

# VT ElektroPlast

ONE COMPANY – INFINITE POSSIBILITIES

—  
Quality Management

TECHNOLOGY

DYNAMISM

PROGRESS

STABILITY

# CONTENT

- Certified standards
- Quality staff
- Documentation system
- Process Map
- Quality management system development
- Supplier evaluation, development, sourcing
- Trainings
- Measurement equipment calibration
- Specific requirements
- Applied quality technics
- Test lab
- Measurement lab

# CERTIFIED STANDARDS – VTEP/VTBT

## ISO 9001:2015

### Scope

Component assembly and injection moulding parts manufacturing



# CERTIFIED STANDARDS – VTEP/VTBT

## IATF 16949:2016

### Scope

Component assembly and injection moulding parts manufacturing

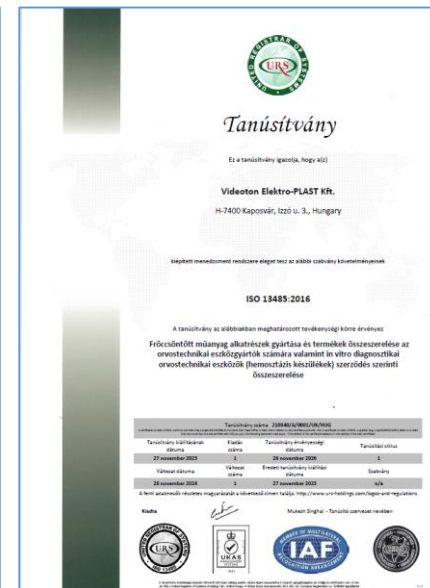


# CERTIFIED STANDARDS - VTEP

## ISO 13485:2016

### Scope

Manufacture of injection moulded plastic parts and assembly of products for medical device manufacturers and assembly of in vitro diagnostic medical devices (hemostasis instrument) according contract manufacturing



# QUALITY STAFF

	VTEP	VTBT
Workshop QA manager	3	1
Quality engineer	10	2
SQA engineer	2	-
Supplier development engineer	1	-
Supplier quality technician	2	-
Quality technician	6	2
Incoming inspector	3	2
Quality inspector	18	7
<b>Total:</b>	<b>45</b>	<b>14</b>



# DOCUMENTATION SYSTEM

Electronic system on a safe intranet with authorized access

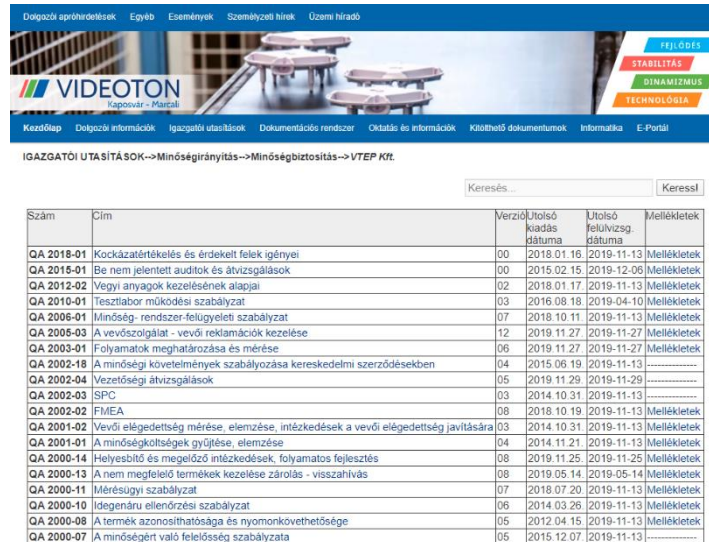
Level 1 Quality Manual

Level 2 Standard Operation Procedures

Level 3 Work Instructions

Level 4 Records

- Processed based documentation
- PPAP documents for all products and produced parts
- All the documentations are available for authorized users

