

TAMURA CORPORATION

Your global electronic components partner



Energize the Future **100th**
ANNIVERSARY

Tamura Corporation

At the beginning...



1924
Established Tamura Radio Store in Shinjuku, Tokyo, Japan



1924-1930
Radio receiving sets
Gramophones



2000's
Worldwide expansion

Tamura headquarter in Japan, Tokyo



MASAHIRO ASADA
President and representative Director

NAOKI TAMURA
Chairperson and representative Director

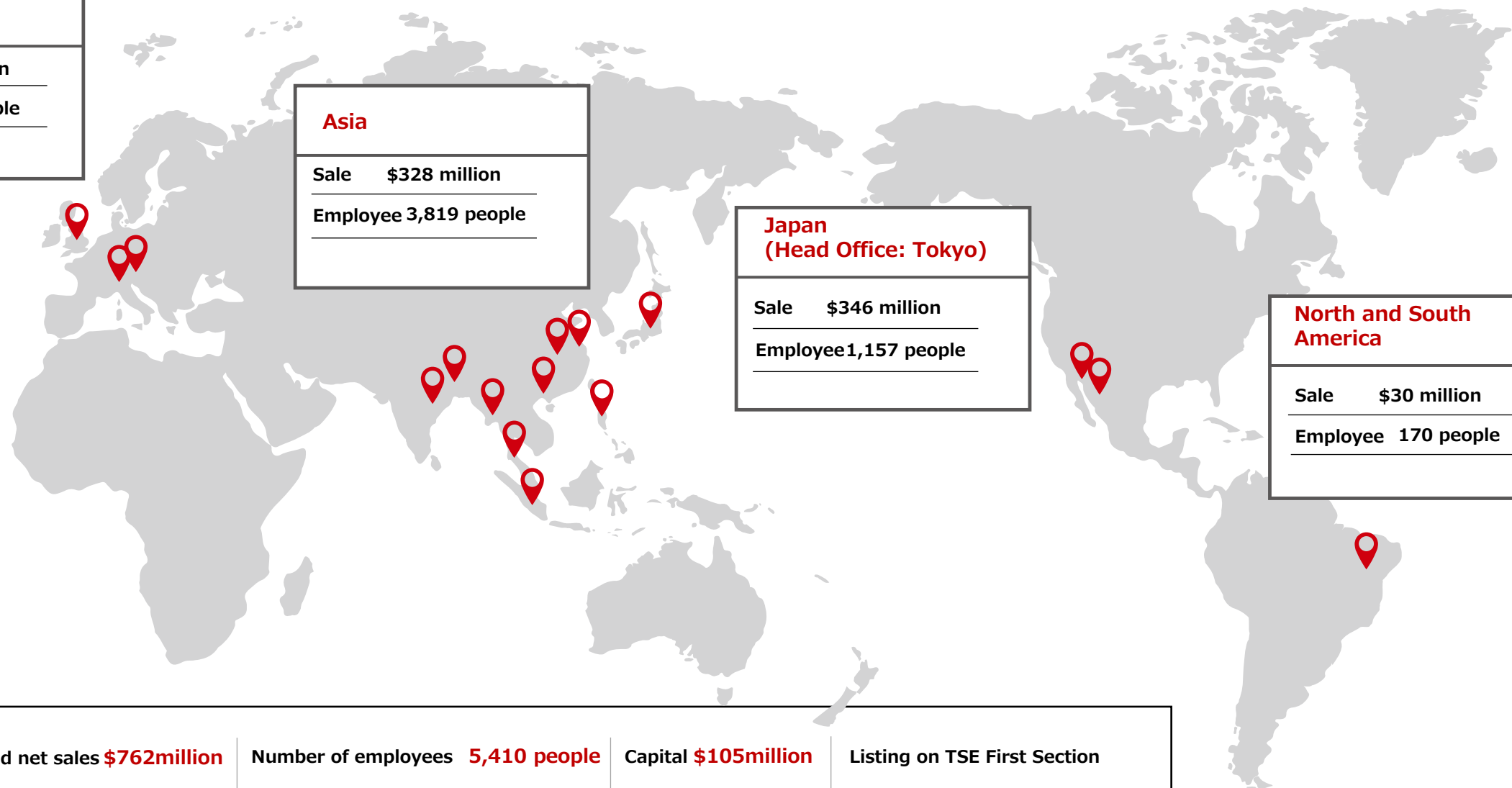
Company Profile 2021

Europe	
Sale	\$58 million
Employee	264 people

Asia	
Sale	\$328 million
Employee	3,819 people

Japan (Head Office: Tokyo)	
Sale	\$346 million
Employee	1,157 people

North and South America	
Sale	\$30 million
Employee	170 people



Consolidated net sales \$762million	Number of employees 5,410 people	Capital \$105million	Listing on TSE First Section
--	---	-----------------------------	------------------------------

Business Units

Electronic Components



Transformers, Inductors, Reactors,
Choke coils,
Current sensors
Gate Drivers

Electronic Chemicals FA Systems



Solder paste & Post-flux
Self Assembling Material

Solder resist for rigid & flexible PCBs
OSP(Pre-flux)
White reflective material,
Black absorbing material

Reflow soldering system
Wave soldering system
Spray fluxer & other peripheral devices

Information Equipment



Audio mixing console & Sound editor
& other equipment for broadcast use

Wireless intercom
Wireless microphone

Communication network equipment
Security-related equipment
OEM products

Business Units – *Electronic components*

Products

Transformers



Reactors



Technologies

Direct liquid cooled



Indirect liquid cooled



Dry type



Cast resin

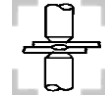


Applications

Traction



Welding



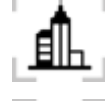
Energy



Industry



Infrastructure



Renewables



Marine



Oil | Gas | Water



Business Units – *Electronic components*



LV Transformers and reactors Dry Type
(Air Natural/Air Forced cooled)



MV Transformers and reactors Dry Type
(Direct Water-cooled)



MV Transformers and reactors Dry Type



LV Transformers and reactors Dry Type
(Indirect Water-cooled)



