



COMPANY INTRODUCTION

Nihon Denji Sokki Co., Ltd.



COMPANY PROFILE

Founding Year: 1953

Employee: 118 (At March 2026)

Business Divisions: Magnetization, Non-destructive Testing

Annual revenue: 1.7billion Yen (FY 2025)

**ISO certification: ISO 9001
ISO 1400**

Manufactured Products

- ☐ **MAGENETIZER & MAGNETIZING YOKE**
- ☐ **MAGNETIC MEASURING INSTRUMENT
(Tesla Meter, Flux Meter etc.)**
- ☐ **MAGNETIC FIELD PRESSING EQUIPMENT**
- ☐ **NON-DESTRUCTIVE INSPECTION EQUIPMENT
(Magnetic Particle Flaw Detector etc.)**
- ☐ **MAGNETIC APPLICATION PRODUCTS & ACCESSORIES**



JAPAN

NIHON DENJI SOKKI CO., Ltd.

- Head Quarter
- Factories (Tokyo/ Nagano)

CHINA

Shanghai Hirano Magnetics Co., Ltd.

Shanghai Mizuho Magnetics Co., Ltd.

Shanghai Kasahara Electronic Equipment Co., Ltd.

THAILAND

NDK Asia Co., Ltd.

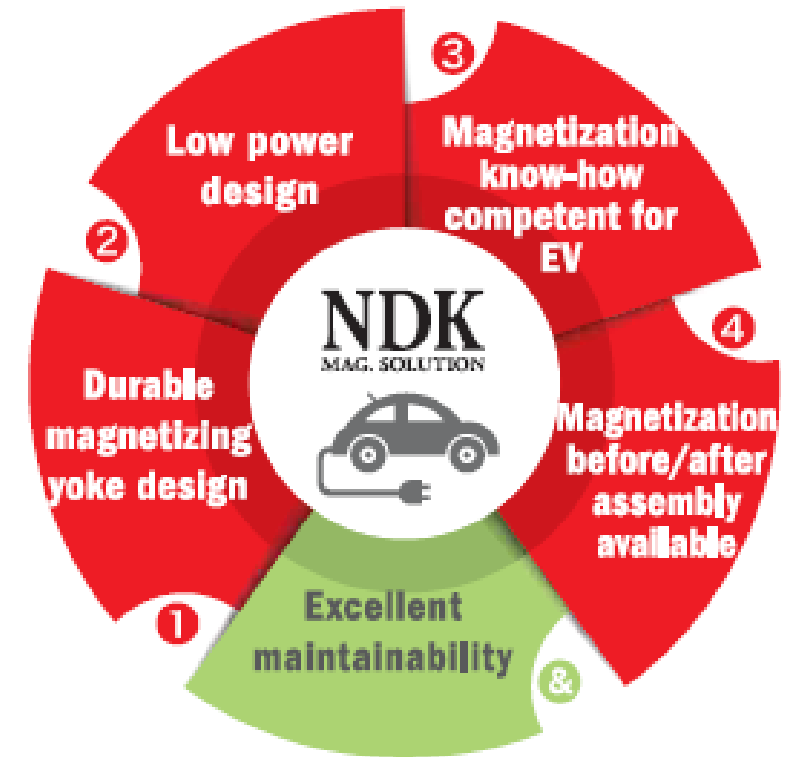
~**GLOBAL SALES NETWORK**~



Our partnership with Elsoma
We also support our customers in Europe!

~MAJOR CLIENTS~

We are proud to have introduced many of our products to major Japanese automobile manufacturers and other domestic & overseas automobile suppliers who are globally expanding.

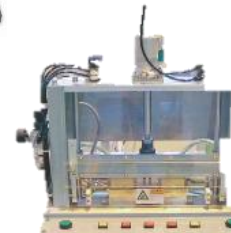
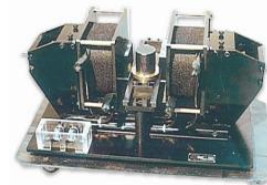
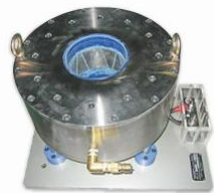


- **A sole supplier for one of the largest major domestic automakers.**
- **Approx. 50% share of the entire Japan automotive industry.**

