

Hankook SmartLife

Solutions

PREMIUM • VISION • PARTNERSHIP

alphatread



Official Partner of
FORMULA E



Regrooving



Hot retreading

Hankook SmartLife Solutions

Extend your tyre life with Hankook Smartlife Solutions

Cost competitiveness, respect for the environment and safety are all major issues faced by European transport professionals and tyres are an integral part of this major concern.

Hankook Smartlife Solutions Regrooving and Retreading provides dealers and fleet managers with the opportunity to address these issues from the perspective of tyre management with the aim to:



**Save Fleets
Money**



**Reduce
Emissions**



**Improve
Safety**

Delivering 'built-in' value to dealers and fleet managers

Through the investment in tyre technology the Hankook tyre is designed specifically to be regrooved and retreaded.

Design Technology

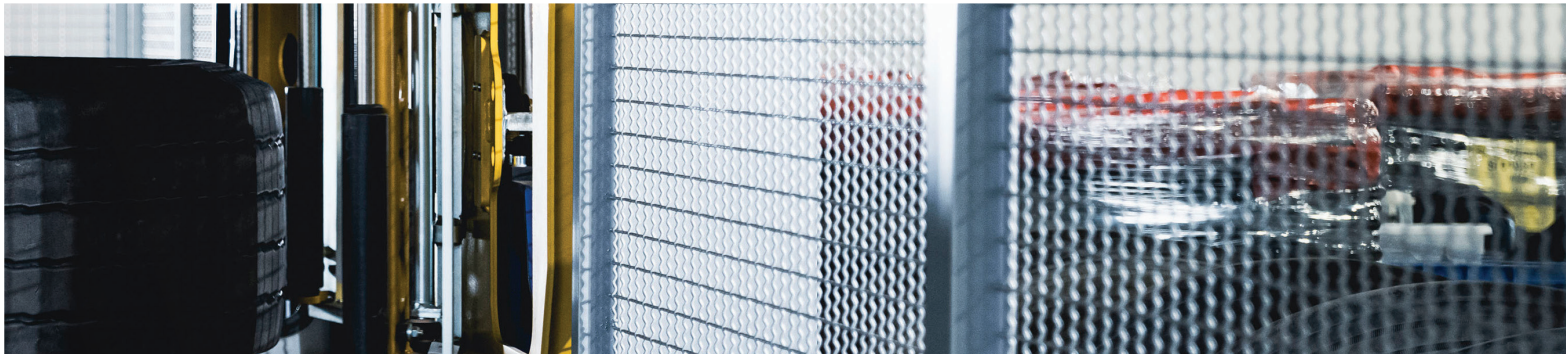
All Hankook TBR tyres are designed and built to be regrooved and retreaded.

More Tread Rubber

We add 5-8mm more tread rubber under the tread pattern for regrooving.

Multiple Retreads

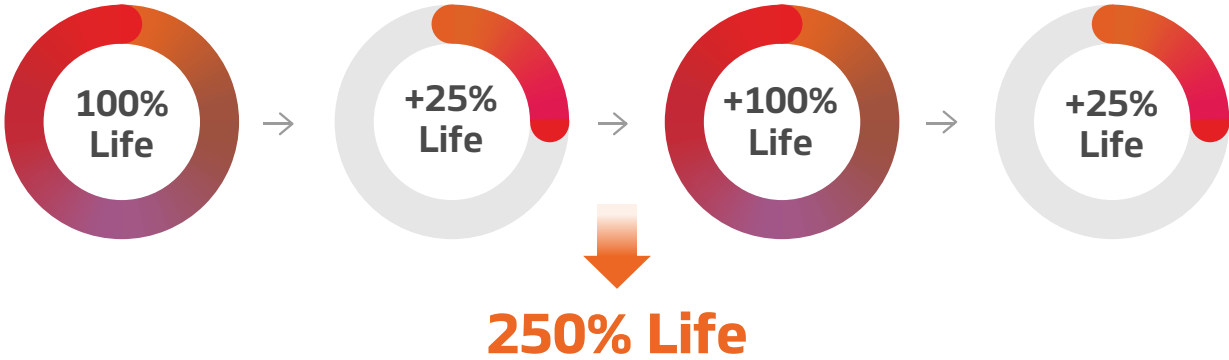
We build tyre casings to withstand multiple retreads.



Up to 250% mileage life from 1 new tyre

1 st Life	2 nd Life	3 rd Life	4 th Life
New tyre	Regrooved tyre	Retreaded tyre	Regrooved tyre

1 tyre = 1 casing = 250% tyre life



Premium tyres and casings that deliver up to 250% tyre life

All Hankook TBR premium tyres are designed and manufactured to provide premium performance throughout their first life and have a second, third and fourth life extension through Hankook SmartLife Regrooving and Retreading.

With additional premium rubber under the tread, the Hankook TBR tyre delivers up to 25% more mileage after regrooving. In addition to this, the high-quality reinforced casings allow the premium Hankook TBR tyres to be retreaded further extending the tyre life.



Regrooving

A regrooved tyre is a tyre, either new or retreaded, on which a tread pattern has been produced by cutting into the tread in accordance with the tyre manufacturer's regroove tread pattern. By regrooving your premium Hankook tyres you save resources, preserve the environment and save yourself money on tyres and fuel.

Regrooving - Be SMART and regroove your Premium Hankook tyres.



Safety

Regrooved tyres can provide 10% more grip and traction.¹



Efficiency

Up to 25% more km of wear. 2L of fuel saved per 100km of driving.²



Environment

1.6 tons less CO² per vehicle set per year³ 70kg raw materials saved with 4 regrooved tyres.

