

Marine Fastener Demand of Chinese Shipbuilding Industry

中国造船业船舶紧固件需求分析

Why Shipbuilding is the Best Demand Signal for Marine Fasteners

In shipbuilding, fasteners are not a single product group. They sit across multiple “consumption zones” inside a vessel, from structural and block-assembly applications to piping systems, machinery foundations, deck equipment, accommodation, and electrical and HVAC supports. Because of that, the cleanest way to analyze demand is to start from shipbuilding activity and then translate it into a fastener demand profile.

For China specifically, the main demand engine is newbuild construction, supported by a second layer of repair and retrofit work. In practice, when shipbuilding completions rise and shipyards carry larger orderbooks, fastener demand strengthens in three ways:

- Volume effect: more ships delivered means more total fasteners consumed.
- Mix effect: more complex ships (for example, gas carriers and alternative-fuel newbuilds) tend to raise the share of higher-grade fasteners and stricter documentation requirements.
- Scheduling effect: high orderbooks extend forward purchasing windows, which increases the importance of lead time management, capacity reservation, and supplier qualification.

These points are included to explain, in practical terms, how shipbuilding activity translates into marine fastener demand. In this article, official shipbuilding indicators are used to set the baseline for China, and the outlook is estimated from the same shipbuilding signals and widely used market reporting, since marine fastener consumption is not published as a standalone public statistic.

China's Shipbuilding Demand Baseline: What the Latest Indicators Imply for Fasteners

China's “three major shipbuilding indicators” are typically reported as:

- Shipbuilding completions (delivered output)
- New orders (contracting)
- Orderbook (holding orders)

For marine fasteners, completions are the closest proxy to consumption in a given year, while the orderbook and new orders shape forward visibility and procurement pressure.

Across 2023-2024, China's completions and ordering rose strongly. In 2025 (based on the latest available year-to-date reporting), completions continued to rise year on year, while new orders softened from an exceptionally high base. For fastener suppliers, that combination usually means:

- Near-term demand stays firm because deliveries remain high.
- Competitive pressure increases on pricing and lead times, because shipyards focus on delivery execution and cost control.
- Specification-driven segments (stainless, duplex, certified traceability lots, fatigue-critical bolting, and corrosion-resistant systems) remain attractive, even if overall ordering slows.

The most important structural point is that China's orderbook remains very large. A large orderbook does not guarantee identical demand across all fastener types, but it does support a sustained baseline of consumption for core marine fastener categories used in construction and outfitting.

Where Fasteners are Consumed in a Ship: A Practical Demand Map

For industry planning, **shipbuilding fastener demand is grouped here into six practical consumption zones.** This grouping is used here for clarity and planning purposes and is not presented as a formal industry standard.

1. Block assembly and structural integration

- High-volume usage in assembly fixtures, structural attachments, foundations, and integration points.
- Demand is sensitive to shipyard production cadence and modular construction practices.

2. Piping systems and fluid handling

- Stud bolts and bolting sets tied to flanges, valves, pumps, strainers, and system interfaces.
- Corrosion environment and media drive material selection, documentation, and coating requirements.

3. Machinery foundations and rotating equipment interfaces

- Higher criticality: vibration, fatigue, alignment, and maintenance access often influence fastener selection and locking solutions.

4. Deck equipment and mooring systems

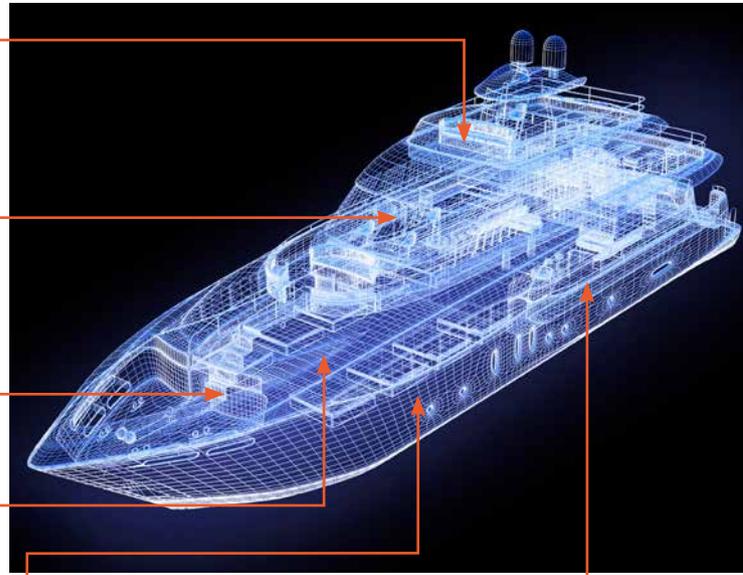
- Exposure-driven: weather, spray, salt, and mechanical loading.
- Often requires higher corrosion resistance and robust surface protection.