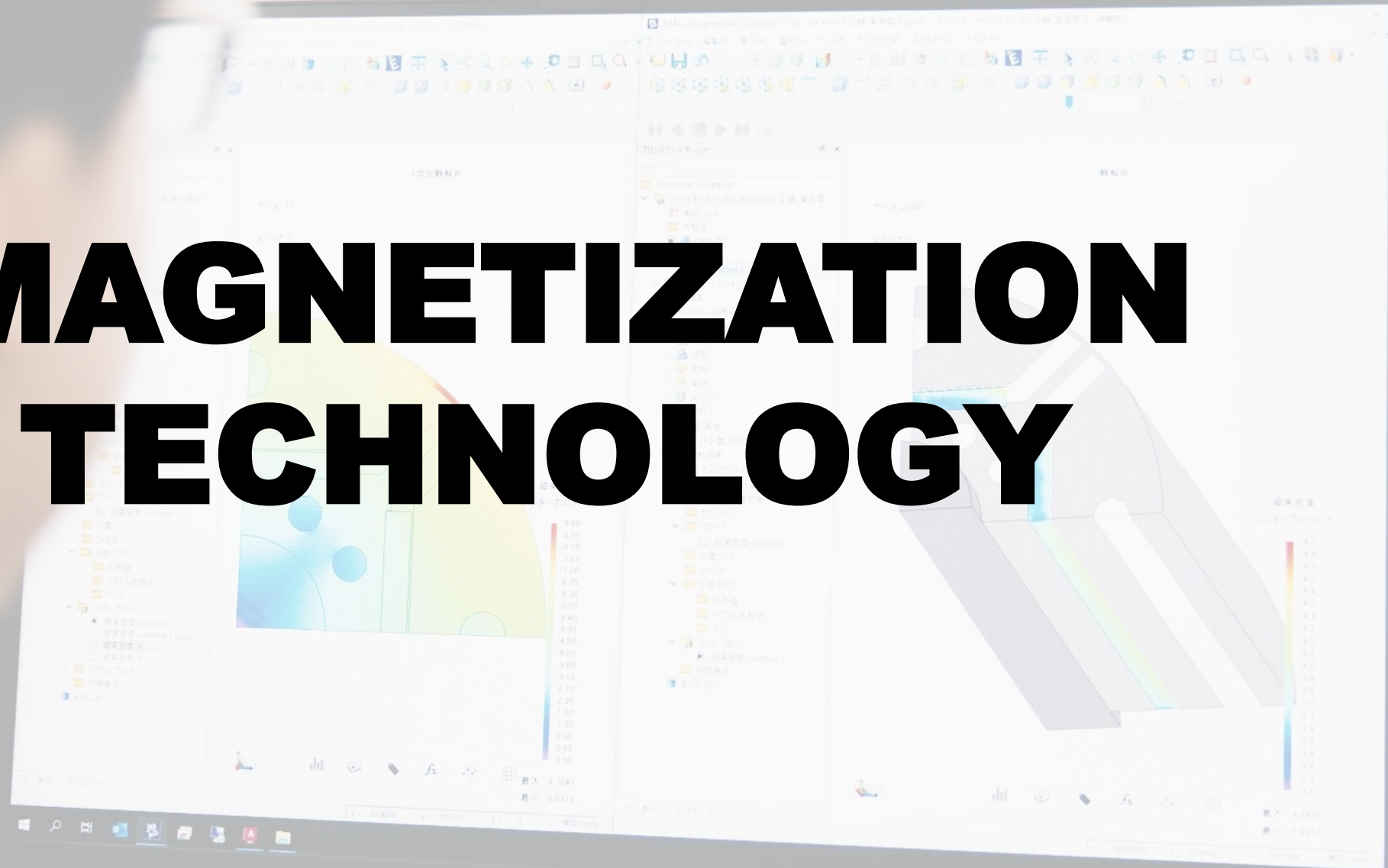
A worker in a green uniform and cap is operating industrial machinery in a factory setting. The worker is positioned on the left side of the frame, facing right, and is interacting with a control panel or machine. The background shows various industrial equipment, including a large machine with a screen and a control panel, and a rack of equipment on the right. The overall scene is a blurred industrial environment.