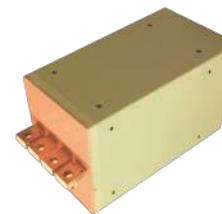
MV Transformers and reactors Cast-Resin



Transformers and reactors for
Railways



Transformers for
Resistance Welding

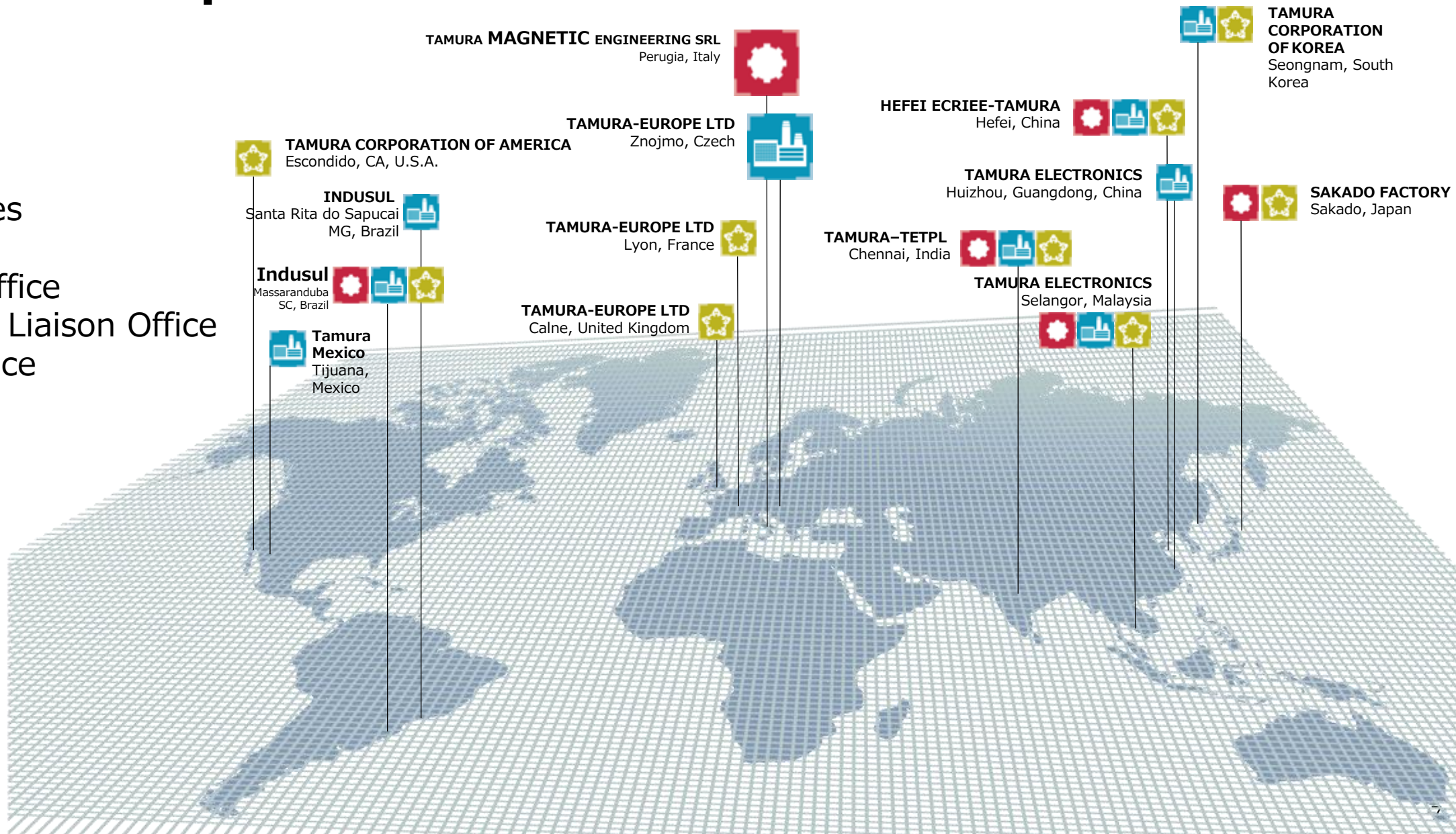


Current Sensors and
Gate Drivers

Global Footprint

- ✓ 12 Countries
- ✓ 9 Factories
- ✓ 3 Design Office
- ✓ 4 Technical Liaison Office
- ✓ 9 Sales Office

-  Sales
-  Factory
-  Technical



EU Production Site - Location

- Tamura-Europe Ltd
 - Znojmo, Czech Rep.



TAMURA-EUROPE LTD
Znojmo, Czech



Company	Tamura Europe Ltd (Czech)
Factory est.	Year 2012
Location	Znojmo, Czech Republic
Employees	392 People (267 Direct, 99 In-direct)
Factory info	13,000m ² , Crane Max 7ton, Floor 7ton/m ²
Products	Voltage range 500VA ~ 7MVA



EU Production Site - Testing Capabilities

Routine Tests

- Measurement of winding resistance
- Measurement of voltage ratio and check of phase displacement
- Measurement of short-circuit impedance and load losses
- Measurement of no-load loss and current
