## TNA-81 CNC MULTI-AXIS SPRING FORMER with rotary tooling table

The rotary tooling system giving stable wire line is suitable for ultra fine wire forming TM-8 has evolved into ultimate forming machine for ultra fine wire There is no dead zone, and constant position of tooling is kept with auto-compensation while the table is turning MNO (Mec New Operation system) equipped controls operation, gauging and multifunctional production management



## **Features**

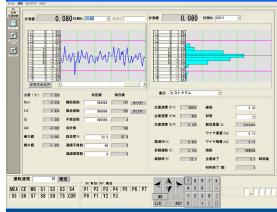
- Tooling table equipped with 8 forming slides turns around a quill in the center at high speed. Slides can be set up at any angle for coil, i.e. forming adjustment can be made easily. Furthermore, newly developed 1 motor-for-2 slides, i.e. No dead zone has been achieved by divided 16 cams. Forming work at any angle is available.
- Tool position is unchanging by auto-compensation even though tooling table turns.
- Position setup follows slide number, and no need to change drive motor number even though table rotation angle is changed.
- Employing square quill enables to make long spring part that needs certain space when it is twirled during forming process.
- 3 RR servo slides at maximum can be equipped.
- Program display controlled by "MNO" is easy-to-read, i.e. program flow, each axis operation status, input/output, jump and so on can be grasped by scrolling.
- Easy to make long program and also shorten setup time with multifunction.
- Gauging, Coil end control, Input/Output and such program screen comes on independently.
- Motor Sensor System, MSD-1 (Standard spec.)

The contact sensor functions as positioning for cut axis, pitch axis and such drive servomotor. It measures free length, outside diameter, leg portion angle in 1/1000mm resolution, and performs corrective control.

It functions as well as capacitance sensor or contact type sensor.



Tooling table without dead angle



Graphs and Production control items are displayed in real time.

Machine Specifications	Wire Dia.	φ0.2~0.8mm		Control device	Max. 16 axes to be controlled by computer – OS Windows XP
	Index	D/d 4 or more		Display	17" TFT color LC display
	Twirl distance	Radius 45mm available using square quill		External memory	USB thumb drive
	Slides	Body slide	1 pce	Service Temp.	0 ~ 40 °C
		Bending slide	3 pcs	Power source	AC 200V, 3-phase, 20 A
		Cut slide	4 pcs	Service Air pressure	Max. 0.5 MPa
		RR servo slide	Option 3 pcs at max.	Net weight	450 kg

