

HORIBA Solution

HORIBA Ltd.
Corporate Officer
Hiroyuki Urabe

Overview

- **Line of Business** R&D, Manufacturing, Sales, Services of analysis and measurement equipment
- **Head Office** Kyoto, Japan
- **Founded** October 17, 1945
- **Incorporated** January 26, 1953
- **Net sales** 317.3 BJPY (FY2024)
- **Number of Employees** 8,955 (FY2024)
- **Chairman & Group CEO** Atsushi Horiba
- **Fiscal Year End** December 31



Chairman & Group CEO
Atsushi Horiba

HORIBA in Europe



Nuneaton, UK



Northampton, UK



Oberursel, Darmstadt,
Germany



Barleben, Germany



Leichlingen, German



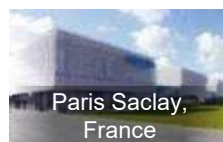
Berlin, Germany



Tulln, Austria



Olomouc, Prague
Czech



Paris Saclay,
France



Lille, France

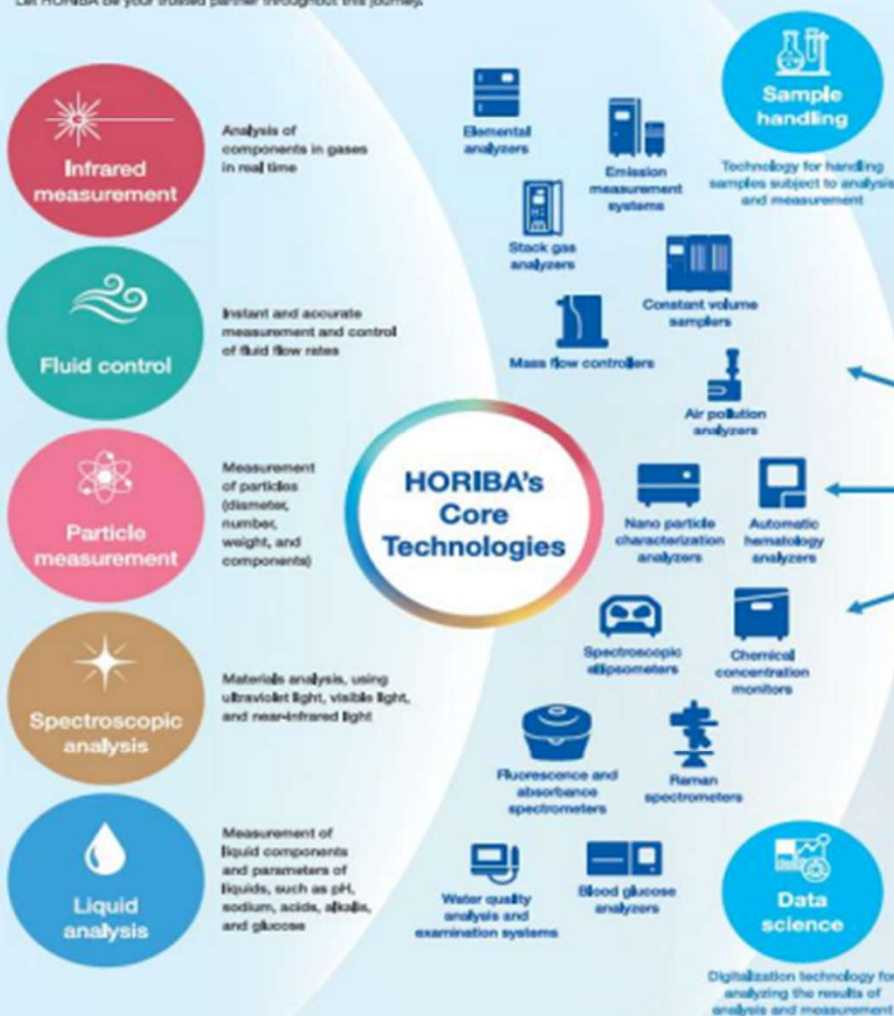


Montpellier, France



Sharing the joy of understanding through measurement and analysis.