MAGNETIZATION

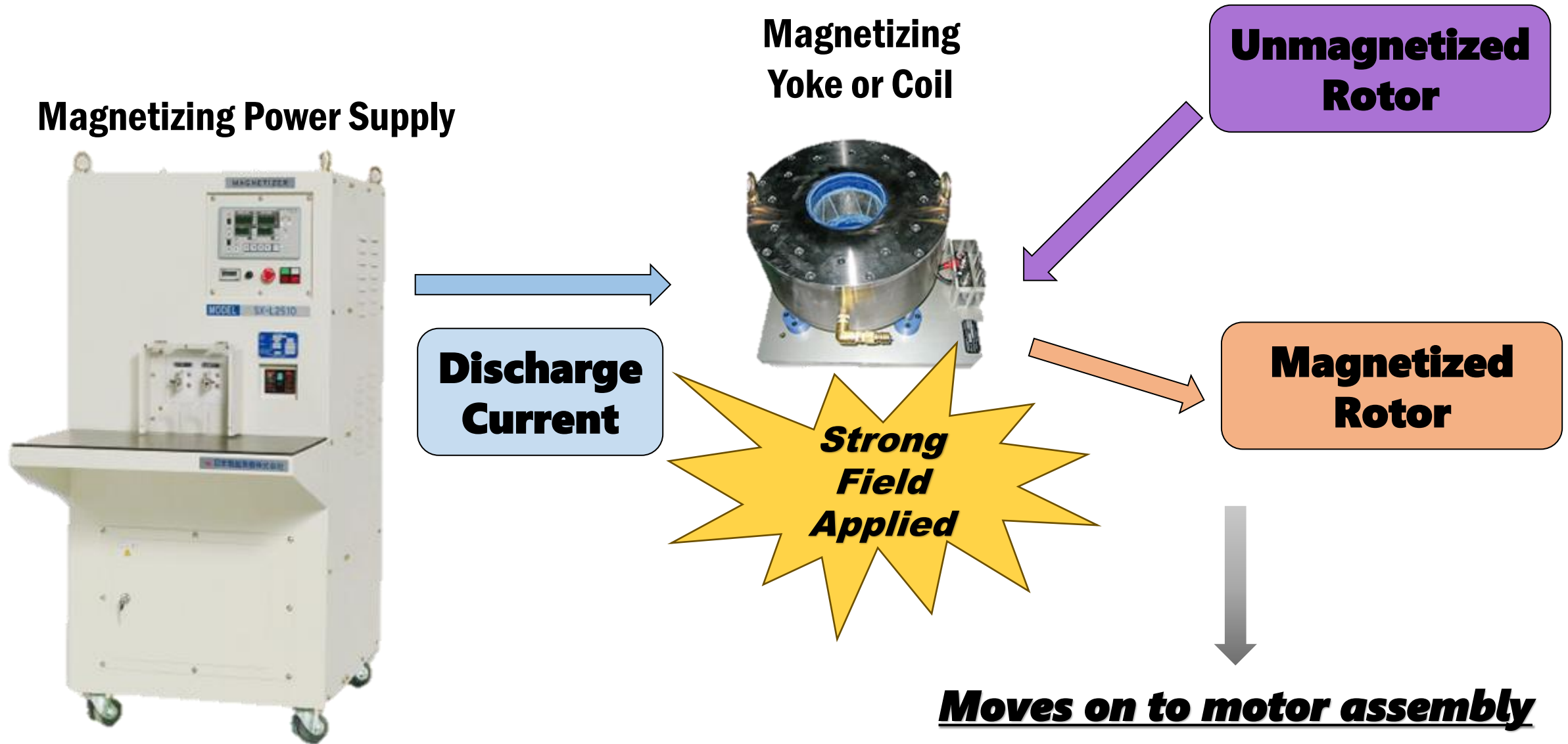
MAGNETIZER & MAGNETIZING YOKE



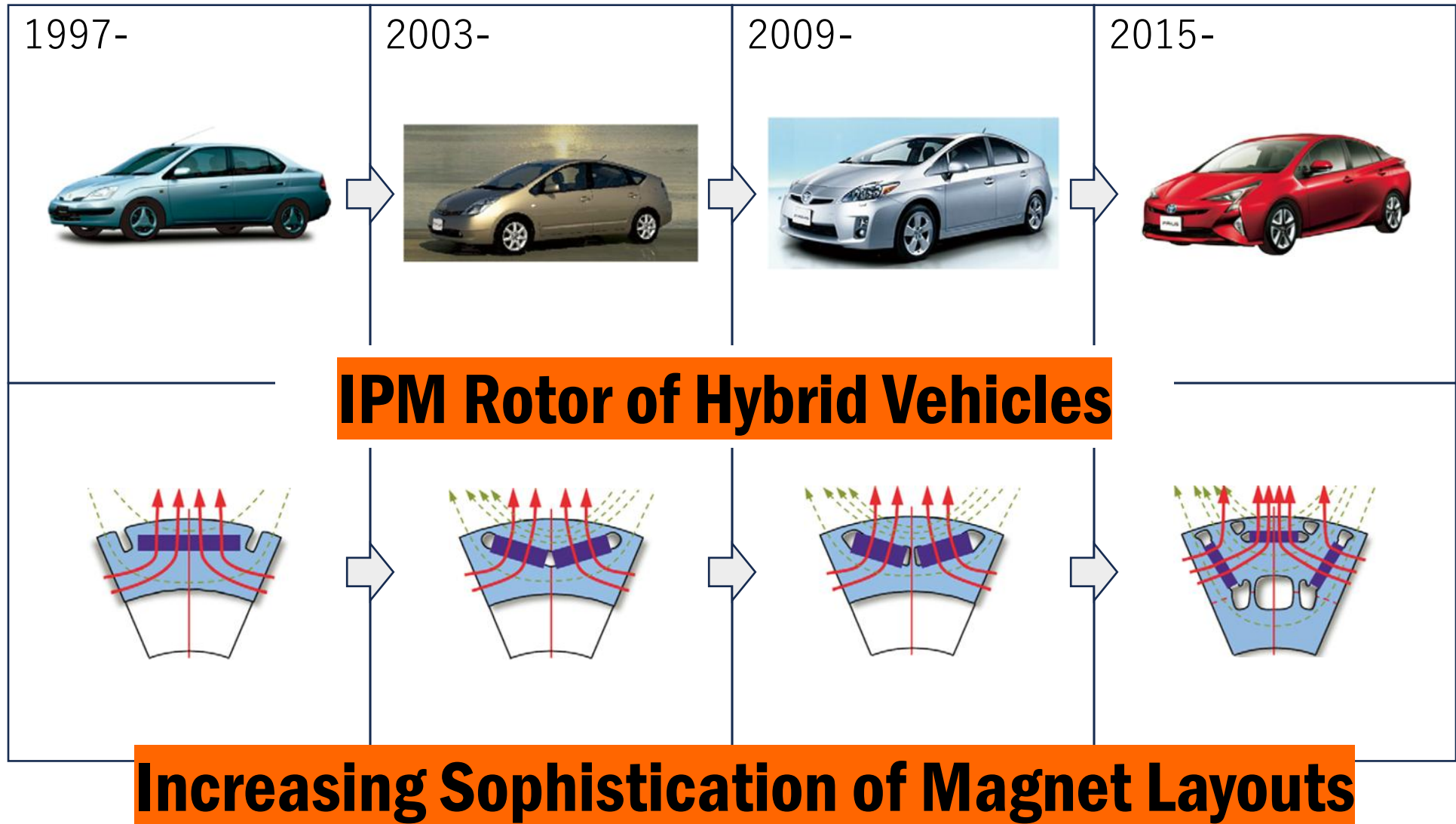
MAGNETIZATION TECHNOLOGY



~WHATS IS MEANT BY MAGNETIZATION?~



~MAGNETIZATION TECHNOLOGY~



IEEJ Journal, Vol.138 No.5, 2018

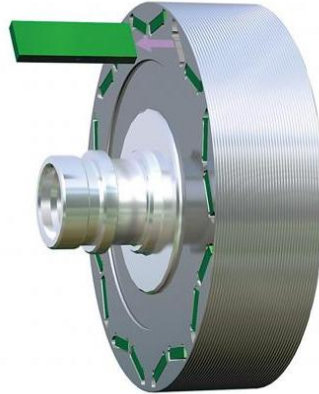
Pre- & Post Magnetization Technology

~PRE-& POST MAGNETIZATION~

If it is difficult to magnetize the magnets after being inserted into the rotor, they have to be magnetized before being inserted into the rotor.

Pre-assembly Magnetization

Magnetize the magnet
before inserting it into the rotor



Post-assembly Magnetization

Magnetization after the magnets are