5. Accommodation and interior outfitting

- Large SKU variety, lower criticality on strength compared to machinery zones, but strong requirements on corrosion resistance, appearance, and consistency.

6. Electrical, HVAC, and cable support systems

- Very high piece counts across brackets, supports, trays, and penetrations.
- Typically procurement-heavy in late-stage outfitting, when schedule risk is the highest.



This demand map matters because China's yard mix and the global move toward alternative fuels changes the relative weight of zones 2-4, where higher-grade fasteners and tighter documentation are more common.

5S 质造® 螺套

螺套产品&技术一站式服务

ONE-STOP SERVICE FOR SCREW SLEEVE PRODUCTS AND TECHNOLOGY



钢丝螺套
Free Running



无尾螺套
Tailless Screw Sleeve



自锁螺套
Screw Lock



盲孔螺套
Blind Hole Screw Sleeve



自攻螺套
Self-tapping Screw Sleeves



插销螺套
Pin Socket

Wuxi Wuda Machinery Technology Co., Ltd. focuses on advanced thread technology and product research and development, enhancing its thread inspection capabilities to international standards. Through the development of elastic thread fasteners, internal thread improvement technology, and independent innovation in fastening structure design, it has improved the tensile and yield strength, precision, resistance to high and low temperatures, and high corrosion resistance of elastic internal threads. The anti-loosening performance, quick installation and other features have been innovated in application and precisely designed in structure. The product has broken through the single product of steel wire thread inserts, including special-shaped wire materials, matching tools, thread insert assembly equipment, thread insert testing and measuring tools, thread insert production equipment and tooling, etc., gradually improving technology and quality. Take providing advanced fastening technology products for outstanding Chinese enterprises as the corporate value and mission!

01 异型丝材料
Special-shaped
Filament Material

02 螺套产品
Screw sleeve
products

03 配套工具
Supporting tools

04 螺套装配设备
Screw sleeve
assembly equipment

05 螺套检测量具
Screw sleeve
measuring tool

06 螺套生产设备
Screw sleeve production
equipment and tooling



无锡务达机械科技股份有限公司
WUXI WUDA MACHINERY TECHNOLOGY CO., LTD

电话Tel: +86-510-83118458 陈小姐 (Jenny Chen) 网址Web: www.5shardware.com
地址: 无锡市惠山区堰新路18号标准厂房A区C20栋 E-mail: jennychen@5shardware.com
Add: Building C20, Zone A, Standard Factory, No. 18, Yan Xin East Road, Huishan District, Wuxi City



Demand Quality is Rising: Decarbonization and “Value Per Ship”

Even when total ship counts fluctuate, the “value per ship” for fasteners can rise because of:

- More complex ship designs and system density
- Higher documentation expectations (traceability, certification, test reporting)
- More corrosion-challenging systems and operating environments
- Greater emphasis on maintenance planning and reliability

A useful market signal is the continued share of alternative-fuel capable ships in global ordering, even during periods when total ordering slows. That matters for fasteners because **alternative-fuel systems, fuel handling, and associated safety systems tend to increase the use of higher-spec bolting in defined parts of the vessel.**

For suppliers, this typically pushes the market toward:

- Better corrosion resistance in exposed zones
- Higher confidence in mechanical performance in fatigue- and vibration-sensitive installations
- Stronger documentation discipline to match yard and owner quality systems

Procurement Reality in China: How Fastener Demand Actually Shows Up

Marine fastener demand in Chinese shipbuilding does not flow through a single buying desk. It usually shows up through a combination of:

- Shipyard direct procurement for core consumables, standardized fastener sets, and approved vendor lists
- OEM and system integrator procurement (pumps, valves, engines, deck machinery, HVAC, electrical systems) where fasteners are bundled into equipment packages
- Tiered distributors and service centres that support last-mile delivery and urgent schedule recovery

Because deliveries and outfitting schedules create peaks, suppliers that can combine:

- stable capacity,
- controlled lead times,
- consistent quality documentation,
- and packaging that matches shipyard workflows, tend to capture repeat share even in price-sensitive cycles.

