



YOUR PASSPORT
TO MARKETS

**INDUSTRIAL
PRODUCT
CERTIFICATION**



**BUREAU
VERITAS**

INDUSTRIAL PRODUCT CERTIFICATION YOUR PASSPORT TO MARKETS

International trade is rapidly evolving, enabling manufacturers to distribute high-quality products to global markets with greater efficiency. To take advantage of these opportunities, businesses need to ensure their products adhere to rigorous safety and quality standards.

In this context, certification serves as an enabler for trade in industrial products. By meeting recognized standards, producers can secure access to new markets and establish credibility for their equipment.

This brochure explores how certification facilitates market access, guarantees safety and quality, and unlocks business growth. By focusing on key products (pressure equipment, machinery, railway and mobility, and containers) across regions, this report illustrates how certification can act as a passport to markets.

CONTENTS

HOW DOES CERTIFICATION WORK IN PRACTICE?	2	PRESSURE EQUIPMENT	5-6
WHAT IS INDUSTRIAL PRODUCT CERTIFICATION?	3	MACHINERY	7-8
EDITORIAL	4	TRANSPORT & LOGISTICS	9-10
		RAILWAY & MOBILITY	11-12

HOW DOES CERTIFICATION WORK IN PRACTICE?



YOUR STRATEGIC PARTNER

Bureau Veritas is able to certify most industrial products worldwide.

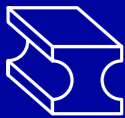
Key sectors include:



PRESSURE EQUIPMENT



MACHINERY



CONSTRUCTION PRODUCTS



TRANSPORT & LOGISTICS



RAILWAY & MOBILITY

... AND MORE!

HOW DOES CERTIFICATION ADD VALUE TO INDUSTRIAL PRODUCTS?



IT CONFIRMS YOUR PRODUCTS ARE SAFE AND HIGH-QUALITY...



...SO THEY MEET REGULATORY REQUIREMENTS - EVEN IN AN EVOLVING LANDSCAPE...



...ENABLING YOU TO OPERATE WITH CONTINUITY, AND SAFEGUARD REPUTATION...

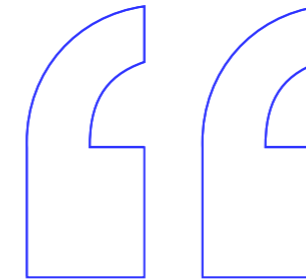
TRUST IN TRADE



...AND ULTIMATELY OPEN UP OPPORTUNITIES IN NEW MARKETS AND INNOVATIVE INDUSTRIES.

EDITORIAL

CERTIFICATION AS A STRATEGIC ENABLER



As an industrial manufacturer or operator, how can you use certification as a powerful accelerator and real passport to market?

Regulatory differences, accelerating technological innovation, and shifting client expectations are reshaping how manufacturers and operators design, build, and trade.

In this environment, Industrial Product Certification serves as an accelerator for business success, empowering manufacturers and operators to meet new challenges and seize emerging opportunities. Certification bodies are able to meet this demand by offering a modular, one-stop-shop approach that supports smooth market entry.

In an evolving regulatory world, how does certification help?

With global reach, local agility, and multi-specialist knowledge, we deliver tailored solutions and support manufacturers seeking to navigate fast-moving compliance and innovation. Whether you need support with pressure equipment, machinery, railway, or containers, we understand the technical language of your industry and help drive your growth.

Safety, sustainability, and innovation are the cornerstones of our approach. By balancing these priorities, we help clients accelerate time to market and avoid costly redesigns. Our experts continuously monitor industry trends and trade

flows, staying ahead of shifting regulations and emerging technologies. By combining this approach with investments in digital tools and innovative methods, industrial progress becomes safer, faster and more sustainable.