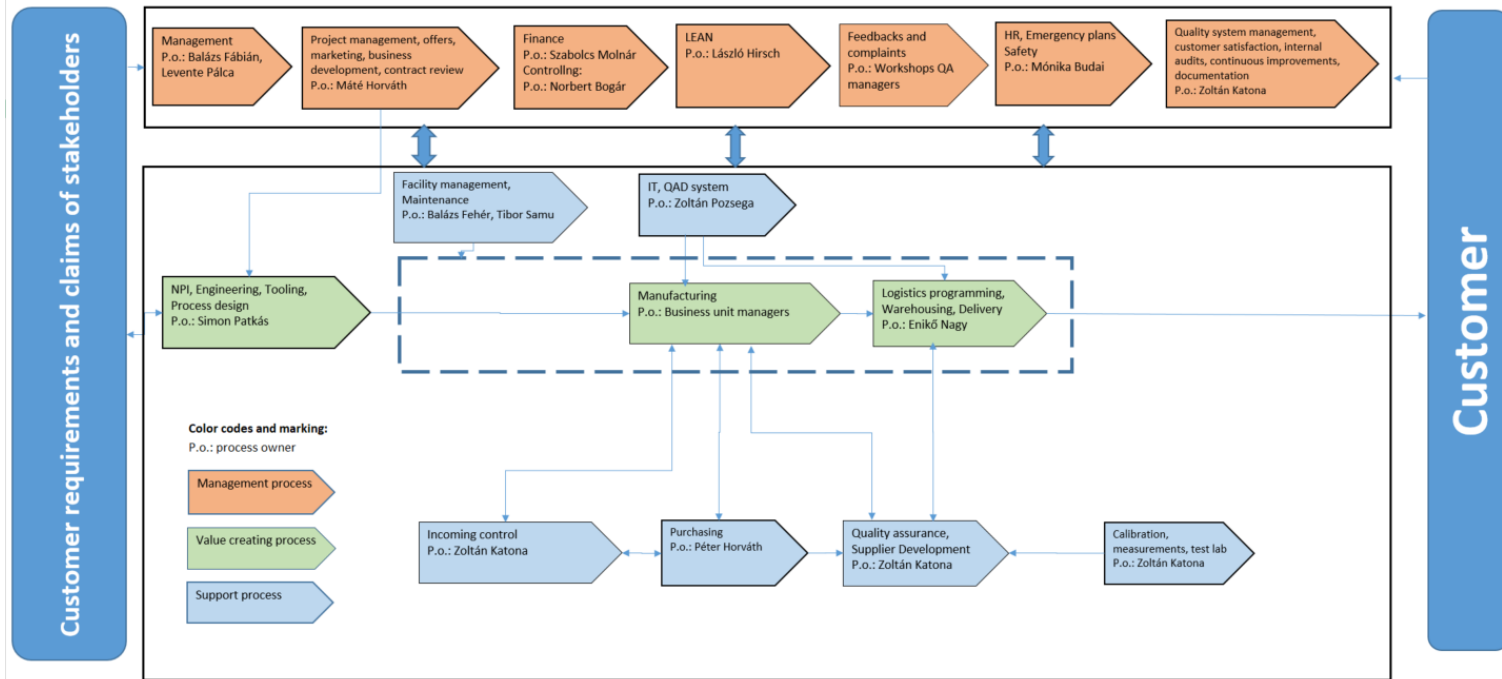


Szám	Cím	Verzió	Utolsó kiadás dátuma	Utolsó felülvizsg. dátuma	Mellékletek
QA 2018-01	Kockázatelemzés és érdekelt felek igényei	00	2018.01.16	2019-11-13	Mellékletek
QA 2015-01	Be nem jelentett auditok és átvizsgálások	00	2015.02.15	2019-12-06	Mellékletek
QA 2012-02	Vegyi anyagok kezelésének alapjai	02	2018.01.17	2019-11-13	Mellékletek
QA 2010-01	Tesztlabor működési szabályzat	03	2016.08.18	2019-04-10	Mellékletek
QA 2006-01	Minőség- rendszer-felügyeleti szabályzat	07	2018.10.11	2019-11-13	Mellékletek
QA 2005-03	A vevőszolgálat - vevői reklamációk kezelése	12	2019.11.27	2019-11-27	Mellékletek
QA 2003-01	Folyamatok meghatározása és mérése	06	2019.11.27	2019-11-27	Mellékletek
QA 2002-18	A minőség követelmények szabályozása kereskedelmi szerződésekben	04	2015.06.19	2019-11-13	.....
QA 2002-04	Vezetőségi átvizsgálások	05	2019.11.29	2019-11-29	.....
QA 2002-03	SPC	03	2014.10.31	2019-11-13	.....
QA 2002-02	FMEA	08	2018.10.19	2019-11-13	Mellékletek
QA 2001-02	Vevői elégedettség mérése, elemzése, intézkedések a vevői elégedettség javítására	03	2014.10.31	2019-11-13	Mellékletek
QA 2001-01	A minőségköltségek gyűjtése, elemzése	04	2014.11.21	2019-11-13	Mellékletek
QA 2000-14	Helyesbítő és megelőző intézkedések, folyamatok fejlesztés	08	2019.11.25	2019-11-25	Mellékletek
QA 2000-13	A nem megfelelő termékek kezelése zárolás - visszahívás	08	2019.05.14	2019-05-14	Mellékletek
QA 2000-11	Mérésügyi szabályzat	07	2018.07.20	2019-11-13	Mellékletek
QA 2000-10	Idegenárú ellenőrzési szabályzat	06	2014.03.26	2019-11-13	Mellékletek
QA 2000-08	A termék azonosíthatósága és nyomonkövethetősége	05	2012.04.15	2019-11-13	Mellékletek
QA 2000-07	A minőségért való felelősség szabályzata	05	2015.12.07	2019-11-13	.....

