
Polyurethane Tread on Nylon Center Wheels

Title	Polyurethane Tread on Nylon Center Wheels
Thumb	
Address	Anfeng Industrial Park, Dongtai City, Jiangsu, China
Website	https://www.poly-wheels.com/
Email	sale06@kfqizhongji.com

Description

In modern material handling and internal logistics, selecting the right components is key to maintaining operational efficiency. At Philson, our Polyurethane on Nylon Core Wheels are designed to provide a balanced combination of durability, load-carrying capability, and surface protection. Our precision-engineered solutions are built to support a wide range of automated systems and industrial equipment.



Why Choose Polyurethane Tread on Nylon Center Wheels?

The combination of a high-grade polyurethane tread and a robust nylon center creates a wheel that excels in diverse industrial settings. Unlike all-metal wheels, the Polyurethane Tread Nylon Center Wheels offer excellent vibration dampening and noise reduction, which is essential for busy warehouse floors and automated production lines.

The nylon core provides a lightweight yet incredibly strong foundation, making these wheels resistant to corrosion and impact—a significant advantage over standard cast iron or aluminum alternatives.

Superior Durability: Cast Polyurethane vs. Thermoplastic

It is vital to distinguish between high-quality cast polyurethane and common thermoplastic materials. While many market alternatives utilize injection-molded thermoplastic core wheels that may be prone to delamination, our products are manufactured through advanced casting processes.

This ensures:

Enhanced Bond Strength: The chemical bond between the polyurethane tread and the nylon core prevents peeling and separation under heavy cyclic loading.

Extended Service Life: By utilizing superior material formulations, our wheels maintain their structural integrity even after millions of rotations.

Reliability for Automation: These wheels are engineered specifically for demanding equipment like stacker cranes and automated guided vehicles (AGVs), where downtime is not an option.

Key Performance Features of Polyurethane Tyred Nylon Centred Wheels

Our Polyurethane Tyred Nylon Centred Wheels are engineered for precision and longevity in demanding industrial environments. By combining advanced material science with structural innovation, these wheels deliver superior performance where standard solutions fail.

Advanced Bonding Technology: Our polyurethane tread is specially bonded to a high-impact, glass-filled nylon core. This advanced chemical bonding process ensures exceptional adhesion, effectively preventing tread separation or delamination even under intense operational stress.

Optimal Load-Bearing & Floor Protection: Designed to be floor-protective and non-marking, these wheels effectively absorb shocks during transport, minimizing vibration and protecting both the equipment and the warehouse floor surface from damage.

High Strength-to-Weight Ratio: The glass-filled nylon core offers the structural rigidity and strength comparable to steel, but with significantly lower density. This reduced weight lowers the energy consumption of your material handling equipment, such as AGVs, without sacrificing durability.

Cost-Efficient Logistics: Compared to traditional cast iron cores, our nylon-centred wheels are substantially lighter, resulting in lower shipping and handling costs for bulk orders. Furthermore, they are completely corrosion-resistant and will not rust, making them ideal for long-term use.

Broad Chemical Resistance: Engineered to withstand harsh industrial conditions, these wheels are highly resistant to most chemicals, oils, acids, grease, and water, ensuring reliable performance in diverse manufacturing and chemical processing environments.

Versatile Bearing Options: To meet your specific machinery requirements, we offer a wide range of bearing configurations, including Delrin, standard ball, precision ball, and

roller bearings.

Hardness & Thermal Stability: With a hardness of 95 Shore A (± 5), these wheels provide the perfect balance between elasticity and load-bearing capacity. They are designed to operate reliably across a wide temperature range, from -40°F to +180°F (-40°C to +82°C), maintaining structural integrity in extreme climate conditions.

Partner with Polyurethane Tread Wheels Manufacturer

At Philson, we don't just supply parts; we provide integrated solutions for global intralogistics providers. From heavy-duty Polyurethane on Nylon Centre Wheels to custom-engineered drive components, our technical team is dedicated to optimizing your equipment's performance. If you are looking to upgrade your current fleet or require a reliable supplier for your next automation project, contact us today to discuss your specific requirements.