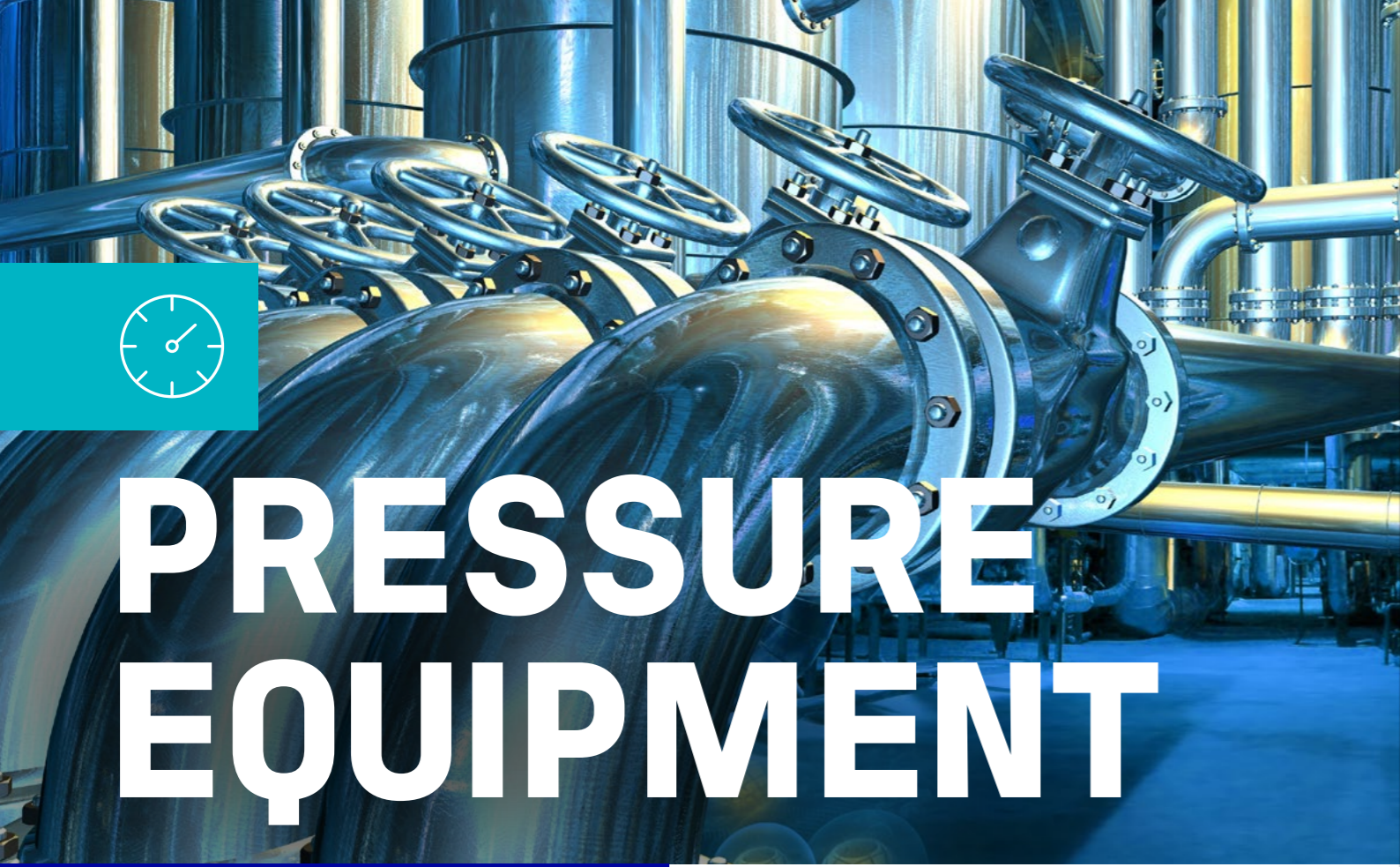
“IN A WORLD OF INCREASINGLY COMPLEX REGULATIONS AND RAPID CHANGES AND INNOVATION, WE ARE A ONE-STOP PARTNER THAT MAKES CERTIFICATION SMARTER, FASTER, AND MORE TRANSPARENT.”

Today, success means earning customer trust, bringing innovations to market with confidence, and operating more safely and sustainably across borders. That is why at Bureau Veritas we turn certification into a passport to markets: unlocking growth while meeting the highest standards.



Karine Kutrowski

Vice President, Industrial Product Certification, Bureau Veritas



PRESSURE EQUIPMENT

The market for pressure equipment is growing steadily. High safety stakes, innovation and evolving regulatory requirements mean that certification plays a pivotal role.

Pressure equipment (vessels, piping, valves, boilers, refrigerating units, safety loops, etc.) operates under extreme conditions where even minor faults can have major human safety, environmental, and financial consequences.

Certification opens the door to markets by ensuring compliance with leading safety and performance benchmarks. Meeting these standards highlights manufacturers' commitment to excellence, safety, and performance—qualities rewarded by customers and regulators worldwide.

Showcasing leadership in a fragmented regulatory landscape

Successfully navigating diverse regulations is essential for companies operating across multiple regions. The rising demands for more sustainable manufacturing and integration of digital monitoring systems give manufacturers and operators an opportunity to showcase leadership by integrating the latest requirements and innovative practices.

