

# SH-8II

## CNC 1POINT COILING MACHINE

**Multifunction coiling machine w/1 Point + Torsion Attachment**

**Model changeover for more user-friendliness**

MNO (Mec New Operation system) gives user-friendliness, measurement control and multiple production controls.

As free-length gage, choose suitable one from contact type sensor: Motor Sensor (MSD-1), non-contact type sensor: Capacitance Gage and Image Sensor for your needs.



TOSAG Engineering AG  
Fuchsweidweg 12, CH-4852 Rothrist  
Tel. +41(0)62 794 38 28, Fax +41(0)62 794 14 58  
[www.tosag.ch](http://www.tosag.ch) [philipp.schaerer@tosag.ch](mailto:philipp.schaerer@tosag.ch)

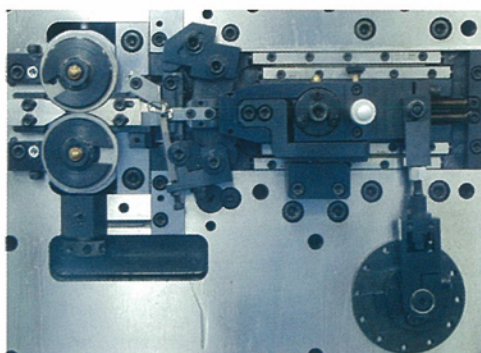


## Features

- 6-Axis (Feed, Cut, Pitch, Point, Torsion & Initial tension) equipped as standard.
- Torsion attachment and Cut axis are independent for easy set-up and high speed production. Assist tool can be fit at opposite to cutting tool, and work range is broadened.
- Torsion axis of crank mechanism gives more preciseness, and expansion of clearance around arbor portion. Initial Tension axis is placed inside the plate and also modified to straight movement that enable to keep initial tension even if point is moved up-and-down.
- General shaped spring parts such as cylindrical coil spring and conical spring can be formed with the pattern program entering dimensional data. By changing factor, conical spring can be changed in 100-step, i.e. fine adjustment can be done to get variety of shape like straight, bowl, triangle... Then, desired load can be achieved easily.
- Program screen shows all axes all the time, and program flow, each axis operation, input/output, jump and such can be seen with horizontal scroll.
- Varieties of gauging system (contact type, capacitance gage, and image sensor) are available. Auto correction and multi-functional production management screen and such give easy production control.

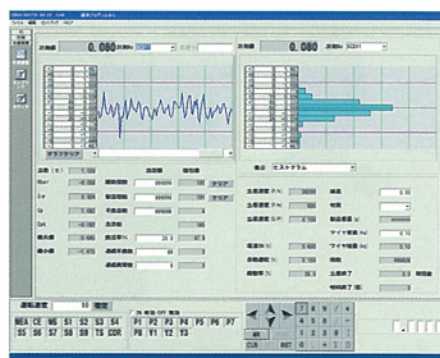
### Motor Sensor System (Standard spec.)

Applying functions of touch sensor and servomotor positioning for cut-axis and pitch-axis enable to measure in 1/1000mm resolution to display graph, control amendment and so on.



**Coiling area**

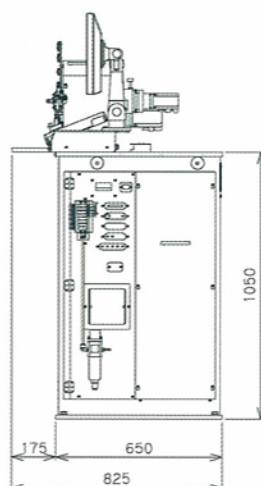
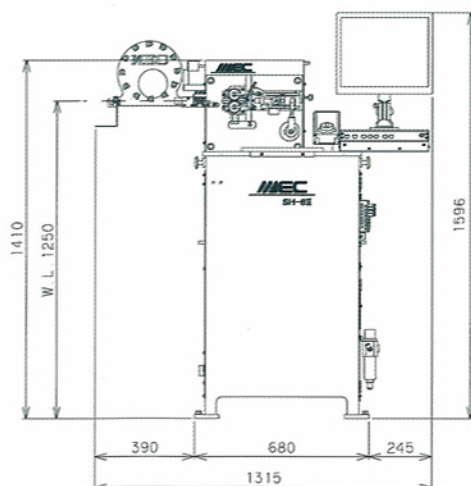
Simple designed front plate with newly developed crank mechanism for torsion spring and initial tension servo placed behind the front plate.



**Production management**

Real time display for Line chart, Histogram, Standard deviation, Production capability, Production quantity, Speed, remaining amount of wire material and so on.

## MACHINE SPECIFICATIONS



Specifications are subject to change without notice.

Standard Spec.	Wire Dia.	φ0.1 ~ 0.8mm
	Outside Dia.	φ20mm
	D/d	4 or more
Feed axis	Resolution	0.001mm
	Max. Speed	188 m/min
Cut axis	Resolution	0.001°
Pitch axis	Resolution	0.001mm
Point axis	Resolution	0.001mm
Torsion A/T axis	Resolution	0.001°
Initial tension axis	Resolution	0.001mm
Arbor (option)	Resolution	0.001mm
Solenoid valves	4 pcs	8pcs at max
Service air pressure	Max. 0.5MPa	
Power source	AC200V, 3-phase, 16A	
Net weight	400kg	
Control device	Max. 9-axis to be controlled by OS Windows XP	
Display	17" TFT color LC display	
External memory	USB thumb drive	
Service Temp	0 ~ 40°C	