inserted into the rotor

Users always prefer post-assembly magnetization

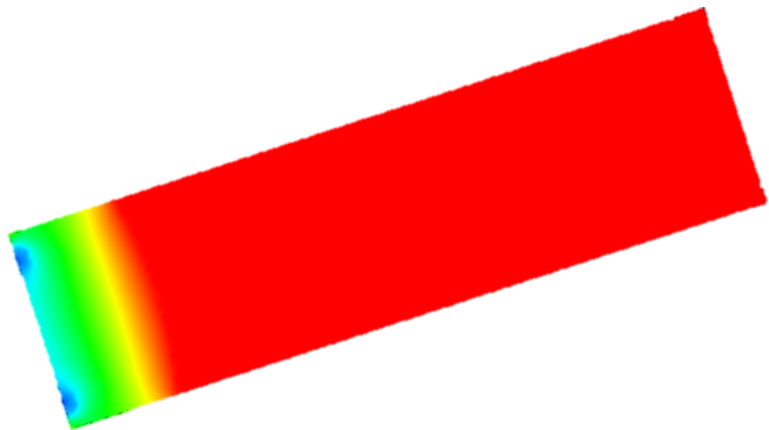
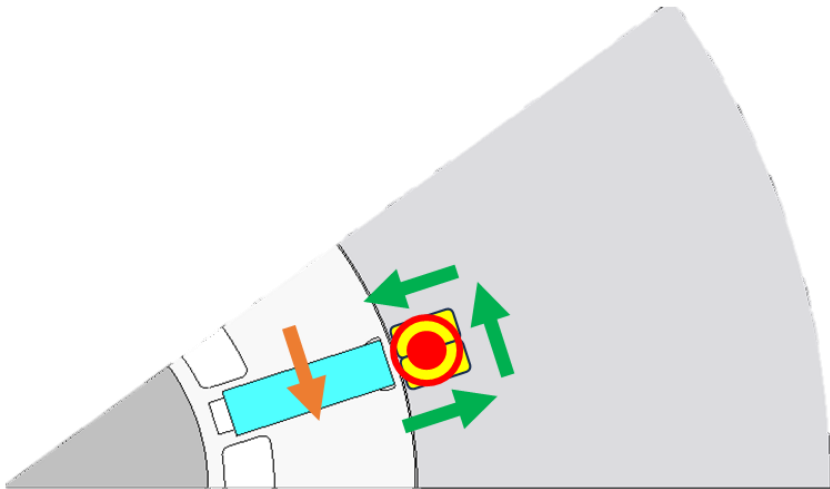
	advantage	disadvantage
Pre-assembly magnetization	Can magnetize the magnets 100% Easy to magnetize small size magnetizers can do the job.	Difficult to assemble a rotor Magnet breakage, injury Assembly equipment should get larger and complex.
Post-assembly magnetization	Easy to assemble the rotor Assembly equipment can be downsized.	100% magnetization may not be possible. Requires large size magnetizers

NDK will suggest the solutions that enable post-assembly magnetization.

