

March 11, 2025

AMADA PRESS SYSTEM CO., LTD.

Launch of the “LM-26A”

15-Axis CNC Torsion Spring Machine with Rotating Wire

Expanded processing range with the unique double-swing axis



AMADA PRESS SYSTEM CO., LTD. (Isehara, Kanagawa, Japan President: Kimio Horie) launched sales of the “LM-26A” beginning March 11th. The LM-26A is a wire rotation torsion spring machine that realizes intuitive operation. It has a wire-rotating mechanism, eight processing slides, and a 15-axis control. Torsion spring machines are spring formers that specialize in torsion springs, but they can also be used for all types of wire processing including extension, compression, and other forms.

As on the “LM-16A” that was launched for different wire diameters in 2023, the new “LM-26A” has processing slides split between four axes each on the top and bottom, and a double-swing axis with computer numerical control of the lateral movement of the slides. This expands the processing range, including complex shapes that have previously been considered difficult. Furthermore, the high-degree of reproducibility realized by the program reduces setup time, workload, and increases productivity.

Additionally, compared with the previous TM-20M, the LM-26A enables the processing of thicker wires while only requiring roughly the same installation area, saving space.

In recent years, in addition to the demand for greater quality and productivity in manufacturing, there has also been a growing need for the automation and simplification of the setup process. This is in response to the backdrop of labor shortages due to the declining birthrate and aging population, and the retirement of skilled workers. The LM-26A

offers a solution to these issues and supports high-efficiency production. With its unique spring forming program MNO2, the LM-26A simplifies program creation, production visualization, and also a variety of other functions.

■ Main features

1. Achieve high-precision processing

The introduction of a dual feed roller reduces the feed pressure load applied to the wire making consistent, high-quality coiling possible. High-resolution servo motor control enables fine movement and high-precision processing.

Additionally, the motor sensor system, which makes every slide a sensor, allows measurements such as the coiling angle and free length of coil to be taken in 0.001 mm units. The results are displayed in tables and graphs and it is possible to correct each axis.

2. Improved productivity with shorter processing time and setup work

A high-speed rotary servo slide reduces the time for bending work. The spinner tool is compact, but it allows the adjustment of the distance between the shaft and the outer pin, so it is not necessary to replace the pins for each different wire diameter. This reduces the work for repeat driving and hardening at the time of a replacement, thus improving the setup time and running costs.

3. Improved operability with the MNO2 program

With the “MNO2” program specifically designed for spring forming machines, it is possible at a glance to know the program flow, operating status of each axis, inputs/outputs, and jumps. The navigation system and touch panel greatly improve operability, making program creation easy and reducing setup time. Additionally, as support for IOT, the operating status of the machine can be monitored on devices such as a smartphone or computer, and periodic maintenance using the preventive maintenance functions contributes to improved production efficiency.

4. Solutions that meet your processing needs

A wide variety of optional units are available to meet various post-processing and measurement needs. This includes the “3D Slide Unit”, which allows the slide to move forward up to 200 mm, the “Air Grip Unit”, which enables processing after wire cutting to avoid interference, the “Coil Outer Diameter Servo Unit”, which uses a servo motor to adjust the outer diameter of the coil, and the “Capacitance Sensor”, which measures free coil length.

■ Specifications

Model		LM-26A
Wire diameter	mm	ø1.2 - ø2.6
Maximum feed speed	m/min	160
Number of axes		15
Net weight	kg	1700
Control device		Windows
Software		MNO2

Reference

Product information for the LM-26A

<https://products.amada.co.jp/products/product/?productid=id402031&language=2>

Processing scene movie for the LM-26A

<https://www.youtube.com/watch?v=ZcL8x0RIO1Q>

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* The information in this release is subject to change without notice.