



# Solid Tyres for CE Applications

The zero-maintenance solid tyres are a sound investment for demanding applications such as construction, mining, port handling, recycling, steel making, solid waste management, scrap handling, etc

**T**rident International specialises in the design, development and supply of solid industrial tyres for construction, quarrying, underground mining, port and material handling equipment. The company has developed new range of solid tyres specifically for skid steer loaders, wheel loaders, backhoe loaders, dumper, tippers, etc. The sizes range from 10-16.5 to 26.5-25.

Pneumatic tyres that are fitted on these machines, are inherently prone to punctures, damage and fast wear, due to the severe service conditions in which these machines are used. This results in losses associated with frequent repair and replacement, downtime, and additional costs associated with excess inventory of spares.

## Solid tyres for skid steer loaders

The solid skid steer tyres offered by Trident are puncture-proof and are made from highly wear-resistant rubber compounds. This gives them a lifespan of 3-5



Solid tyres with sidewall apertures for shock absorption.

times that of conventional pneumatic tyres. These tyres also significantly improve occupational safety as there is no possibility of tyre blowout related accidents. The skid steer tyres are available for all skid steer loaders (including Bobcat S130, S250, Terex Heman 175, JCB Robot 170, etc).

The tyres have an abrasion resistant tread that is specifically compounded for use on a wide range of working conditions that skid steer loaders are used in. Furthermore, solid skid steer tyres have useable tread depths between 65 to 90 mm as compared to 20-25 mm tread depths on most pneumatic skid steer tyres currently available. The extra deep tread gives a greater wear volume, consequently enhancing the lifespan of the tyre.

Innovative features include side-wall apertures in the tyres that absorb shock and provide cushioning, thereby providing a stable ride. The side-wall apertures

also provide additional traction by allowing the tyre to flex and grip better on uneven work surfaces that skid steer loaders are typically used on.

Trident's solid skid steer tyres are available in a range of traction lug and smooth tread patterns. The cut-resistant traction lug tyres are suitable for use on rough terrain, and uneven, semi-prepared surfaces typically found on construction, mining and demolition sites. The tread design provides traction in the dirt and extended tyre life on uneven surfaces. Traction lug tyres are available in different tread depths, lug-void ratios, and sidewall aperture arrangements to suit the application.

Smooth tyres are made with extra rubber and an abrasion-resistant tread compound. This makes them ideally suited for use on hard abrasive surfaces such as highways, airport-runways and other paved surfaces, like factories, foundries, recycling plants and waste



Solid skid steer tyre.



Skid steer using a smooth tread pattern tyre.

transfer stations where the floor may be contaminated with flash, slag, glass, etc. These tyres also have a higher load carrying capacity.

All solid skid steer tyres are mounted on heavy-duty wheels, and are supplied as ready-to-fit assemblies. No special mounting equipment is required. Machine operators can change tyres with ease.

### Solid tyres for dumpers, backhoe & wheel loaders

The use of solid tyres on construction,

mining and other specialised equipment is a relatively new phenomenon, which has been gaining acceptance as the benefits become more apparent.

Trident has developed new range of solid tyres in a cut resistant, mining compound in a pattern specifically for:

- Backhoe loaders (JCB 3DX, L&T Case 770, etc)
- Tipper trucks (Kamaz, Tata Prima, AMW, MAN, Ashok Leyland, etc)
- Slag pot carriers
- Wheel loaders (HM 2021, CAT 924 to 966H, etc)



Solid tyre for tippers and loaders.

Solid tyres are ideally suitable for short haul, high load, low speed machines working in yards, construction sites and other confined areas with harsh underfoot conditions. These tyres have an extra deep tread with a greater wear volume that gives them a lifespan of 3-5 times that of conventional pneumatic tyres.

### Solid tyres: a cost-effective alternative

Cost continues to be a factor in the wider acceptance of the solid tyre concept, especially when one considers that solid tyres cost at least three times the price of pneumatic tyres. It is important that the user be educated about the fact that solid tyres are puncture-proof and their life is far more than that of pneumatic tyres. Costs associated with puncture-related issues



Tipper using solid tyres in a stone quarry.

such as machine downtime, idle operator time and operational delays are automatically eliminated.

Fewer replacements mean that costs associated with re-purchase, downtime, inventory and repair are significantly reduced. Solid tyres are therefore a viable cost-effective alternative for the customer to seriously consider.

The above factors combine to offer a product that significantly improves equipment utilisation in severe applications where tyres are puncture prone and susceptible to damage. Besides providing the user complete peace of mind, these zero-maintenance tyres are a sound investment for demanding applications such as construction, mining, port handling, recycling, steel making, solid waste management, scrap handling, etc.

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