Certification supports the safety and performance of both new and in-service pressure equipment. For **new equipment**, certification guarantees the design and manufacturing processes comply with recognized standards and applicable regulations. By working with manufacturers and engineering, procurement, and construction companies, it ensures that compliance is built from the design stage.

For **in-service equipment**, inspection safeguards ongoing reliability, performance, and safety. As technology and regulation evolves, in-service inspection helps operators mitigate risks, extend the lifespan of their equipment, and maintain regulatory compliance in local markets.

ACHIEVING COMPLIANCE WITH KEY PRESSURE EQUIPMENT REGULATIONS

Our pressure equipment services support over 8,400 clients in more than 50 countries, helping manufacturers achieve multi-market compliance, streamline project delivery, and uphold safety and quality standards.

For manufacturers of pressure equipment, **speed to market is as essential as safety**. At Bureau Veritas, we combine **in-depth technical expertise with real-time regulatory knowledge**. By integrating compliance checks as early as the design stage, we ensure efficient project execution and minimize redesigns or potential delays.

Beyond certification, we support clients by offering training and liability studies before contracts are signed. Our webinars are designed to equip manufacturers with the knowledge they need to embed compliance into their operations.

As regulation evolves, and new technologies emerge, our goal remains the same: to make certification a streamlined, forward-looking foundation for client success—enabling operations that are resilient, efficient, and competitive worldwide.

“AS THE SECTOR REMAINS ONE OF OUR PRIMARY TECHNICAL OFFERINGS, CERTIFICATION WITH BUREAU VERITAS WORKS AS A DISTINCT ADVANTAGE FOR YOUR BUSINESS.”

Alexandre Criniere,
*Director Industry France,
Bureau Veritas Exploitation*

In alignment with PED, ASME, and specific national codes, we act as a single-entry point for multi-market certification. Our scope extends beyond new builds: for in-service equipment, our periodic inspections and audits provide assurance that assets continue to meet local safety and performance standards throughout their lifecycle, even as regulations evolve.



KEY REGULATIONS

EUROPE:

Pressure Equipment Directive (PED) for new builds

Transportable Pressure Equipment Directive (TPED) for portable units

UNITED STATES:

American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code

OTHER MARKETS:

India (Indian Boiler Regulation)

Singapore (Ministry of Manpower)

Malaysia (Department of Occupational Safety and Health)

Japan (Japanese Industrial Standard)

Korea (Korea Gas Safety Corporation)



MACHINERY & ADVANCED MANUFACTURING SERVICES

As machinery becomes smarter, certification is adapting to ensure safety, cybersecurity, and regulatory compliance.

Machinery is becoming increasingly smart, digitally integrated and connected, driven by the assimilation of robotics, the Internet of Things (IoT), and Artificial Intelligence (AI). These innovations enhance efficiency and open new avenues for business growth.

As machinery increasingly merges with critical infrastructure, priorities are shifting toward strong cybersecurity and functional safety compliance. By embedding documentation, risk assessment, and design validation early in development, businesses position themselves for accelerated market access for safe products and operational excellence.

Manufacturers today must navigate a complex landscape of evolving national and international regulations, sector-specific standards, voluntary initiatives, and emerging rules on safety, cybersecurity, and AI. In Europe, upcoming regulatory updates will introduce new requirements for AI, digital safety, and traceability. Meanwhile, **Asia-Pacific and the Americas are driving sector growth** with domestic compliance frameworks. Understanding the differences among regional standards enables businesses to seize global market opportunities while maintaining operational continuity, ensuring seamless exports, and strengthening their reputation in competitive markets.

Technologies driving innovation

Robotics, AI and IoT are reshaping machinery at an accelerating pace. The adoption and integration of these new technologies will intensify as manufacturers seek greater efficiency, automation, and connectivity. Increased digitalization also encourages ongoing enhancements in cybersecurity, data security, digital traceability, and functional safety.

ACHIEVING COMPLIANCE WITH KEY MACHINERY REGULATIONS

With over 2,200 clients in more than 30 countries, we help bridge regulatory gaps and enter multiple markets with confidence and efficiency.

At Bureau Veritas, we offer localized support and stay ahead of new developments in the industrial machinery sector. Our multidisciplinary engineering teams bring both technical knowledge and cultural insight, guiding clients through the nuances of local regulations while ensuring conformity with international benchmarks.

“IN AN INDUSTRY WHERE SPEED, SAFETY, AND COMPLIANCE DEFINE SUCCESS, WE STAND AS A TRUSTED PARTNER FROM CONCEPT TO DELIVERY.”

