The Complete Guide to Sourcing Compact 100 Bailey Bridges: How GREATWALL GROUP Leads the Market



Zhenjiang, Jiangsu Dec 11, 2025 (Issuewire.com) - As global infrastructure projects demand faster, more durable, and cost-effective bridge solutions, Zhenjiang Great Wall Heavy Industry

Technology Co., Ltd. (GREATWALL GROUP) stands out as a Compact 100 Bailey Bridge Global Supplier trusted by governments, contractors, and military engineers worldwide. Located in Zhenjiang City, south of the Yangtze River within China's dynamic Yangtze River Delta economic zone, GREATWALL GROUP combines strong transportation advantages—close to ports, airports, and high-speed railways—with a world-class manufacturing base. The company specializes in 321-Type (British Compact-100) prefabricated highway steel bridges, alongside 200-Type Bailey bridges, offering fully engineered modular bridge systems designed for rapid deployment, structural safety, and long-term use in both civilian and military applications.

Industry Outlook: The Growing Importance of Modular Bridge Systems

The global infrastructure landscape is undergoing a profound shift toward modular, prefabricated solutions that accelerate project delivery and improve cost efficiency. As populations grow and logistics networks expand, the need for **temporary and permanent bridge structures** that can be assembled quickly without heavy construction equipment has surged. From rural connectivity programs in Asia and

Africa to emergency response efforts in disaster-prone regions, the Bailey bridge system—originally developed for military use—has evolved into a cornerstone of modern civil engineering.

In particular, the **Compact 100 Bailey Bridge** (also known as the 321-Type prefabricated steel bridge) is recognized worldwide for its **modular design**, **high load-bearing capacity**, **and ease of installation**. It is composed of interchangeable lightweight steel panels, allowing engineers to configure single, double, or triple truss arrangements depending on the span and load requirements. This adaptability makes the Compact 100 system ideal for highway bypasses, construction access, and temporary relief operations.

Market research indicates steady growth in demand for Bailey-type bridges, driven by both developing nations investing in infrastructure resilience and advanced economies upgrading aging transport networks. Prefabricated steel bridge technology reduces construction time by up to 60% compared to traditional concrete structures, while also minimizing environmental impact—key factors that align with the global shift toward **green and efficient construction practices**.

Amid these trends, **GREATWALL GROUP** has positioned itself as a global leader in this niche. With its robust engineering capabilities, adherence to international standards, and proven track record of supplying modular bridge systems to multiple continents, the company continues to strengthen China's role in the global infrastructure supply chain.

International Certifications: A Foundation of Quality and Credibility

Behind GREATWALL GROUP's success as a **Compact 100 Bailey Bridge Global Supplier** lies an uncompromising commitment to quality management, safety, and international compliance. The company holds the **ISO9001 Quality Management System Certificate**, ensuring that every stage of production—from raw material inspection to final assembly—is governed by strict quality control procedures. Its manufacturing process also adheres to the **Factory Work Safety Certificate**, guaranteeing that production activities are carried out under rigorous occupational safety standards.

To assure global clients of material reliability, GREATWALL GROUP's main steel components are tested and certified by **SGS**, one of the world's most reputable third-party testing organizations. The **SGS Testing Report of Main Steel** confirms that the structural materials meet or exceed international strength and durability standards. Furthermore, the company has obtained **SGS-PVOC certification for Tanzania**, demonstrating its capability to comply with African import and quality assurance regulations.

GREATWALL GROUP also holds **FORM E certification to ASEAN countries** and **Certificates of Origin**, which streamline international trade by offering tariff advantages and ensuring traceability of its products. These certifications enable the company to deliver bridge systems efficiently to Southeast Asia, the Middle East, and Africa, reinforcing its global competitiveness.

Adding to these credentials, GREATWALL's **Welding Procedure Specifications (WPS)** and its professional welders have passed **BV (Bureau Veritas)** certification—one of the highest recognitions for welding quality in heavy industry. Meanwhile, both raw materials and finished products undergo evaluation by leading testing agencies such as **SGS, CCIC, and CNAS**, guaranteeing full compliance with international performance benchmarks.

Each certification serves as a testament to GREATWALL GROUP's dedication to excellence, traceability, and safety. Together, they form the backbone of the company's reputation for delivering

bridges that withstand extreme conditions—from tropical humidity and coastal corrosion to heavy vehicle loads and seismic activity.

Core Strengths and Application Scenarios: Why GREATWALL Leads the Market

What sets **GREATWALL GROUP** apart is not only its technical expertise but also its fully integrated production capacity and innovative approach to bridge design. The company operates a **complete production line for Bailey bridge components**, ensuring total control over quality, consistency, and customization. With an **annual output of over 10,000 tons**, GREATWALL can meet the demands of large-scale infrastructure projects while maintaining strict delivery timelines.

The company's advanced **surface treatment technologies**—including **sandblasting**, **dip coating**, **spray painting**, **hot-dip galvanizing**, **and zinc-aluminum alloy coating**—ensure that its bridge components resist corrosion, extend service life, and perform reliably in diverse climates. Combined with modern CNC machining and precision assembly methods, these processes guarantee structural accuracy and field readiness.

Beyond its Compact 100 systems, GREATWALL has developed a large-span D-Type prefabricated bridge with a single span of up to 91 meters, a remarkable engineering achievement validated by load tests and real-world deployment. This innovation underscores the company's research-driven culture and its ability to provide customized solutions for complex terrain and special engineering requirements.

Application Scenarios of GREATWALL's Compact 100 Bailey Bridge:

Emergency Relief: Quick bridge deployment for disaster recovery after floods, earthquakes, or landslides.

Military and Defense: Reliable field bridges for rapid troop and equipment mobility.

Infrastructure Development: Temporary or semi-permanent highway and rural access bridges.

Construction Projects: Short-term bypass structures and site access solutions for contractors.

Each bridge system is designed for **modular assembly, minimal on-site labor, and easy transportation**, making GREATWALL's solutions particularly valuable in remote or infrastructure-limited regions. The company's engineering team also provides full technical support—from design consultation and load calculation to onsite installation guidance—ensuring that each project achieves optimal safety and performance.

Conclusion: Building Global Connectivity Through Engineering Excellence

In a world where infrastructure speed and reliability define progress, **GREATWALL GROUP** exemplifies the future of modular bridge engineering. Its role as a **Compact 100 Bailey Bridge Global Supplier** extends far beyond manufacturing—it represents a commitment to innovation, safety, and international collaboration. By combining certified quality systems, cutting-edge technology, and a customer-first philosophy, GREATWALL continues to empower nations and industries to build faster, safer, and smarter.

For more information about GREATWALL GROUP's Compact 100 Bailey Bridges and other prefabricated steel bridge solutions, please visit the official website: www.greatwallgroup.net

Media Contact

ZhenJiang Great Wall Heavy Industry Technology Co., Ltd.

******@qq.com

008618652846913

Source: ZhenJiang Great Wall Heavy Industry Technology Co., Ltd.

See on IssueWire