- Measurement of inductance with AC source, AC/DC, Voltage pulse
- Separate source AC Withstand voltage test (applied voltage)
- Induced overvoltage withstand test
- Hydraulic test: pressure and drop (for WF)



Type and Special Tests

- Temperature-rise test (water cooled / air forced)
- Noise level test
- Partial discharge measurement ($V_{max}=50kV$)
- Lightning impulse test ($V_{max} 100kV$ con $\epsilon=10kJ$ $V_{max}=200kV$ con $\epsilon=5kJ$)

Test Bench technical features


- AC/DC $\rightarrow I_{DCmax} 4000A / I_{ACmax} 100A @300Hz$
- AC $\rightarrow I_{max} 1600A @100V / I_{max} 166A @1000V$



MX Production Site - Location

- Tamura Power Technologies de Mexico, S.A. De C.V.
 - Tijuana, Mexico

 **TAMURA CORPORATION OF AMERICA**
Escondido, CA, U.S.A.

 **Tamura Mexico**
Tijuana, Mexico



Company	Tamura Power Technologies de Mexico, S.A. de C.V.
Factory est.	Year 1992
Location	Tijuana, Mexico
Employees	133 People
Factory info	7,500m ² , Crane Max 3ton
Products	Dry type Low Voltage range 1kVA ~ 1MVA