Christian Godfrey,
Director Industrial Product Certification – Machinery, Bureau Veritas North America

We simplify machinery certification by integrating compliance into the design process itself, helping anticipate risks, align documentation, and maximize resources. Our integrated services span the entire value chain, verifying each component of a machine against the relevant standards and regulations at every stage of production. To identify potential risks, we systematically assess safeguards, documentation, and processes. Increasingly, we co-develop hybrid programs with customers to match their operational needs and compliance objectives.

Our services cover a wide spectrum of actors in the sector: original equipment manufacturers, custom builders, system integrators, multinational corporations and domestic installers seeking to expand internationally.



KEY REGULATIONS

UNITED STATES: Occupational Safety and Health Administration (OSHA), National Recognized Testing Laboratory (NRTL), Underwriters Laboratories (UL), National Fire Protection Association (NFPA)

EUROPE: EU Machinery Regulation (2006/42/EC) remains the active framework until January 2027, when it will be fully replaced by (EU) 2023/1230; European conformity (CE) marking

CHINA: China Compulsory Certification (CCC)

INDIA: Bureau of Indian standards (BIS)

UK: the UK Conformity Assessed (UKCA)

BRAZIL: National Institute of Metrology, Quality, and Technology (INMETRO) and Ministry of Labor Regulation (NR-12)

CANADA: Canadian Standards Association (CSA C22.2)

GLOBALLY ACCEPTED FRAMEWORKS: American Society of Mechanical Engineers (ASME), International Standards for all electrical, electronic and related technologies (IEC), and International Organization for Standardization (ISO)



TRANSPORT & LOGISTICS

In 2025, the logistics sector continues to evolve within a changing global landscape.

The global container industry is the backbone of international trade, with China at its geographical center. In 2024, Chinese manufacturers produced over 95% of new containers, exporting more than 98% worldwide.

Currently, there are over **45 million twenty-foot equivalent units (TEUs) of in-service dry and refrigerated units, and 800,000 tank containers** in circulation. Certification allows manufacturers, operators, and shippers to demonstrate the integrity, quality, and safety of containers as they move across borders.

Container compliance: managing technical complexity

The logistics sector is highly standardized, making certification an essential step in each container's journey. Regulatory inspections and maintenance ensure continuous reliability and safety for vast fleets. The Approved Continuous

Examination Program (ACEP) enables owners of dry and reefer containers to conduct annual inspections in line with international standards, benefiting from trusted oversight.

For tank containers, certification frameworks require inspections every 2.5 years (minor) and every 5 years (major), conforming to international regulations such as CSC, IMDG, ADR, RID, and US-DOT. Operators must navigate international, regional, and national standards while upholding safety, timeliness, and operational efficiency.

Ports and depots: strengthening operational compliance

Global logistics depend not only on containers but also on the performance of ports and inland depots. Major hubs such as Shanghai, Singapore, Rotterdam, Antwerp, Los Angeles, and Jebel Ali handle large TEU volumes, while operators must ensure high standards of safety, labor practices, and regulatory compliance to maintain efficiency and trust.

ACHIEVING COMPLIANCE WITH KEY CONTAINER REGULATIONS

At Bureau Veritas, we help navigate different standards by supporting manufacturers, leasing companies, and logistic companies in certifying dry bulk containers, refrigerated units, and specialized container systems. Our clients fall into four main categories: shipping companies, container-leasing companies, container manufacturer and depots.

We are the only certification society authorized to deliver **Approval Continuous Examination Program (ACEP)** globally. Our safety advisory and depot audit services cover the entire value chain.

“AT BUREAU VERITAS, WE SUPPORT BOTH NEW CONTAINERS AND IN-SERVICE CONTAINERS GLOBALLY, WHEREVER AND WHENEVER YOU NEED US.”

Peter Ju,
*Director, Transport & Logistics,
Bureau Veritas China*

This framework enables owners of dry and reefer containers to conduct their own annual inspections in compliance with international standards. For tank containers, our **OPEX Support Service** covers both minor and major inspections, providing a one-step global solution for regulatory approval.

Beyond compliance, our digital tools (**TLStar**, a lifecycle management system, and **HERMES**, a real-time certification management app)

support our clients throughout the certification process. Our **SAFE TRANSPORT** offer covers the full spectrum of the certification services: from design verification to inspection.