# PROCESS MAP - VTEP

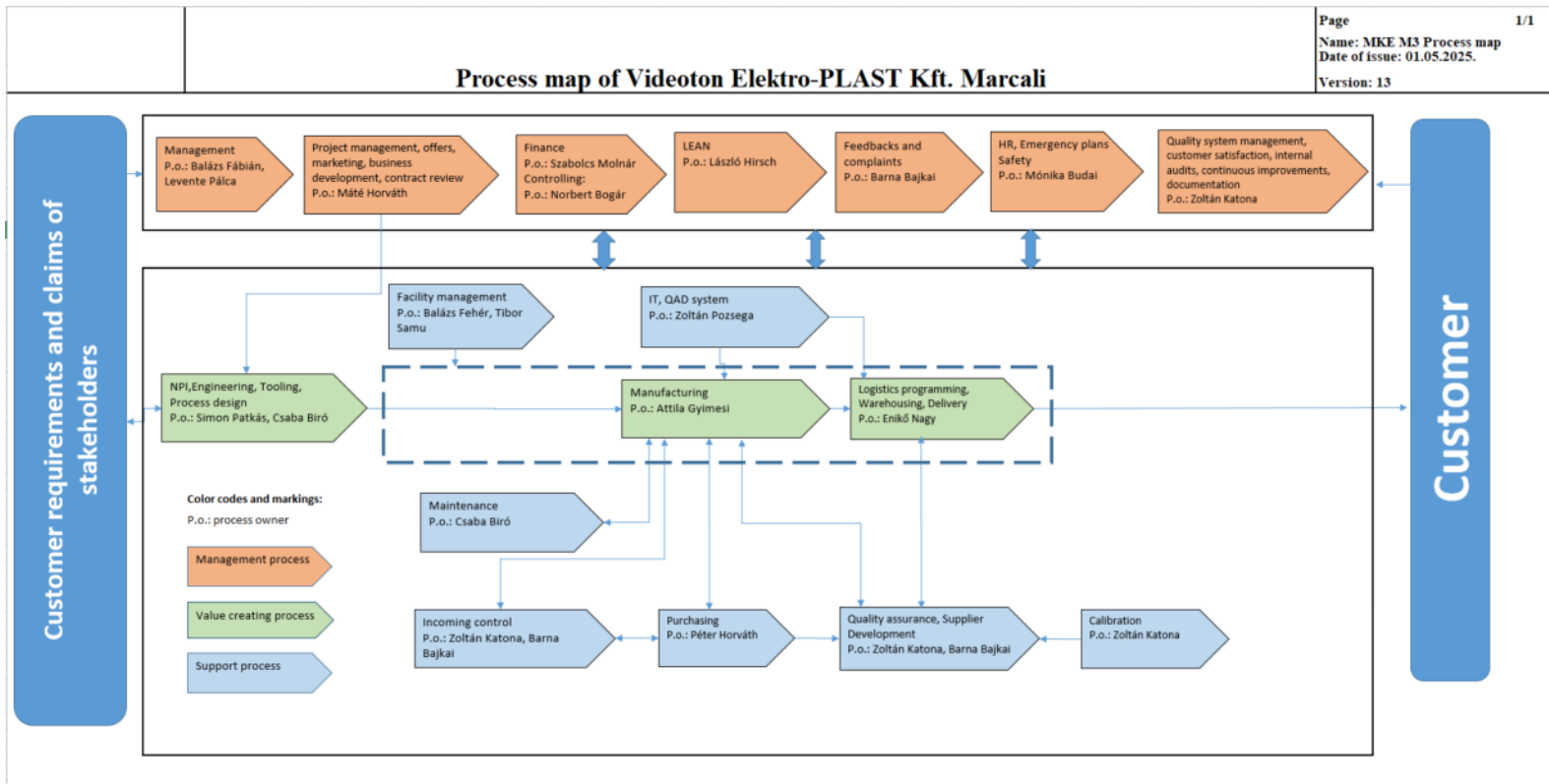
## Process map of Videoton Elektro-PLAST Kft. and Videoton Battery Technologies Kft. Kaposvár