BRA Production Site - Location

- Indusul Transformadores Ltda.
 - Santa Rita do Sapucaí and Massaranduba, Brasil

INDUSUL
 Santa Rita do Sapucaí
 MG, Brazil

INDUSUL
 Massaranduba
 SC, Brazil



Company	Indusul Transformadores Ltda.
Factory est.	Year 2012
Location	Santa Rita do Sapucaí and Massaranduba, Brasil
Employees	200 People
Factory info	Total of 5,000m ²
Products	Dry type LV and MV range 1kVA ~ 15MVA

IND Production Site - Location

- Tamura Elcomponics Technologies Pvt. Ltd.
 - Chennai, India

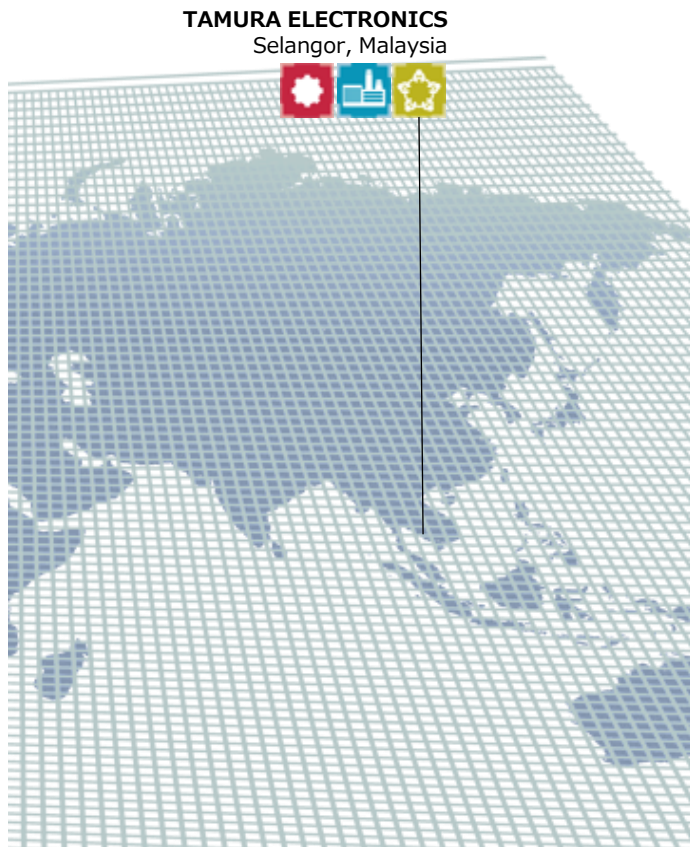
TAMURA-TETPL
Chennai, India



Company	Tamura Elcomponics Technologies Pvt. Ltd.
Factory est.	Year 2015
Location	Chennai, India
Employees	50 People
Factory info	4,000m ²
Products	Dry type Low Voltage range 1kVA ~ 1MVA

MY Production Site - Location

- Tamura Electronics (M) Sdn. Bhd.
 - Shah Alam KL, Malaysia



Company	Tamura Electronics (M) Sdn. Bhd.
Factory est.	Year 1975
Location	Shah Alam KL, Malaysia
Employees	250 People
Factory info	14,800m ²
Products	Dry type Low Voltage range 1kVA ~ 2MVA

CN Production Site - Location

- Tamura Electronics (Huizhou) CO.,Ltd.
 - Huizhou, China

TAMURA ELECTRONICS
Huizhou, Guangdong, China



Company	Tamura Electronics (Huizhou) CO.,Ltd.
Factory est.	Year 2003
Location	Huizhou, China
Employees	680 People
Factory info	3,500m ²
Products	Dry type LV and MV range 1kVA ~ 8MVA