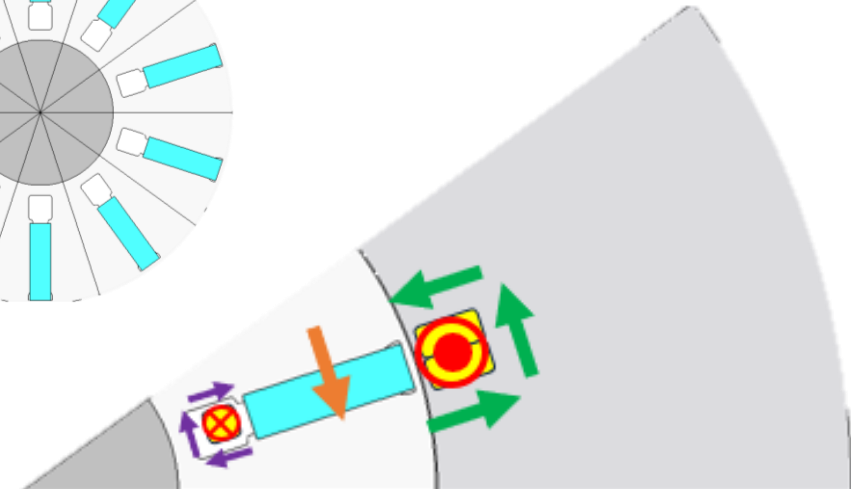
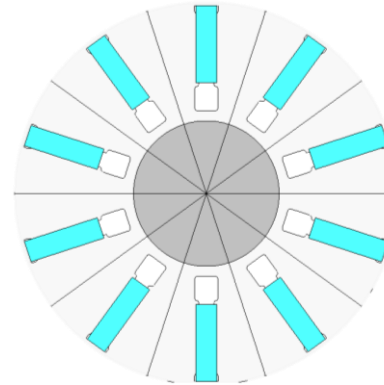
Outer & Inner Magnetization Technology

~INNER & OUTER MAGNETIZATION~

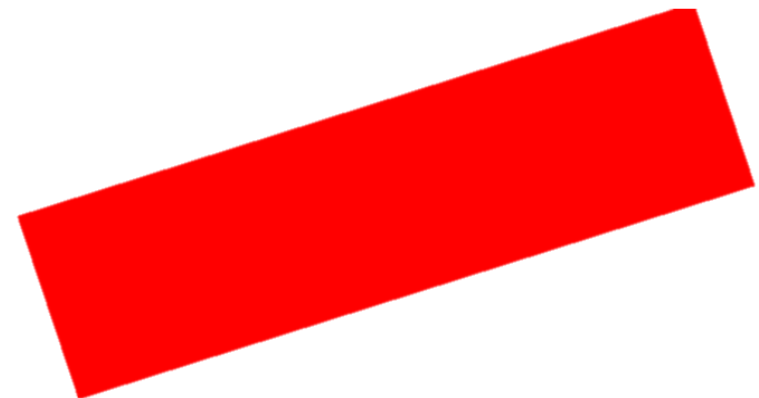
Only outer yoke



Inner & outer yoke



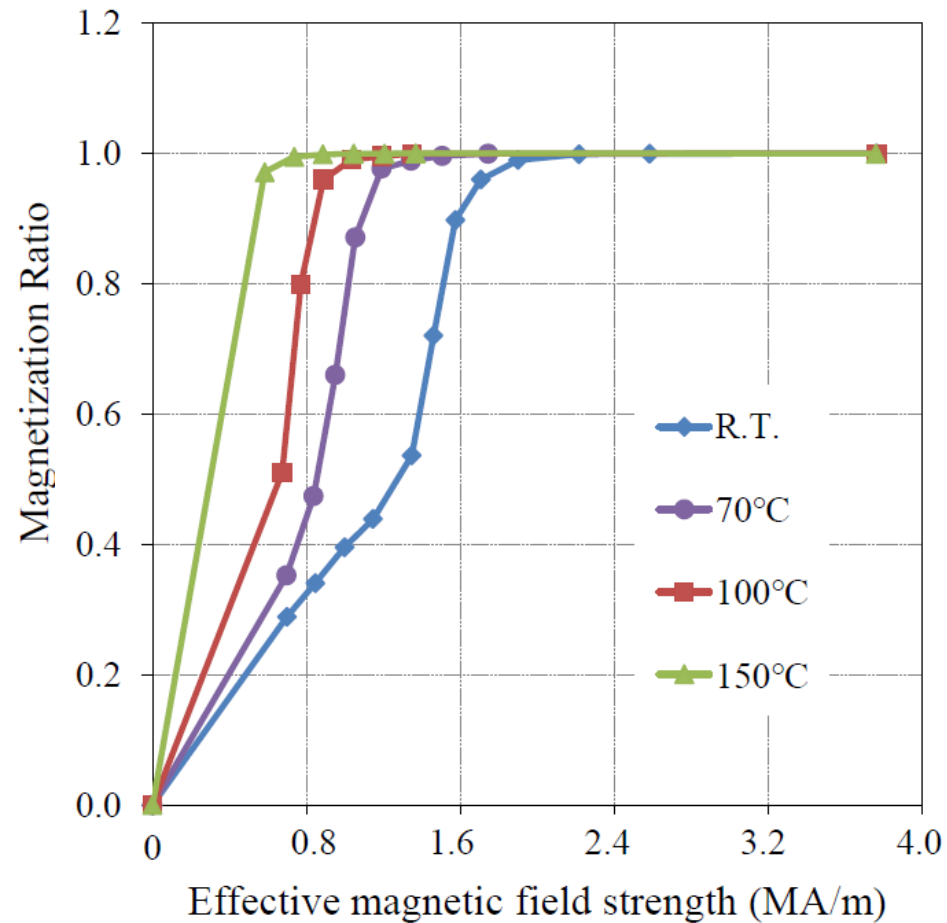
Flux Density [T]