How to interpret *Table 1* for fasteners:

- Completions are the closest consumption signal for newbuild-related fasteners.
- Orderbook supports sustained baseline demand and longer forward procurement visibility.
- A pullback in new orders after a boom year does not immediately reduce fastener consumption, because the delivery pipeline remains full.



HANDAN CITY DAONING FASTENER MANUFACTURING CO., LTD
 邯郸市道宁紧固件制造有限责任公司
www.dao-ning.com






mail: info@dao-ning.com
 South of Dongmingyang Village, Linminguan Town,
 Yongnian District, Handan City, Hebei Province, China
www.fastener-world.com/en/supplier/dao-ning



Table 1. China's Shipbuilding Activity Indicators That Drive Marine Fastener Demand

All figures are as reported by the cited institutions. Units are million dwt unless stated otherwise.

Period	Completions	New orders	Orderbook (end period)	Notes that matter for fasteners
2023 (full year)	42.32	71.20	139.39	High growth year; strong ramp into 2024 delivery cycle
2024 (full year)	48.18	113.05	208.72	Record-scale ordering and backlog expansion
2025 (Jan–Oct)	43.34	71.73	244.20	Completions still growing year on year; new orders lower vs 2024 peak; orderbook remains very large

Forecast: What to Expect in 2026–2027 for Newbuild Marine Fasteners

Shipbuilding deliveries are the most practical way to read near-term marine fastener demand in China. Every vessel delivered represents completed hull work and outfitting, which is where fastener consumption happens in volume. With a very large orderbook still sitting in Chinese yards, the delivery pipeline remains supported into 2026 and 2027. This keeps baseline demand for newbuild fasteners strong, even if new orders cool compared with the 2024 peak.

The forecast below is presented as a demand range, not a single number. It is built from two inputs that the market already follows closely: China's 2025 completion outlook from industry reporting, and Clarkson's global shipbuilding growth outlook for 2025–2027. The low case reflects a steady-growth path similar to recent domestic progress, while the high case reflects a faster delivery ramp consistent with the global production outlook. The base case sits between them to represent a balanced market view. The result is expressed as an index (2024 = 100) so procurement teams and suppliers can translate it into their own product mix and pricing assumptions.

Table 2. China's Newbuild Marine Fastener Demand Indicator (Estimated Scenarios) Based on Shipbuilding Completions

Year	Shipbuilding completions (million dwt)	Demand indicator index (2024 = 100)
2024 (actual)	48.18	100.0
2025 (industry outlook)	51.00	105.9
2026 (low)	54.0	112.1
2026 (base)	56.3	116.8
2026 (high)	58.7	121.8
2027 (low)	57.1	118.5
2027 (base)	60.1	124.7
2027 (high)	63.2	131.2

Note: 2024 is actual, 2025 is an industry outlook, and 2026–2027 figures are estimated scenarios based on published shipbuilding outlooks and global growth signals.

What the forecast means in practical terms is simple: the market is not deciding whether demand exists, it is deciding how fast deliveries expand. If yard capacity keeps ramping and delivery schedules remain heavy, demand can track toward the upper range. If yards prioritize cost control and scheduling discipline over aggressive ramp-up, demand is more likely to sit in the lower to mid range. Either way, the expected floor remains above 2024 because the backlog is still large.

Conclusion

The key takeaway for fastener suppliers is that 2026–2027 is expected to remain a volume-supported period for China's newbuild channel, backed by a large orderbook and a high delivery pipeline. The biggest opportunities are in products that reduce delivery risk for shipyards, especially corrosion-resistant and system-critical fastener sets, consistent documentation and traceability, and reliable lead times for late-stage outfitting. Suppliers positioned as schedule-safe partners, not only lowest-cost vendors, are more likely to hold share as shipyards focus on converting backlog into delivered tonnage. □

Sources:

- Ministry of Industry and Information Technology (MIIT), China, shipbuilding "three major indicators" releases
- China Association of the National Shipbuilding Industry (CANSI), shipbuilding statistics releases and 2025 outlook statements
- SteelOrbis, coverage citing CANSI monthly or year-to-date indicators and outlook statements
- S&P Global Commodity Insights, coverage citing MIIT shipbuilding indicators
- Clarkson Research, global shipbuilding production and deliveries outlook data (as cited in market reporting)
- DNV Alternative Fuels Insight (AFI), statistics on alternative-fuel capable ships and ordering trends
- UNCTAD, Review of Maritime Transport (latest edition used for shipbuilding capacity and market context)