KR Production Site - Location

- Tamura Corporation of Korea
 - Seongnam, South Korea



TAMURA
CORPORATION
OF KOREA
Seongnam, South Korea



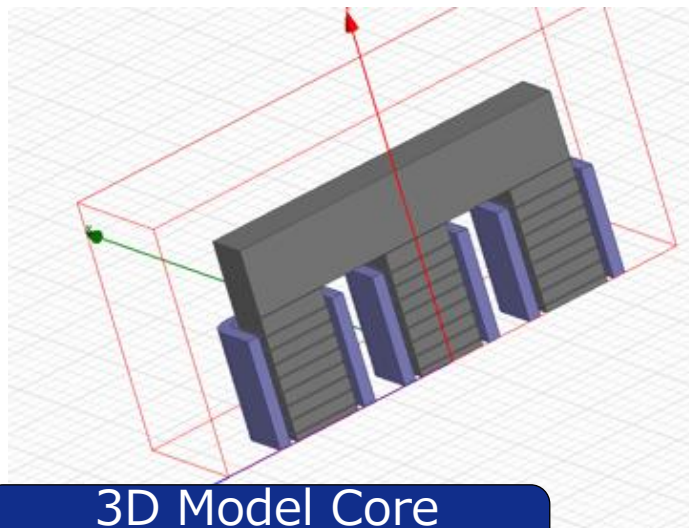
Company	Tamura Corporation of Korea
Factory est.	Year 2003
Location	Seongnam, South Korea
Employees	680 People
Factory info	22,300m ² , Crane Max 3ton
Products	Dry type Low Voltage range 1kVA ~ 1MVA

Global R&D

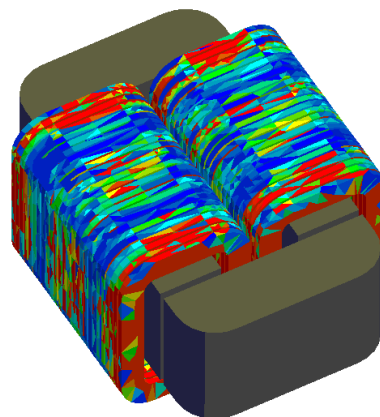
TAMURA MAGNETIC ENGINEERING SRL
Perugia, Italy



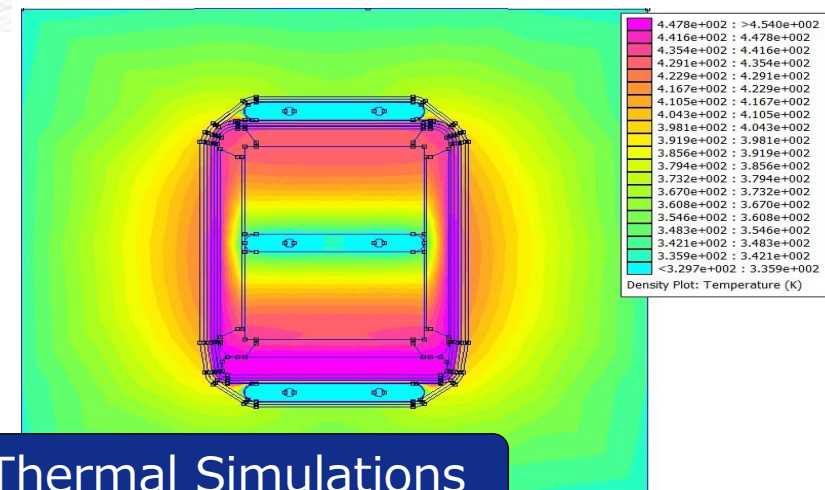
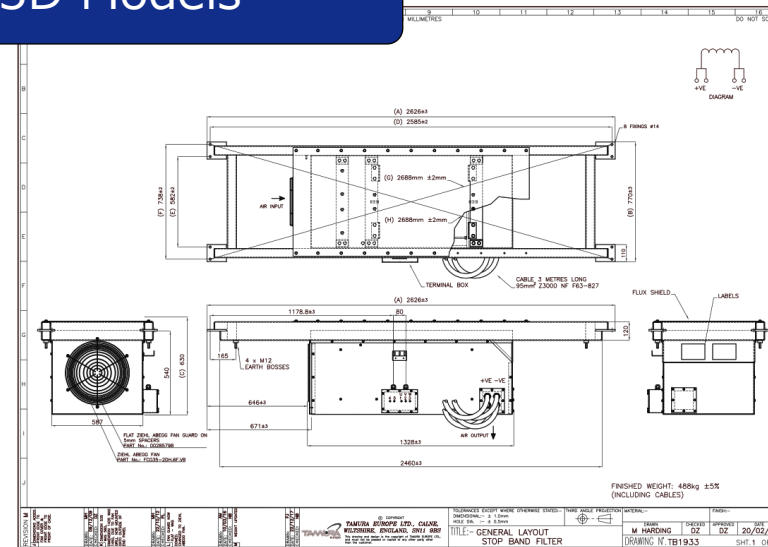
- ✓ R&D HQ in Italy
- ✓ ONE global design
- ✓ Valued added solution
- ✓ 3D drawings
- ✓ Technical analysis
- ✓ FEM analysis for thermal and magnetic behaviour



