FOERSTER

HIGH-SPEED INSPECTION SYSTEM FOR NEEDLE BEARING ROLLERS

Verifying heat treatment of tiny needle rollers at high speed is demanding. MAGNATEST enables precise, automated inspection and sorting.



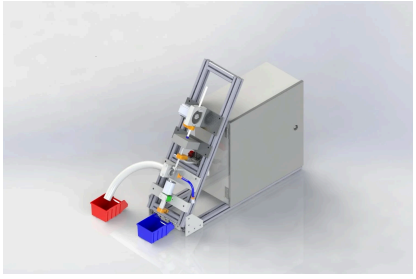
THE CHALLENGE

Verifying the correct heat treatment of small needle and pin bearing rollers at high production speeds is particularly demanding. Due to their very small diameter and short length, each roller must pass individually and precisely centered through the encircling coil. Reliable feeding and accurate sorting are essential to ensure consistent quality in high-volume manufacturing.

THE SOLUTION

FOERSTER's inspection system combines a precisely engineered slotted wheel with adjustable speed and an encircling coil from the MAGNATEST product family. The mechanism ensures smooth loading and unloading while guiding each roller accurately through the center of the coil. The test is triggered automatically, and non-conforming parts are separated by an integrated air blow-off system.





THE RESULT

The system processes 10–15 parts per second, depending on the test electronics configuration. Its compact and robust design ensures easy operation and low maintenance. By exchanging the tooling wheel, the system can be quickly adapted to different roller dimensions, enabling flexible and efficient quality control.

FOERSTER



MAGNATEST PRODUCT FAMILY

Magnetic-inductive testing of metallic materials in the automotive and aviation sectors

foerstergroup.com

The FOERSTER Group is represented by subsidiaries and representatives in over 60 countries worldwide. You can find a complete overview on our website.

Headquarters
Institut Dr. Foerster GmbH & Co. KG

In Laisen 70
72766 Reutlingen
Germany

+49 7121 140 0
info@foerstergroup.com

© Copyright 2026 – Copyright notice: All contents of this work, in particular texts, photographs and graphics, are protected by copyright. Unless explicitly stated otherwise, the copyright lies with Institut Dr. Foerster GmbH & Co. KG. Please contact us if you wish to use any part of this work.

Generated: 2026-11-02 18:38:33