WDS Components Help Desk

WDS Marine Accessories

2026-05-21 - Mark Moody - Sales and Marketing Director - New Products
Marine Connection Hardware: Reliable Performance in Harsh Environments

Connection hardware plays a critical role in marine environments, supporting rigging, load management, and structural integrity across vessels, marinas, and coastal infrastructure. Designed to operate under constant exposure to saltwater, humidity, and dynamic loads, WDS marine hardware provides dependable, long-term performance in both permanent and adjustable systems.

Connection hardware manufactured in grade 316 stainless steel, also known as marine-grade stainless steel, benefits from its added molybdenum, which significantly enhances resistance to corrosion. This makes it an ideal choice for applications in harsher conditions where higher corrosion resistance is required. The WDS Inox Noir range adds additional corrosion resistance: through its chemical treatment (a hot process equivalent to steel blacking) it offers improved corrosion resistance and a beautiful matt black finish.

Core product types include ring eyelets, turnbuckles, and shackles, each engineered to fulfil specific roles within marine assemblies.

Secure Anchoring With Ring Eyelets

Ring eyelets (eye bolts and eye nuts) form the foundation of many marine fixing systems, providing stable connection points for wire, rope, cord, and cable routing. WDS ranges are made of 316 stainless steel and zinc plated steel, providing exceptional corrosion resistance.

Eye bolts feature a threaded shank for installation into metal or timber structures, with an integrated loop for tie-off. In marine environments, they are commonly used to guide rigging lines, secure shade sails and covers, and fasten deck equipment. Their versatility extends to architectural wire systems, signage mounting, and modular installations, making them a practical choice across multiple sectors.

Eye nuts, designed for installation onto threaded bars or bolts, create closed-loop anchorage points (in non-lifting capacities). Typical marine uses include cable routing, securing onboard equipment, and forming fixed tie-off points in confined or modular assemblies. Their application additionally spans general engineering, agriculture, and structural frameworks.

Turnbuckles For Accurate Tensioning

Turnbuckles provide precise adjustment of rope and cable tension, ensuring system stability in environments subject to movement and vibration. Their opposing left and right-hand threads allow controlled length adjustment without dismantling the assembly. WDS turnbuckles, manufactured in 316 stainless steel, are manufactured to DIN 1480 and are available in a range of metric thread sizes.

Eye and eye turnbuckles contain enclosed connection points at both ends, reducing the risk of disengagement. They are widely used in standing rigging, mast stays, guardrails, and structural bracing where a secure, permanent connection is required. Their durability also supports architectural and industrial tensioning systems.

Hook and eye turnbuckles combine secure fixing with easy installation and removal. They are well suited to marine safety lines, dockside cables, and systems requiring periodic adjustment. Once set, they maintain consistent tension under static loads while allowing straightforward maintenance.

Hook and hook turnbuckles, also referred to as wire rope adjusters, are designed for temporary or adjustable applications. Their open configuration enables rapid connection and release, making them ideal for short-term

rigging, barriers, and auxiliary systems where flexibility is essential.

Shackles: Strong, Adaptable Connectors

Shackles are critical components in marine systems, providing secure, load-bearing connections in environments subject to movement and stress. Typically consisting of a U-shaped body and pin, they are designed for strength, reliability, and ease of use. WDS shackles in 316 stainless steel provides improved resistance to corrosion and surface degradation compared with galvanised alternatives.

D shackles with retained pins are commonly used for in-line connections such as rigging assemblies and chain links. The retained pin design helps prevent loss during maintenance, making them particularly suitable for frequently adjusted systems.

Bow shackles with removable pins feature a wider profile, allowing for multi-directional loading and thicker connection points. They are widely used in mooring systems, anchor connections, and lifting arrangements where flexibility and articulation are required. Their design also suits demanding industrial and outdoor environments.

Twist shackles with removable pins incorporate a 90-degree twist to connect components positioned on different planes. This makes them especially useful in constrained rigging layouts, sail connections, and bespoke deck hardware installations where alignment is critical.

Supporting Modern Marine Systems

From rigging and anchoring to structural support, WDS connection with its combination of strength, adaptability, and environmental resistance, ensures continued relevance across marine applications.

The latest corrosion-resistant ranges with full technical specifications and CAD data provided to support efficient design integration.

The new detectable product range is available directly from WDS Components. Detailed technical specifications, dimensional data, and CAD drawings are available to support design integration and retrofit applications.

Attachments

- WDS CHANDLERY FLYER.pdf [783.74 KB]