# **Trasteel WEAR**

# Undercarriage



**Trasteel Wear Parts** is a global benchmark in spare parts and attachments for earthmoving, construction and mining machinery. Since its inception, this brand has aimed at providing an excellent final product.

To this end, a great deal of attention has been paid to all aspects, from the design to the selection of raw materials and production processes. This is what defines **Trasteel Wear Parts**.

The primary objective of this global brand is to combine design and technology to offer a maximum profitability in the field.



**Trasteel Track** offers a complete range of high quality undercarriage components, so that you always have the necessary spare parts available for your tracks.







# Profitability on Track

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Undercarriage



**Trasteel Track** offers a wide range of undercarriage components of exceptional quality, capable to tackle with the most challenging terrain.

Our spare parts are adaptable to most of the machines of the leading manufacturers on the market.

In addition, they are subjected to demanding quality tests to ensure optimum performance, reliability and durability.

We know that the costs associated with unplanned downtime for machine maintenance are very significant and lead to a considerable loss of productivity. At **Trasteel Track** we strive to avoid them, offering a balanced and very durable undercarriage.

We have a diverse range of undercarriage components, for excavators, loaders and bulldozers from 1 to 120 tonnes, to meet the most demanding requests.

## DESIGN

Our engineering department uses CAD/CAM technologies for the development of our spare parts: by studying and optimising the geometry we manage to improve the structural resistance.

#### RAW MATERIAL AND CHEMICAL COMPOSITION

We use carefully selected steel alloys with balanced chemical compositions to ensure exceptional resistance to fatigue and abrasion, even under extreme working conditions.

## O5 TESTS

We carry out rigorous quality testing at all stages of production to ensure compliance with the highest standards. Our spare parts are subjected to dimensional, hardness, strength and structural integrity tests, using state-of-the-art equipment and internationally recognised testing methodologies.

#### **O7** DURABILITY

Our aim is to ensure superior performance and an extended service life, to reduce maintenance costs and maximise machine productivity.

## PRODUCTION PROCESSES

We use advanced manufacturing technologies to produce our spare parts, which are characterised by precise tolerances and high quality finishes.

### HEAT TREATMENT

We apply specific heat treatments to improve the mechanical properties of our spare parts. By means of techniques such as quenching, tempering and induction hardening, we manage to increase the hardness, wear resistance and toughness of the components, ensuring optimum performance under a heavy load and continuous use.

## QUALITY

Quality is a fundamental basis at **Trasteel Track**. Offering excellent quality spare parts ensures optimum performance and profitability and therefore, customer satisfaction.

## **PROFITABILITY ON TRACK**

The service life of an undercarriage assembly depends to a large extent on the performance of the individual undercarriage components. If they condition and performance are optimal, the service life can be extended up to 35%. From the track links to the hardware, including rollers, idlers, sprockets, tensioners, track shoes, etc... **Trasteel Track** components offer great strength, durability and ease of maintenance.





## **Property Testing**

Our commitment to quality is paramount. We subject our spare parts to stringent quality controls and property tests to ensure that we always offer the best service. Tests for hardness, fracture toughness, structural integrity, chemical composition, dimensional controls, durability in mud, etc.



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Designed and manufactured for the most demanding applications. After obtaining feedback from our customers and studying other competitor solutions, our engineering department has focused on improving the joints between links to maximise lubricant retention and durability.

All our chains are heat treated by quenching, tempering and induction hardening to maximise mechanical properties and minimise internal stresses.

We have one of the best factories in the world to produce our **Trasteel Track** steel tracks, an OEM approved manufacturer for machinery brands such as Volvo, Hyundai, Liebherr...

We carry out exhaustive quality controls that allow us to offer guarantees against material and manufacturing defects of 4,000 hours.





- Dry and sealed tracks. Most economical solution for most applications.
- **Greased and sealed tracks.** Recommended for machines with medium-high drive action. The sealing keeps the grease layer inside the seal and prevents excessive internal wear.
- **Lubricated and sealed tracks.** Recommended for loaders and bulldozers with high or very high drive action. Each joint is sealed and lubricated to prevent internal wear.

