

Polyurethane wheels for forklift trucks: the keystone for the handling of goods



Forklift truck wheels can be made of many materials, each one with different characteristics, in terms of durability, resistance to tearing, cutting, water and chemical action but most of all to high load.

Rubber, cast iron, polyamide and polypropylene, polyurethane are the most frequent materials for the production of wheels for forklift trucks: each one has its own specificity but polyurethane offers considerable advantages when compared to the alternatives available on the market.

Polyurethane wheels for forklift trucks and pallet trucks

Every time a client state a specific need, a challenge arises: from the analysis of the specific use, the type of flooring and environmental conditions we are able to tailor the most suitable wheels for long term use and high- performance function.

From the feedback with our customers, replacing the wheels of high load forklift trucks with polyurethane wheels means:

- ensuring ease and freedom of movement in the handling of goods
- choose a material with great dynamic capabilities
- opt for a material with excellent anti-vibration properties: polyurethane absorbs vibrations, protecting workers' health and safeguarding equipment and floor.
- solve the need for high load (up to 20 tons per wheel)

Polyether or polyester?

The right compounds for polyurethane wheels for forklift trucks vary depending on several factors:

We suggest **polyether compounds** when good dynamic properties, high load resistance, high speed rotation, contact of the wheels with water, or with aggressive acid or basic liquids are required.

Polyester compounds, on the other hand, are more advisable when the company's requirements highlight a need for resistance to abrasion (in the case of rugged flooring or contact with sharp bodies, as may occur in glass treatment plants), resistance to cutting, tearing and aggression by hydrocarbons.

In addition, polyester compounds in softer formulations dissipate heat and offer anti-vibration properties, as well as leaving no marks on the surface.



Polyurethane coated bridge crane wheels

Customer: FLUORSID SPA

For Fluorsid company we have built high-load and abrasion-resistant polyurethane coated steel wheels for bridge crane systems. The polyurethane coating also has the function of dampening any vibrations or tears due to oscillations in the load to handle.

Wheels for cylindrical bodies welding plant

Customer: TERMOMECCANICA SPA

The plant uses 4 wheels that move cylindrical bodies for a total load that can reach 80 tons. The maximum load borne by each wheel is 20 tons and it is therefore essential that the steel wheels are coated with a hot-cast polyurethane, specifically formulated to dissipate the heat generated by such a high load.

Wheels for agitators in water treatment plants

Customers: TECNOCASIC, CISA SERVICE, VILLA SERVICE.

In this case, the wheels allow the very slow rotation of an agitator that moves the waste water inside large collection tanks.