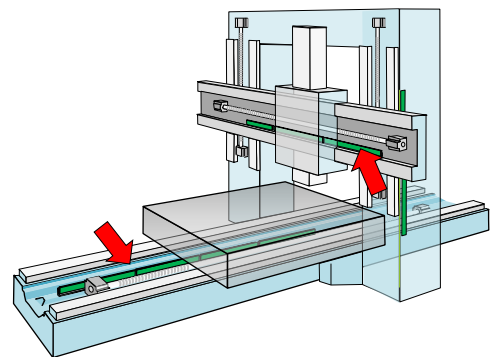
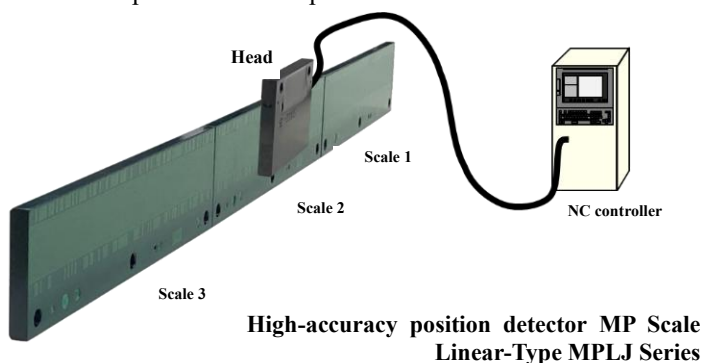


June 12, 2026

## **Nidec Machine Tool to Launch MPLJ Series: A Linear Position Detector for Large Machine Tools and Long-stroke Equipment** **- A Single-Cable, High-Accuracy, and Compact Product with a Maximum 255m Stroke Coverage -**

Nidec Machine Tool Corporation announced today that it will launch the MPLJ series on June 15, a linear-type high-accuracy position detector capable of handling long strokes for large machine tools and long equipment. With its unique MP Scale that adopts an electromagnetic induction method, this new series realizes a position detection accuracy of  $\pm 2.5\mu\text{m/m}$  with a maximum stroke coverage of 255m. In addition, this product boasts high usability with an absolute system (which does not require homing during startup) and single-cable use.

As machine tools and transportation devices become increasingly large in recent years, demand is growing for position detectors to accommodate long devices, use less wiring labor, homing during startup efficiently upon activation, and consume less power during maintenance. The MPLJ series successfully addresses such issues in designing, manufacturing, and maintenance processes to help reduce the burden on users.



**Example of installation: Large machine tool**

### **1. Maximum coverage of 255m and better maintainability**

By connecting standard-length scales of 1,000mm, 750mm, 500mm, and 250mm in a modular connected structure, the MPLJ series achieves a maximum stroke coverage of 255m. With the use of the standard lengths, the MPLJ series realizes easier transportation and installation, while offering improved maintainability when damaged, since only the damaged section needs to be replaced.

### **2. Single-cable connection to significantly reduce wiring labor**

With an A/D converter and pre-amplifier function built in its head, MPLJ does not require an external signal conversion unit – which has been needed for conventional products. This improvement enables a single-cable-based direct connection from the MPLJ's sensor head to the NC controller, simplifying wiring and reducing its equipment design workload. (It depends on the controller equipment)

### **3. Absolute position detection to activate equipment more quickly**

MPLJ's absolute position detection function, which has both incremental and absolute patterns, can retain position information even when the power is turned off, and does not require homing during startup during activation. In addition, the MPLJ does not require a backup battery, which further helps reduce maintenance workloads.

### **4. IP67 to realize high-accuracy, stable operation in environments with oil and machining chips**

MPLJ adopts fully contactless structure based on an electromagnetic induction method to be free of wear components. In addition, complying with IP67, the product realizes stable operations even under a dusty and oily environment, while maintaining its highly accurate position detection capability of  $\pm 2.5\mu\text{m/m}$ , realizing long-term, high-accuracy position detection.

### **5. Multi-head capability for multi-axis control and greater design freedom**

With its "multi-head" feature, where the user can mount multiple heads on a single scale, MPLJ can control multiple axes independently and design equipment more freely. Further, the use of the dedicated software, MP Checker II, enables easy installation condition check, long-term condition monitoring, and maintenance diagnosis.

For inquiries regarding this product, please contact MP Scale Team, Sales Department, Service Component Division of Nidec Machine Tool Corporation (Tel.: +81 77 500 3323).