Page 1/1  
Name: MKE M3 Process map  
Date of issue: 01.01.2025.  
Version: 13





# PROCESS MAP - VTBT



# QUALITY MANAGEMENT SYSTEM DEVELOPMENT

## **Regular internal audits (system and process) based on a yearly plan**

It ensures the quality system is consistently in a state of control

## **Management review**

Ensures that the Quality Management System achieves the established objectives with a successful and effective operation

## **CAPA (Corrective Action/ Preventive Action)**

Ensures that quality system issues are identified, analysed and corrected in a proactive manner to keep quality system effective

## **Quality Improvement Plan**

Determines improvement actions for all the departments on a yearly base

# SUPPLIER EVALUATION, DEVELOPMENT, SOURCING

## Monthly based evaluation on

- Quality performance
- Delivery performance



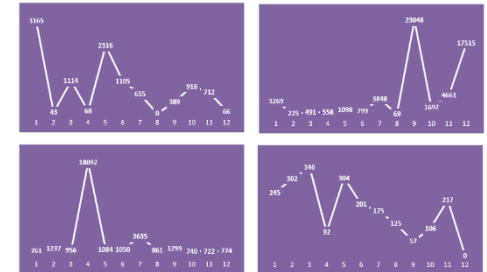
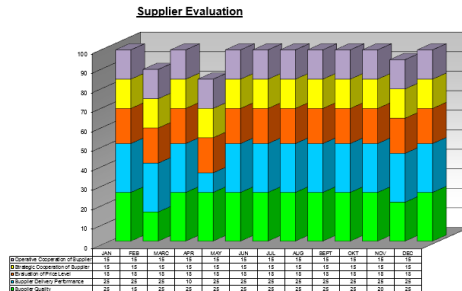
## Suppliers are ranked

A - B - C - D categories

Monthly detailed evaluation

Focus on C and D category suppliers (improvement requests)

PPM Performance monitoring



# SUPPLIER EVALUATION, DEVELOPMENT, SOURCING

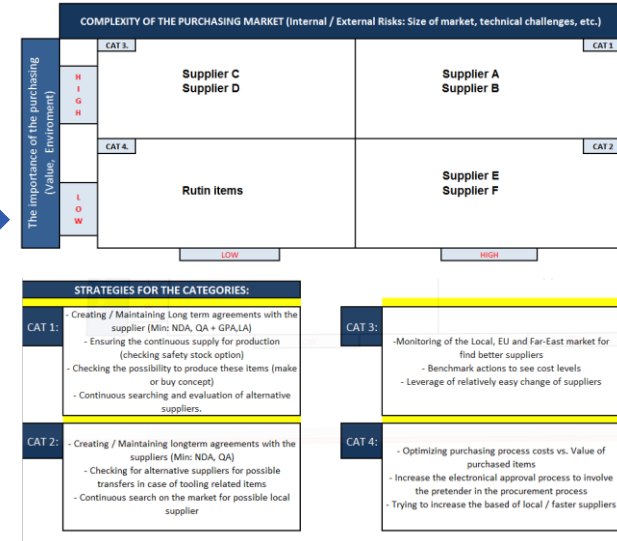
## Supplier development

- Dedicated Supplier Development Engineer
- Support in quality issues for SQA engineers in supplier related quality problems
- Visits and audits at suppliers
- Improvement of communication and co-operation
- Monitoring of Reach, RoHS, Conflict Mineral, IMDS, Food Contact, BOMcheck with declarations
- Suggestions and requirements for improvements
- Determine short– and long-term improvement actions
- Pre-qualification in the case of new suppliers

# SUPPLIER EVALUATION, DEVELOPMENT, SOURCING

## Strategic purchasing

- Commodity driven Sourcing Team
- Supplier classification based on Kraljic matrix
- Continuously updated supplier database
- Seeking and pre-qualifying of new suppliers
- Agreements with suppliers
- Optimization of commercial conditions
- Defining strategic actions toward suppliers, based on classification (Development / Hold / Phase Out / make or buy)
- Defining Road map for development of suppliers