Heat-Assisted Magnetization Technology

~HEAT-ASSISTED MAGNETIZATION~

Magnetization Profile



REPM2021: The 26th International Workshop on Rare-Earth and Future Permanent Magnets and Applications, Virtual, Day 3, June 9, 2021

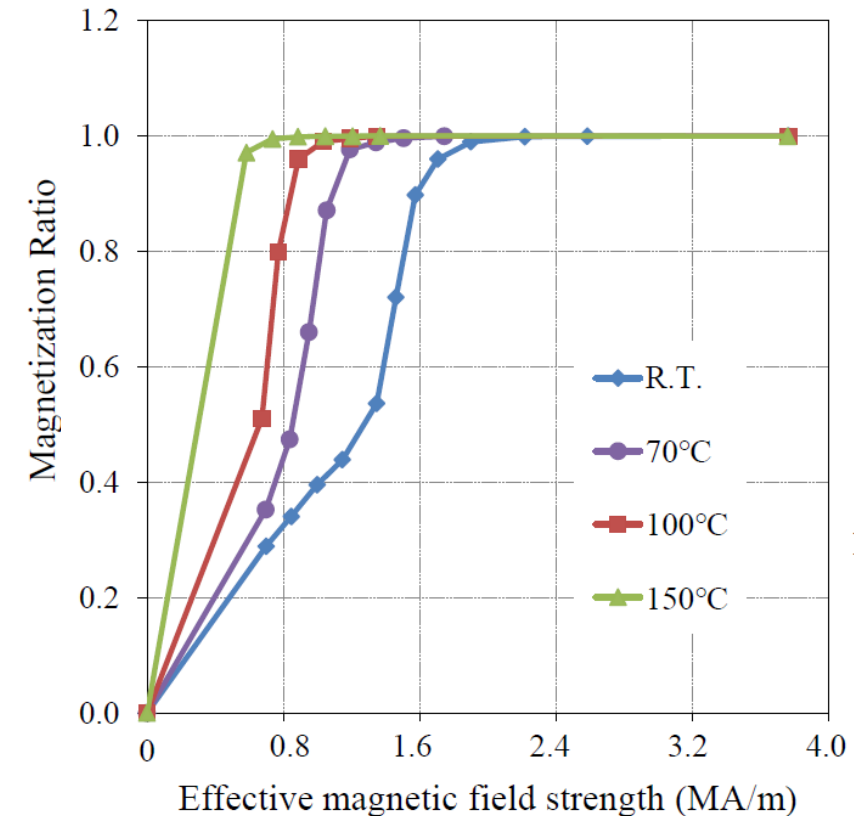
~HEAT-ASSISTED MAGNETIZATION~

Heat the magnet



Lower needed magnetization field

Magnetization Profile



~HEAT-ASSISTED MAGNETIZATION~

Heated rotor's surface
by high frequency induction



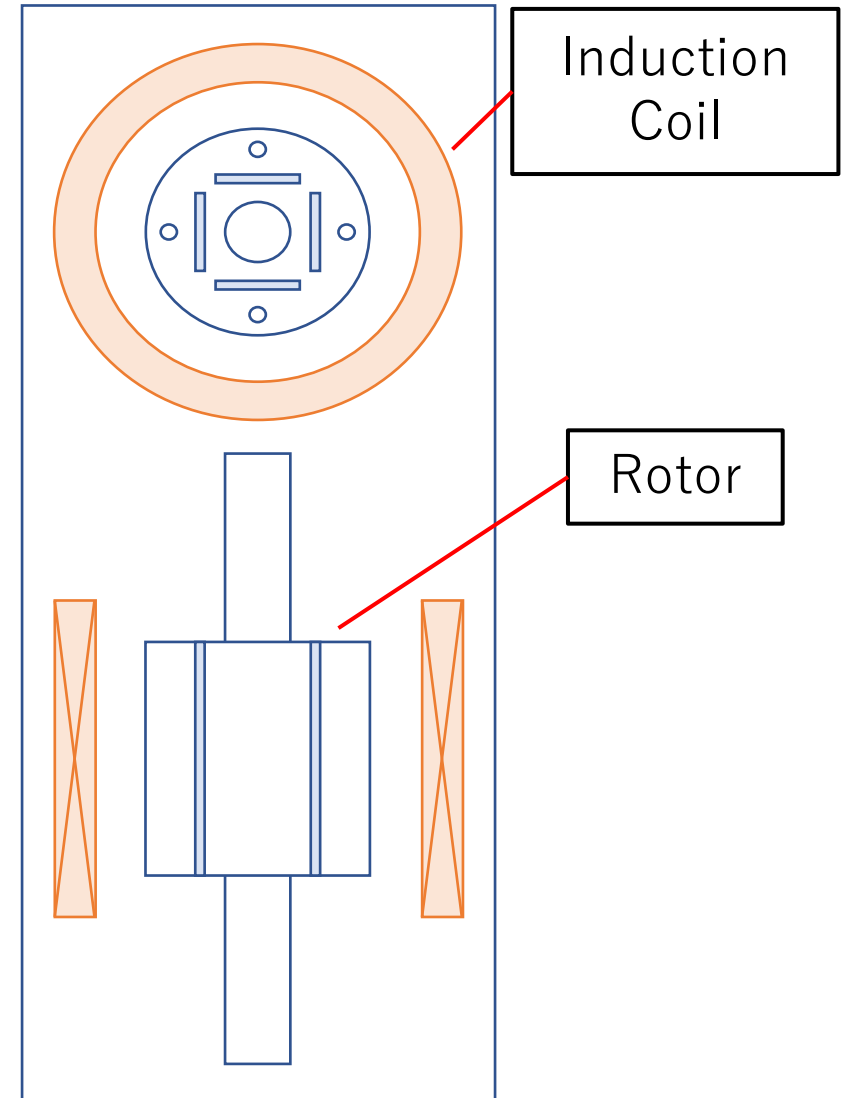
