degree	Minimum 1°
	Upper and lower stroke	Maximum 70MM
PRODUCTION SPEED :		5 ~ 50 / ea
POWER SOURCE :		3P 200/220V
POWER :	Coiling Axis Servo Motor	A.C 2.9 kw
	Main Machine operating Motor	P.C 1.5 kw
USED AIR PRESSURE :	Break & Product ejection	2 - 5 kg /㎠
MACHINE WEIGHT :		1,020 kg

MTS-10/23 STANDARD ACCESSORIES

# Vertical Slide :	(0° ~15°)	1
# Vertical Slide :	(15° ~15°)	1
# Horizontal Slide :		3
# Slim Horizontal Slide :		2
# Right Type Sanp Slide :		1
# Left Type Sanp Slide :		1
# Under Free Slide :	(0°)	1
# Main Rotation Cam :	120°	1
	90°	1
# Rewinding Cam :		1
# Lift Cam :	10°	2
	30°	2
	60°	2
# FormingCam :	(30, 45)	68
# Stopper Cam :	(30-45)	3-6
# Wire Feeding Cam :		2
# Wire Guide :	(⌀1.8)	1
# Tool box :		1
# Ball wench :		1 set
# Spanners :	7, 10, 13, 17, 19, 22, 32	1 each
# Nippers :		1
# Plier :		1
# Grease pump :		1
# Screw driver :	±	1
# Working Light :		1
# File No. 7		1set

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3.0 INTRODUCTION

MTS-23 type has the highly accurate Mechanism Forming apparatus with the highly efficiency and this is to be driven and controlled by the special Diesel servo system of which is operating accurately.

- Setting the machine axis angle 0° ~ 360° /one time turning at the time to be completed pushing out wire and then indicating degree-number in order to confirm position of the driving main axis(machine axis angle) of Forming apparatus.

- The driving control of the winding axis for doing so well the high speed responding efficiency is to consist of 2 channel-parts of the main turning and the auxiliary turning.

- The control of the main turning, moving lever of which adjusting 2 strokes with matching pitch cam 2 sheets, is changing the returning movement of the necessitated-required stroke slide and converting the pulse signal by the special apparatus simultaneously, as that is called as an original signal, it is as for driving and controlling the winding axis (the winding, winding returning), it is to be numbered by digital switch, accordingly, it is to adjusted its from 0° to 75° of timing of the winding starting as the machine axis angle by moving of the fixed angle of pitch cam.

- The auxiliary turning control is to drive and control by setting data on digital switch(it is within one time turning generally), it is to execute the winding axis from the newly machine angle 0° of which is not in turning of machine and also executing the winding axis from the primary stage auxiliary turning control and the machine angle, and there are the secondary stage auxiliary turning control and etc.

- User can use the operational data-date optionally with adjustment of the fixed angle and setting the primary stage and the secondary auxiliary turning and cancelling its according to setting and using the setting date of pitch cam of the winding axis operational control.

4.0 EXPLANATION OF FUNCTION.

At the first hand in order to manufacture springs in manual mode, after inputting data into its for manufacturing spring state, and thus it is to select the auto. mode after setting the machinery device.

4.1 RETURNING TO THE ZERO POINT.

It shall have to execute its prior to executing returning to the original point after confirming its whether pitch lever would be positioned at the original position always or not.

o It pressing"Reset" Button Key 2 times, while turning spindle of Servo Motor it is to be stopped after executing returning to the original to the original point. At this time, while turning handle with hand slowly. after pressing "Reset button key one time, confirming the machinery device, it is not to be turned one times at this ime, spindle is to be turned from tow times.

(Note) If putting power on, it should be executed the returning to the original point always.

4.2 MANUAL MODE.

It is to input data after checking its whether pitch lever would be positioned at the original position or not prior to putting its on main switch of main power line key board.