The PPR retaining system is available, which mechanically fixes the pin and link, preventing transverse movements and thus possible loss of lubricant from the inside of the sleeve bearing.

## **Sprockets and Segments.**



Our sprockets and sprocket segments are manufactured by forging and hot stamping, and by means of controlled recrystallisation and subsequent heat treatment, we manage to increase their hardness and resistance, also obtaining the required dimensional stability and facilitating precision machining.





#### **Idlers**



Playing a key role in the stability, control and overall performance of the undercarriage, wear resistance is especially important for the idlers, and they must have an adequate load capacity to support the weight of the machine, without compromising the stability and structural integrity of the equipment.

That is why at **Trasteel Track** we use premium quality anti-wear steels, heat treated to maximise hardness and wear resistance in our idlers, thus achieving the best performance and extending their service life even in unfavourable conditions.





Critical components that help to maintain the adequate chain tension. Proper maintenance of these elements is essential to ensure optimum performance and long undercarriage life.

Inadequate track tension can lead to uneven or premature wear of links, rollers and other components, therefore regular maintenance based on visual inspection, lubrication of moving components and adjustment of tension will be essential for the correct functioning of the tensioners.

**Trasteel Track** provides you with tensioning drives, with an optional automatic adjustment system, all to ensure excellent performance for your equipment.

## **Top and Track Rollers**



**Trasteel Track** supplies a wide range of rollers, which, thanks to their studied design, increase the contact surface with the track links in order to guarantee a high structural resistance to wear, impact and deformation.



Most machines, especially excavators, are exposed to many variations in their centre of gravity during operation, which is why the rollers must withstand heavy loads and therefore, be in optimum condition. We increase the diameters of the shafts to extend the load capacity and robustness of our rollers, and by heat treatment we achieve the best physical characteristics.



## **Steel Track Shoes**



Our steel track shoes increase the productivity of your machines thanks to their well thought-out design and our high-performance steel with superior wear resistance and excellent toughness.

Standard Service and Extreme Service track shoes are available with superior plate thickness and grouser height for extremely abrasive and demanding work requirements.

The lower the grouser height, either by design or due to wear, the lower the tensile load that can be transmitted, but the greater the turning manoeuvrability, so we study the need and parameterise accordingly to offer the best performance for each application.

**Trasteel Track** offers different models suitable for most of the machines on the market to cover all needs.

- Single grouser track shoes. High level of penetration and therefore traction, they are the ideal choice for rocky and abrasive terrain, especially on bulldozers and large front loaders.
- **Double grouser track shoes.** They are usually indicated for applications where a balance between thrust and manoeuvrability is required, wich favour turning while maintaining acceptable traction.
- Triple grouser track shoes. They are characterised by a lower penetration on the ground and an optimal manoeuvrability, they are mainly suitable for excavators due to their low turning resistance and for use on soft ground.







## Hardware



Although a priori they may seem to be the least important components in the undercarriage, their importance should not be underestimated. We believe that a good fit between track links and track shoes is essential to avoid unnecessary downtime

Our fasteners are of exceptional quality, we manage to avoid breakage and elongation of the bolts and thus the loss of track shoes on site or in the mine, in addition to facilitating maintenance tasks, reducing machine downtime and associated costs.

The bolts should not be considered as a necessary accessory but as a fundamental part of the assembly. At **Trasteel Track**, we know that details make the difference.



## **Trabber**

**Rubber Track Pads** 

Suitable to prevent damage to surfaces when working on concrete or asphalt, to achieve better traction on hard ground that could cause the undercarriage to slip and to reduce vibrations and noise. Get your undercarriage converted to rubber with **Trabber**.

Bolt-On Track Pads. Bolted directly to the steel track shoe, they are the most durable and economical alternative. Suitable for long-term use, they provide high rigidity and structural stability.



- Clip-On Track Pads. They are mounted by means of the built-in side clips, and their advantages include the quick installation and the possibility of replacing them without having to dismantle the whole steel track shoe.
- Chain-On Track Pads. They are placed directly on the steel track links, replacing the steel track shoes. They are an appropriate option when the main objective is to protect the ground on which work is being carried out.



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PROFITABILITY ON TRACK