Heat the magnet



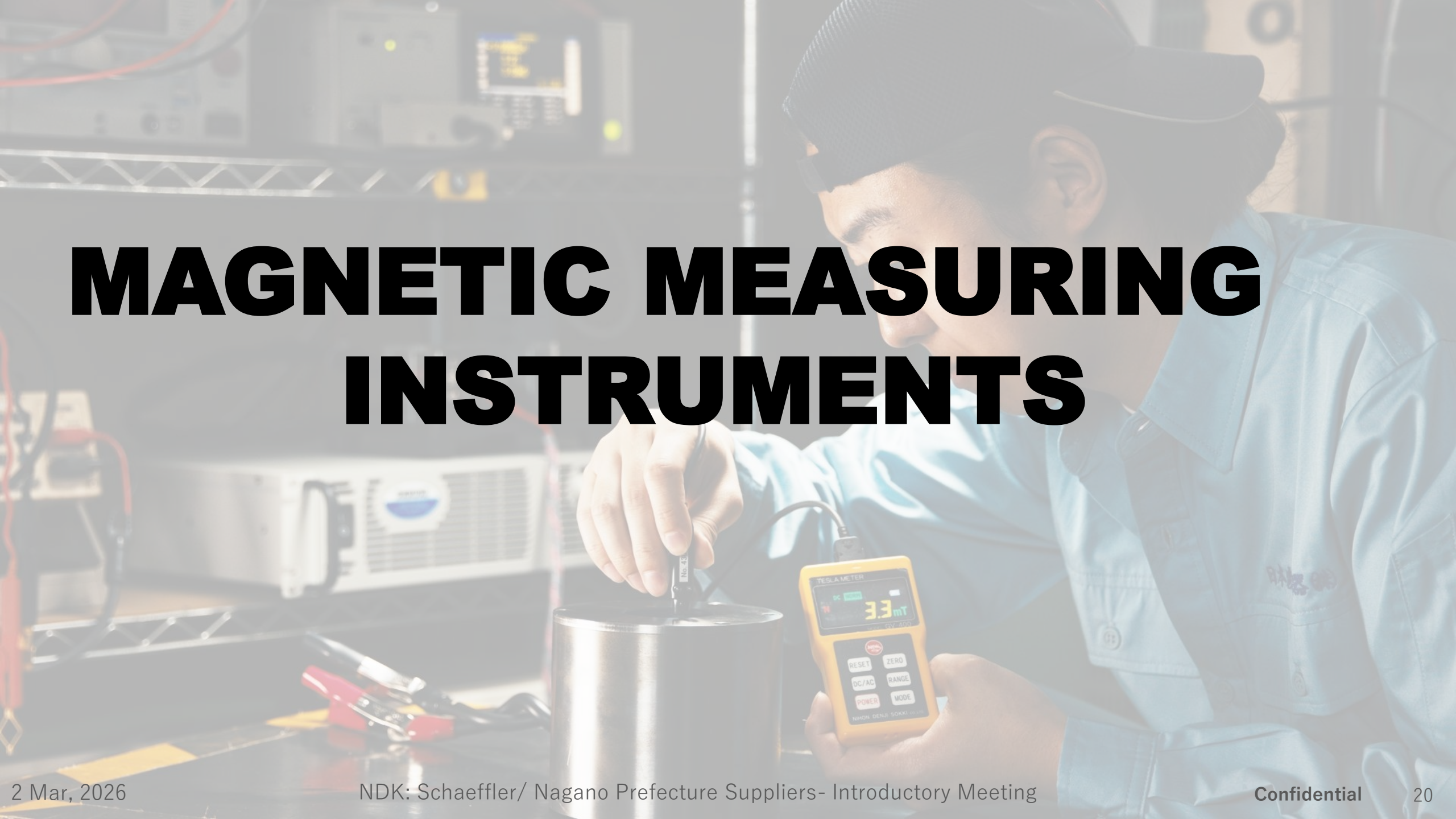
Lower needed magnetization field



Lower needed **magnetization current**



MAGNETIC MEASURING INSTRUMENTS

A technician in a blue uniform and cap is using a handheld magnetic field meter to measure a cylindrical metal component. The meter's screen displays '3.3 mT'. The background shows a laboratory or industrial setting with various equipment.

~MAGNETIC MEASURING INSTRUMENT~



(Tesla Meter/ Flux Meter/ BH Curve Tracer etc.)