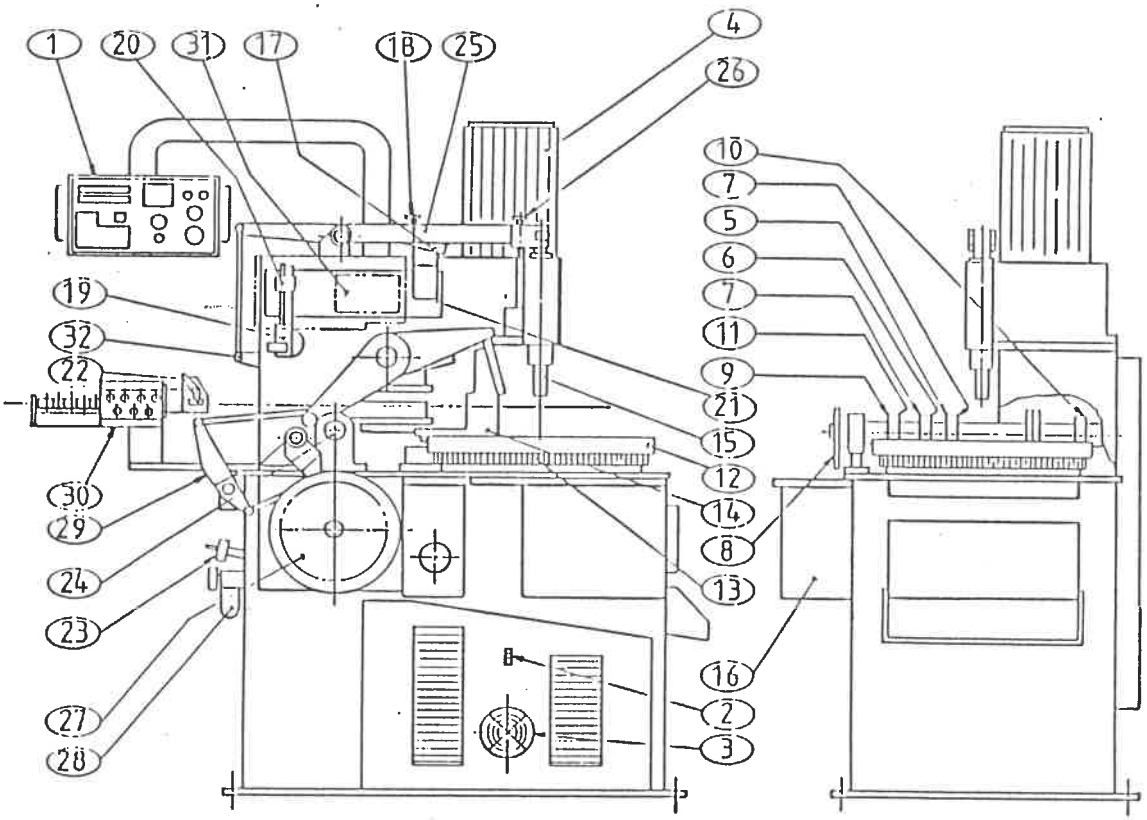
o If after setting the bending machine device to be suitable-matched to spring state while turning the spindle of machine, and it is to input data after setting the primary stage and the main turning, the secondary stage, the winding direction.
It shall be situated in state permanently unless replacing the inputted data

4.3 AUTO MODE.

It is to execute the product being set at auto mode automatically, and thus when executing its again automatically after putting power off, it is to start its after executing its in following of returning to the original point, it should be checked whether pitch adjustment lever would be positioned in its original position or not and then it shall have to execute the original point returning.

(Note) When executing returning its to the original point with cause of coiling pin of spindle axis being rotated, while caring the coiling pin would not be touched with the bending machine device, raising up the coiling pin of the spindle axis with hand and then it should be supported its with prop, executing the returning to original point.

1.0 COMPONENT NOMENCLATURE OF MACHINE.



1. CONTROL BOX
2. MAGNET SWITCH
3. COOLING FAN
4. SERVO MOTOR
5. UPPER SLIDE CAM
6. UNDER SLIDE CAM
7. UNDER FREE SLIDE CAM
8. WIRE FEEDING CAM
9. CLIP CAM
10. SPINDLE LIFT CAM
11. AIR LIMIT SWITCH CAM
12. TURN TABLE
13. MAIN DRIVE GEAR
14. VERTICAL SLIDE
15. SPINDLE SHAFT
16. TOOL BOX
17. PITCH CAM
18. PITCH CAM SCREW
19. MAIN TURN ADJUSTER LEVER
20. MAIN TURN ADJUSTER HOLDER
21. PITCH CAM SLIDE
22. WIRE STOP DEVICE
23. UNDER & UNDER FREE ADJUSTER CAM
24. CAM SHAFT
25. SPINDLE LIFT CAM
26. SPINDLE LIFT LEVER STOPPER
27. HANDLE
28. AIR REGULATOR
29. WIRE FEEDING LEVER
30. WIRE STRAIGHT DEVICE
31. MAIN TURN COUNTER DIAGRAM
32. SPINDLE LIFT CAM LEVER