3D Model Core Simulation



3D Models



Thermal Simulations

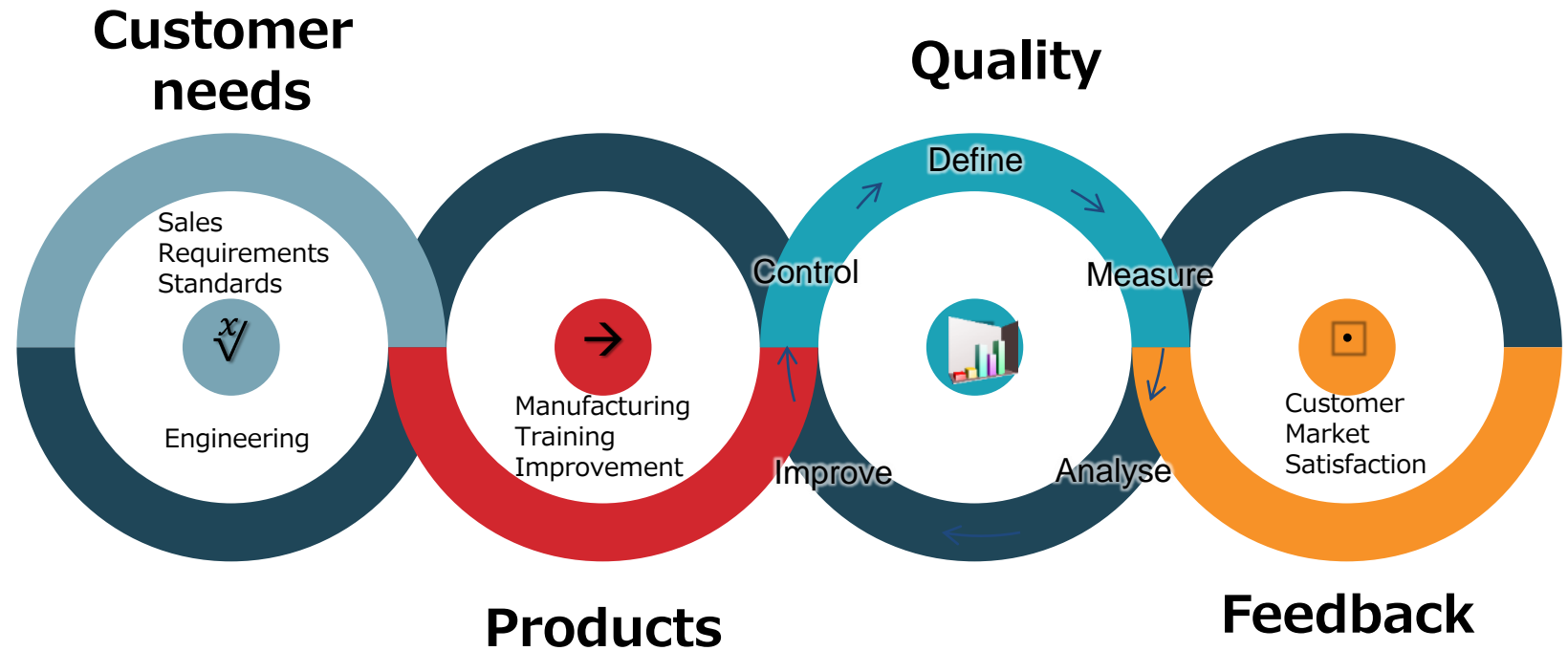
Quality & Continuous Improvement

All our factories comply with:

- ISO9001
- ISO14000



- Process-based Control Policy
- Operational Procedures
- KPIs / Action Plan



Global Service



24/7 Emergency Service
globalservice@tamura-europe.co.uk



Energize the Future **100th**
ANNIVERSARY