# TRAININGS

Wide-spread trainings for **all workers at entrance**

(plus half-yearly and yearly) with examination

- Quality (based on ISO 9001, IATF 16949 and ISO 13485 standards)
- Labour-safety (based on ISO 45001)
- Environment (based on ISO 14001)
- Energy management (based on EN ISO 50001–VTEP)
- Dress rules
- General (rules, ethics, culture)



# TRAININGS

## Extended trainings for **white-collar workers**

- according to the professional field
- further trainings for improving skills (competence, language)
- specialized trainings for management

## **Regular (monthly) training for blue-collar workers**

based on

- operation instruction, failure cards, customer feedbacks, etc.
- yearly training plan to improve worker skills



# MEASUREMENT EQUIPMENT CALIBRATION

**Internal calibration** - Mostly simpler equipment: calipers, micro meters, scales, feeler gauges, dials, simple electronic measurement equipment etc.

**External calibration** - All the special measurement equipment, which require external laboratory: coordinate measurement machine, torque meters, functional testers, complex electronic measurement equipment etc.

- More than 1500 pcs measurement equipment
- Electronic data base for proper tracing of validation deadlines
- Calibration in temperature controlled measurement lab



# SPECIAL REQUIREMENTS

## **FDA (Food and Drug Administration)**

At VTEP, it ensures the manufacturing of safe medical devices complying with the mandatory regulation of 21 CFR Part 820 (Quality System Regulation) for the US market. FDA currently applied at Philips medical products.

## **I-Quality**

Requirements for companies, who manufactures Products for P&G (Braun). Determines major principles for Quality Management System. Currently applied at Braun Shaver Cleaning Center products.



# SPECIAL REQUIREMENTS

**REACH** (Registration, Evaluation, Authorisation and Restriction of Chemicals)

Its major element is to communicate information on chemicals through the supply chain to restrict the usage of them. It covers those chemicals, that can have potential negative impacts on human, health or environment



**RoHS** (Restriction of Hazardous Substances Directive)

This directive restricts the use of six hazardous Materials of various types of electronic and electrical equipment:

Lead (Pb), Mercury (Hg), Cadmium (Cd),  
Hexavalent chromium (Cr6+), Polybrominated, biphenyls (PBB),  
Polybrominated diphenyl ether (PBDE)



# SPECIAL REQUIREMENTS

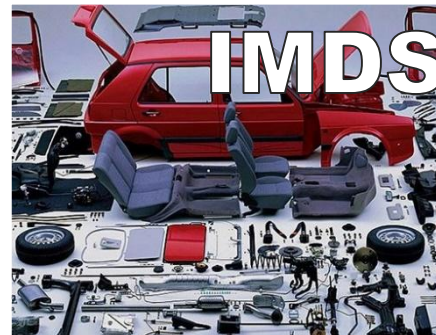
## Food contact materials

Materials that are intended to be in contact with food. It determines strict rules for manufacturing, packaging and warehousing of parts and products contacting with food.

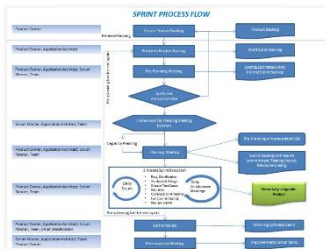


## IMDS (International Material Data System)

In the automotive products, it is a requirement to collect information about the used materials (and hazardous content), which must be declared in material data sheet into the IMDS. All supplier must submit data about the parts that sells to customer.