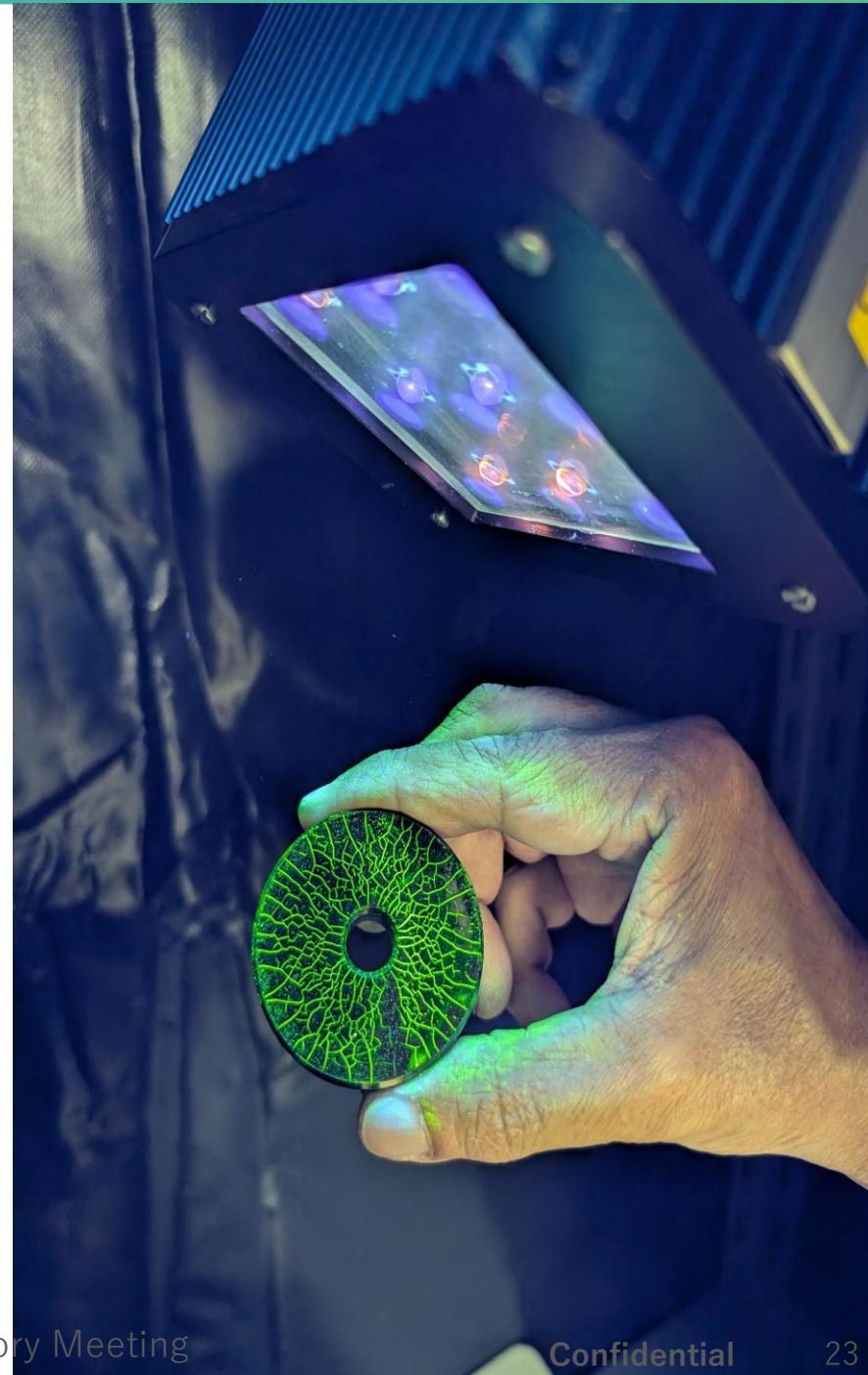
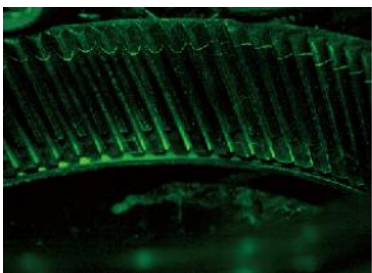
A person wearing a white lab coat and a white cap is working in a laboratory. They are holding a glowing blue device with three white circles on it. The background is a laboratory with shelves and equipment.

NDT EQUIPMENT

【NON-DESTRUCTIVE TESTING EQUIPMENT】



- **EDDY CURRENT FLAW DETECTOR**
- **ULTRASONIC FLAW DETECTOR**
- **CONSUMABLES FOR
NON-DESTRUCTIVE TESTING:
MAGNETIC PARTICLES**



The background image shows three people in a factory or laboratory setting. They are wearing light blue work shirts. One person is seated at a desk with a computer monitor, looking at the screen. Another person is standing next to them, also looking at the monitor. A third person is standing further back, looking on. The monitor displays a 3D model of a green and white mechanical part. The text "MAGNET FABRICATION EQUIPMENT" is overlaid in large, bold, black letters across the center of the image.

MAGNET FABRICATION EQUIPMENT

~MAGNET FIELD PRESSES~

TDP **Transverse Die Pressing**



NPLP **New Press less Process**





Nihon Denji Sokki Co.,Ltd.
【3-E27】



ELSOMA GmbH
【3-E29】

THANK YOU FOR YOUR ATTENTION