Since the foundation, the HORIBA Group (hereinafter, HORIBA) have been committed to contributing to social progress and the realization of a sustainable future for all through the development of technologies. Measurement and analysis are fundamental to the advancement of science and technology. Our mission is to explore cutting-edge measurement and analysis solutions that lead to significant discoveries and enable breakthroughs for the realization of a sustainable society. Let HORIBA be your trusted partner throughout this journey.



Creating original solutions by organically combining our core technologies and customer needs.

*"HONMAMON", derived from the Japanese word "Honmon" (authentic), means the eternal pursuit of creating something from the heart that is one-of-a-kind.

HORIBA's Three Fields

Energy & Environment

Focus field

- Exhaust gas certification processes
- Next-generation vehicle development
- Fuel cell evaluation
- Water electrolysis system evaluation
- Water quality monitoring
- Air quality monitoring
- Process measurement
- Process monitoring

Bio & Healthcare

Focus field

- Hematology testing
- Blood glucose testing
- Immunoassay
- Clinical chemistry testing
- Hemostasis testing
- Pharmaceutical development, manufacturing, and quality control
- Food and beverage development, manufacturing, and quality control
- Cosmetics and skin care product development, manufacturing, and quality control

Materials & Semiconductor

Focus field

- Semiconductor manufacturing process control monitoring
- Facility management and control
- Advanced materials research and development
- Advanced recycling of materials
- Semiconductor-related materials research, development, and quality control

Total solution provider to Mobility R&D

Providing total system solution by combining the Emission Measurement Systems, Mechatronics and Test Automation Systems and Engineering Services



Driveline Testing



Engine Calibration



Brake Testing



Vehicle
Railways

Wind Tunnel Balances



Vehicle and Emission Testing
Test Automation



E-Motor Testing



Fuel Cell and Battery



Brake Inertia Dynamometer for Railway



Test Sample is the complete „Foundation Brake“

Major Applications

• Performance & Wesr Test according:

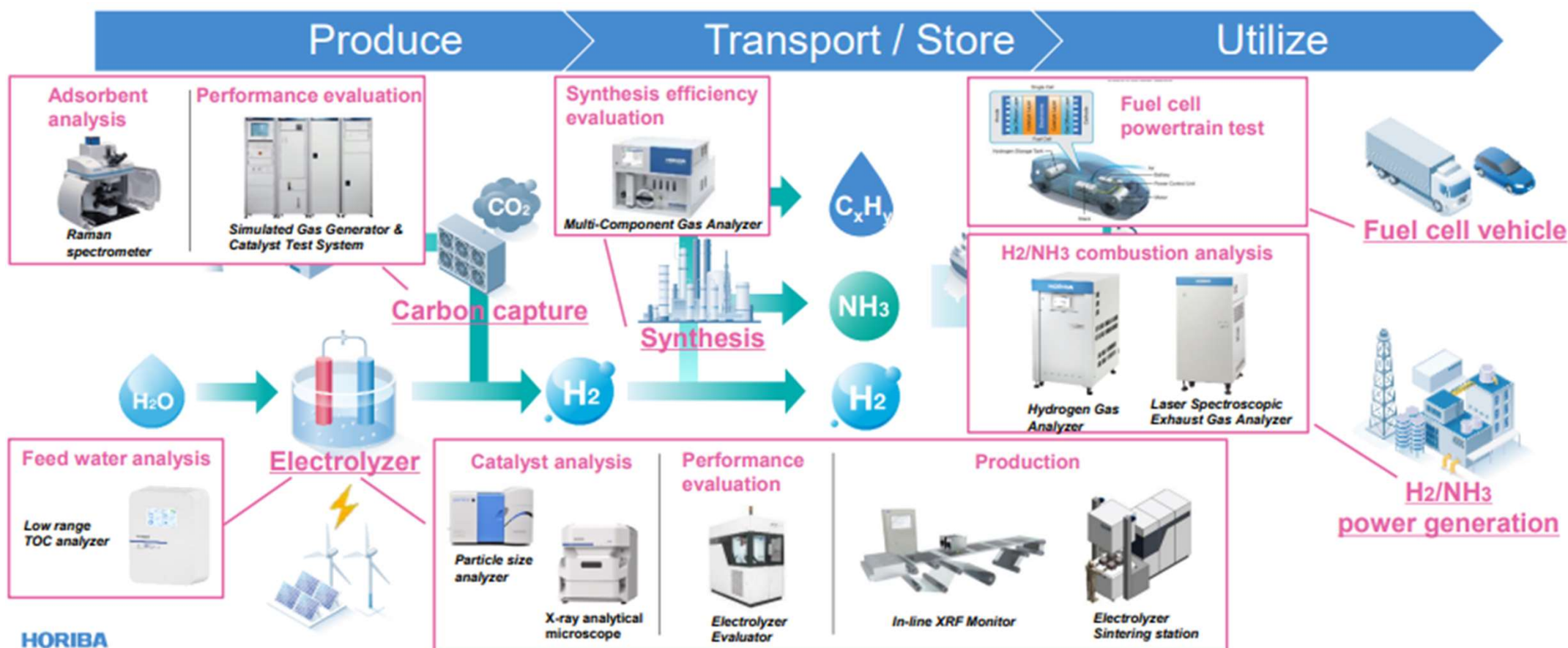
- UIC 541.1
- UIC 541.3 (Disc-Brakes)
- UIC 544.4 (Block Brakes)
- UIC 546 (High Power)
- AAR M-926 (High- μ Block-Brake)
- AAR M 996 (Low- μ Block-Brake)
- BS EN 13452-2-2003 Railways
- TB/T 2618-1995 & 2980-2000
- JIS E 4309-2001 (Japan Disc)
- ISO 1940-1 & 1940-2 (Vibrations)

GIANT 6500 / GIANT 6600
Heavy Commercial Vehicle Applications



HORIBAs Solution for Hydrogen Society

- HORIBA offers the solutions from material to production to resolve technical challenges to realize a hydrogen society



Fuel Cell / Battery evaluation systems



Fuel Cell Evaluation Unit
Evaluator HT/LT



Fuel Cell System Evaluation Unit
Evaluator BOP



Water-electrolysis Cell
Evaluation Unit
Evaluator EC/ES



Battery Module • Pack
Testing System
Evaluator B



Battery Emulator
TrueData X-OPS 48



Battery Production Line
Testing System
Evaluator EOL

HORIBA eHUB (Magdeburg in Germany)

- Global hub of HORIBA hydrogen business
- R&D and manufacturing of various evaluators

Productions

- Fuel Cell Evaluator (PEFC, SOFC)
- Electrolyzer (PEM, SOEC, Alkaline)
- Battery Evaluator
- End of Line

Operation start : Apr. 2022

Floor area : Approx. 10000m²



Testing- Product Lineup

Fuel Cell	Electrolyser	Battery	End of Line
<ul style="list-style-type: none"> • PEMFC (Proton Exchange Membrane) • SOFC (Solid Oxide Fuel Cell) 	<ul style="list-style-type: none"> • PEM Electrolyser • Alkaline Electrolyser • SO Electrolyser 	<ul style="list-style-type: none"> • Battery Tester • Battery Emulator 	<ul style="list-style-type: none"> • Fuel Cell • Electrolyser • Battery
			

Omoshiro-okashiku
Joy and Fun

おもしろ可笑

THANK YOU

Terima kasih
谢谢
Gracias
Σας ευχαριστώ πάρα πολύ
धन्यवाद
شُكْرًا
Tack ska du ha
Danke
Grazie
ขอบคุณครับ
Большое спасибо
Cảm ơn
감사합니다
Dziękuję
Obbrigado
Merci
ありがとうございました

HORIBA

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