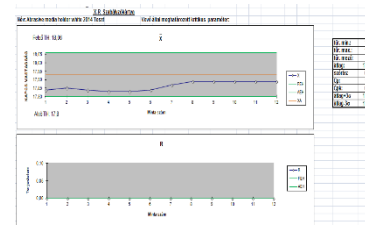
# Process flow chart



## Control Plan

Name		Address		Phone Number		Fax Number		E-mail Address		Website		Business Type		Business Hours		Business Status	
1	ABC Company	123 Main St.	Anytown, CA 90210	(555) 123-4567	(555) 987-6543	info@abc.com	www.abc.com	General Retail	Mon-Fri 9am-6pm	Sat 10am-5pm	Sun Closed	Active	Open	2010-01-01	2010-12-31	2010-01-01	2010-12-31
2	DEF Corp	456 Elm St.	Anytown, CA 90210	(555) 234-5678	(555) 876-5432	contact@def.com	www.def.com	Wholesale Distribution	Mon-Fri 8am-5pm	Sat 9am-4pm	Sun Closed	Active	Open	2009-06-01	2010-12-31	2009-06-01	2010-12-31
3	GHI LLC	789 Oak St.	Anytown, CA 90210	(555) 345-6789	(555) 765-4321	sales@ghi.com	www.ghi.com	Food Service	Mon-Fri 11am-9pm	Sat 11am-8pm	Sun 12pm-7pm	Active	Open	2008-03-15	2010-12-31	2008-03-15	2010-12-31
4	JKL Inc	101 Pine St.	Anytown, CA 90210	(555) 456-7890	(555) 654-3210	info@jkl.com	www.jkl.com	Professional Services	Mon-Fri 9am-5pm	Sat Closed	Sun Closed	Active	Open	2007-01-01	2010-12-31	2007-01-01	2010-12-31
5	MNO Corp	202 Maple St.	Anytown, CA 90210	(555) 567-8901	(555) 543-2109	support@mno.com	www.mno.com	Manufacturing	Mon-Fri 7am-4pm	Sat 8am-3pm	Sun Closed	Active	Open	2006-05-01	2010-12-31	2006-05-01	2010-12-31
6	PQR LLC	303 Cedar St.	Anytown, CA 90210	(555) 678-9012	(555) 432-1098	info@pqr.com	www.pqr.com	Retail	Mon-Fri 10am-7pm	Sat 10am-6pm	Sun 11am-5pm	Active	Open	2005-09-01	2010-12-31	2005-09-01	2010-12-31
7	STU Inc	404 Birch St.	Anytown, CA 90210	(555) 789-0123	(555) 321-0987	sales@stu.com	www.stu.com	Construction	Mon-Fri 8am-5pm	Sat 9am-4pm	Sun Closed	Active	Open	2004-02-01	2010-12-31	2004-02-01	2010-12-31
8	VWX Corp	505 Spruce St.	Anytown, CA 90210	(555) 890-1234	(555) 210-9876	info@vwx.com	www.vwx.com	Transportation	Mon-Fri 6am-3pm	Sat 7am-2pm	Sun Closed	Active	Open	2003-07-01	2010-12-31	2003-07-01	2010-12-31
9	YZA LLC	606 Willow St.	Anytown, CA 90210	(555) 901-2345	(555) 109-8765	support@yza.com	www.yza.com	Healthcare	Mon-Fri 9am-5pm	Sat Closed	Sun Closed	Active	Open	2002-11-01	2010-12-31	2002-11-01	2010-12-31
10	BCD Inc	707 Ash St.	Anytown, CA 90210	(555) 012-3456	(555) 987-6543	info@bcd.com	www.bcd.com	Education	Mon-Fri 8am-5pm	Sat 9am-4pm	Sun Closed	Active	Open	2001-04-01	2010-12-31	2001-04-01	2010-12-31

**SPC**



## PFMEA - DFMEA

[illegible]

## 8D report

[illegible]

**MSA  
Gauge  
R&R**

[illegible]

# TEST LAB

## Test types

- Product design tests
- Product release test
- Battery tests in separated test lab
- Product functionality - related test
- Product performance - related test
- RoHS compliance
- Approbation pre-tests
- Climatic tests in temperature and humidity chambers
- Internal test for investigation of quality problems

## Measurement equipment

- Programmable AC Power Source (Chroma 6530, Chroma 63113A)
- Insulation/Current Leakage tester (GW Instek GPI-745A)
- Power analyzer (Yokogawa WT210 + GPIB)
- Digital multimeter (Picotest M3500A, Keysight 34461A)
- Hi-pot tester (Hioki 3561-01)
- Force/torque meter (Mecmesin AFG 500)
- Static torque wrench (Mecmesin TW15)
- Contactless RPM meter



XRF TESTER  
(RoHS)



TEMPERATURE  
AND HUMIDITY  
CHAMBER

# MEASUREMENT LAB

## Major activity

Measurement in connection with:

- Initial sample approvals
- Quality problem investigation
- Tool approval, optimization or reparation
- Special demand from customer
- R&D

## Measurement equipment

- Keyence IM-7020 image measurement system
- Atos 3D scanner
- Dea Global CMM
- Global performance cmm
- Optiv classic optical cmm
- Tesa visio optical cmm
- Tesa cmm
- Tinius Olsen tensile testing equipment
- Torque meter
- Scale
- Surface roughness meas.
- Hardness meas.



# THANK YOU FOR YOUR KIND ATTENTION!



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