KEY REGULATIONS

INTERNATIONAL:

- Convention for Safe Containers (CSC): ensures structural strength and universal recognition of container compliance
- International Maritime Dangerous Goods Code (IMDG): standardizes safe carriage of dangerous goods at sea
- International Union of Railways (UIC): mandatory for certain non-ISO containers
- TIR (International Customs Convention Certification): facilitates faster customs clearance and ensures container design has no hidden compartments, preventing smuggling risks
- International Organization for the Standardization (ISO): provides worldwide container standards
- Agreement for the International Carriage of Dangerous Goods by Road (ADR)
- Regulations for the International Carriage of Dangerous Goods by Rail (RID)

EUROPE:

Directive 2010/35/EU on transportable pressure equipment (TPED)

NORTH AMERICA:

National regulations and standards: the Code Federal Regulation – Title 49 (49-CFR) from the United States Department of Transportation (US-DOT), American Association of Mechanical Engineers (ASME), or Transport Canada (TC).



RAILWAY & MOBILITY

In today's railway sector, manufacturers and operators have a unique opportunity to set new benchmarks in safety, efficiency, quality, interoperability, and cybersecurity—laying the foundation for the future.

New customer expectations and shifting cross-border regulations are transforming the railway and mobility industry, affecting vehicle builders, system integrators, and infrastructure providers.

Certification now extends beyond **Rolling Stock** (e.g., components, track systems, traction and electrical equipment, and signaling systems) to include digital technologies and software such as train control, platform screen doors, embedded systems, and advanced cybersecurity features. This evolution is reshaping how people and goods move across borders. For manufacturers and operators,

this implies meeting strict requirements for **Reliability, Availability, Maintainability, and Safety**, in compliance with international and local regulations and standards.

Railway renaissance brings new challenges

This sector's renewal, including the growth in railway rolling stock, brings new opportunities and challenges. Governments and operators worldwide are investing in new railway lines and upgrading aging fleets. Modernization efforts also target infrastructure, improving stations, electrification systems, and digital platforms to meet the expectations of a connected society. The advancement of signaling technologies, including **European Train Control System** and **Communications-Based Train Control**, is enabling more efficient and interoperable networks. Other emerging technologies, such as autonomous vehicles and AI-driven maintenance systems, are opening the door to new forms mobility—broadening what's possible in rail operations.

Looking ahead

The future of railway will be increasingly automated, interconnected, and intelligent. Through strategic investments in modernization and certification, manufacturers and operators can reach higher standards and earn greater public trust.

ACHIEVING COMPLIANCE WITH KEY RAILWAY & MOBILITY REGULATIONS

The positive shift in infrastructure investment and modernization across multiple geographies is leading to a continued growth in rail services' business.

Our strategic business approach and local knowledge helps our clients navigate upcoming opportunities in the railway and mobility sector. We have a comprehensive offering in terms of certification services across all railway components and systems: rolling stock, signaling and control-command systems, infrastructure and track and energy equipment.

comparative analysis of standards and proactive updates.

At Bureau Veritas, we are investing in the digital transformation of the railway and mobility sectors through initiatives aimed at enhancing agility and responsiveness.



KEY REGULATIONS

INTERNATIONAL:

Committee for Electrotechnical Standardization (CENELEC), the international electronic commission (CEI), International Organization for Standardization (ISO), and cybersecurity norms

EUROPE:

2016/797 EU Directive on the interoperability rail system, 2017/798 Directive on railway safety, and 402/2013 EU Regulation on common safety method for risk evaluation and assessment; EN: European Standards; Committee for Electrotechnical Standardization (CENELEC), European Committee for Standardization (CEN)

BRAZIL:

National Institute of Metrology, Quality, and Technology (INMETRO)

CANADA:

Canadian Standards Association (CSA)

INDIA: Reach Standards Organization

UK: Conformity Assessed (UKCA)

UNITED STATES:

Federal Railroad Safety Act

“COMPLIANCE IS AN OPPORTUNITY FOR PERFORMANCE AND INNOVATION.”

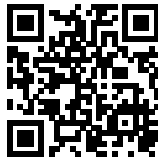
Ana Paula Bouchereau,
Rail Product Leader - Industrial Product Certification, Bureau Veritas

Our multi-level expertise counts with teams specialized by area of expertise according to the applicable regulations and standards. This allows us to offer compliance support from design and manufacturing through commissioning, operations and upgrades, providing assessment of components, complete systems, subsystems and critical interfaces with precision and insight. Our Regulatory Monitoring Service offers continuous monitoring of regulatory developments by performing



SHAPING A WORLD OF TRUST

Bureau Veritas is a world leader in inspection, certification, and laboratory testing services with a powerful purpose: to shape a world of trust by ensuring responsible progress. With a vision to be the preferred partner for customers' excellence and sustainability, the company innovates to help them navigate change. Its technical experts support customers to address challenges in quality, health and safety, environmental protection, and sustainability.



CONNECT WITH OUR
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CERTIFICATION EXPERTS

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Shaping a World of Trust