¹ When compared to a Hankook tyre at legal minimum tread depth

² Tyres improve fuel efficiency as they wear. When a tyre is regrooved you extend the tyre life when it is at its most fuel efficient state

³ Vehicle with 4 regrooved tyres covering 120k km per year

Regrooved tyres wear more slowly than new tyres.

The tread depth in a regrooved tyre is shallower than a new tyre so it is more rigid. This rigidity reduces road friction and tyre rolling resistance as well as less tyre wear leading to improved fuel efficiency.

**DID
YOU
KNOW**



Retreading

Hot cure retread is a re-manufacturing process for tyres that replaces the old tread with a new tread to extend the life of the tyre. Hankook Alphatread hot-cure retread tyres can deliver up to 100% new tyre mileage and on-road performance at around 70% of the cost of a new tyre.

Retreading - A SMART solution for your business and the environment.



Safety

A premium Hankook casing, retreaded by a tier 1 retreader will deliver close to the same performance as a new tyre.



Efficiency

Up to 100% more mileage from your Hankook premium casing premium hot cured retreaded tyres can be 30-40% cheaper than a new tyre.



Environment

70% of the new tyres raw materials are saved when it is retreaded.¹ CO₂ saved in the tyre production: 1000 retreaded tyres save 60 ton of CO₂ in manufacturing.² 19% less water and 29% less land for growing rubber trees.³

¹ Hot cure retreading requires only 10-20kg of raw materials to manufacture saving 50-55kg raw materials

² 50 tons of raw materials is saved/recycled in the process, saving the CO₂ needed in new tyre manufacturing

³ Ernest & Young: The socio-economic impact of truck tyre retreading in Europe

Benefits of retreading for transport professionals and fleet managers:

- Cost saving - 30% cheaper than a new tyre
- Performance - near new mileage and wear
- Efficiency - extend mileage by regrooving and retreading
- Sustainability - save 70% in new raw materials and reduce energy and water consumption

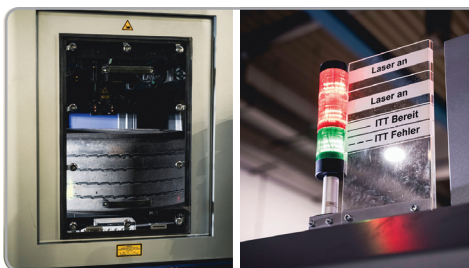
The logo for Hankook Alphatread, featuring the word "hankook" in a dark, sans-serif font and "alphi" in a light, sans-serif font, with a stylized orange and grey graphic element between them.

Hankook Alphatread hot-cure retreading process



Visual inspection

A thorough inspection of all casings is undertaken by a professional and highly experienced team.



Shearography machine inspection

Casings undergo a further detailed inspection with the Shearography machine to ensure they are perfect for the retreading process.



Tread removal

The tyre rebuild begins by removing all the remaining tread to expose any damage to the casing hidden by the rubber.

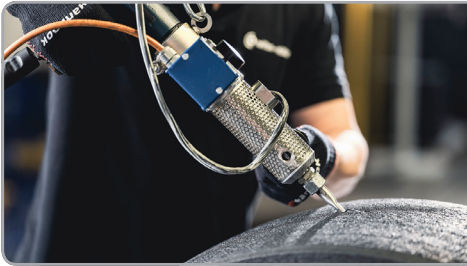


Damage removal

Next critical step is the complete removal of all the damaged elements of the casing.

Hankook Alphatread saves 70% of original tyre materials

Alphatread premium hot-cure retreads save not only the rubber used in the casings but also the steel.



Damage repair

Any damaged casing plies and other damages are repaired.



New tread rubber

Now the casing is ready to have the tread rubber reapplied.



Tyres cured for 1 hour at 160°C

The curing press creates the new tread and sidewall and the finish on the Alphatread tyre is „as new“. This is the identical process used for Hankook premium tyres.



Final inspection


To guarantee a performance close to our new premium tyres, 100% of Alphatread production is both manually and pressure inspected before approved for sale.

Hankook Alphatread is a sustainable initiative

Alphatread is a clever solution for all economically and environmentally conscious fleet partners.



alphatread



**Hankook Alphatread
hot retreads can
deliver up to 100%
of the mileage of a
new tyre at 70% of
the cost.**





Sustainable initiative to increase tyre life and avoid unnecessary waste

Hankook continuously invests in the range and production quantity of premium Alphatread hot-cured tyres to offer our fleet and dealer partners a cost effective and ecological solution to increase tyre life.



Key features of Hankook Alphatread tyres



Premium
first-life
casings



Premium
hot-cured
retreads



Premium
tread
patterns



Hankook
tyre
technology



Tyre
performance
like new



Hankook Alphas tread retread tyre range



alphatread **R-DH05**



Drive axle tyre for medium haul

- Wide tread and deep groove
- Optimised block shape design for outstanding traction and tread stability
- Lateral grooves design provide excellent traction in all weather conditions



alphatread **R-DH31**



All season drive axle tyre for various road conditions

- 3D Sipes ensure excellent traction, high mileage and prevent irregular wear
- 6 angle block rib pattern for outstanding grip, high mileage and handling performance
- Self regenerating sipes control tearing and wearing with hidden grooves while maintaining traction even at the later stages of wear



alphatread **R-TH31**



Trailer tyre for regional haul applications

- Provides excellent traction and water drainage under various road conditions
- Slanted groove design helps to prevent chunking
- Wide shoulder improves stability and reduces uneven wear
- Lateral groove helps improve initial traction performance



alphatread **R-TH22**



Trailer tyre for regional haul applications

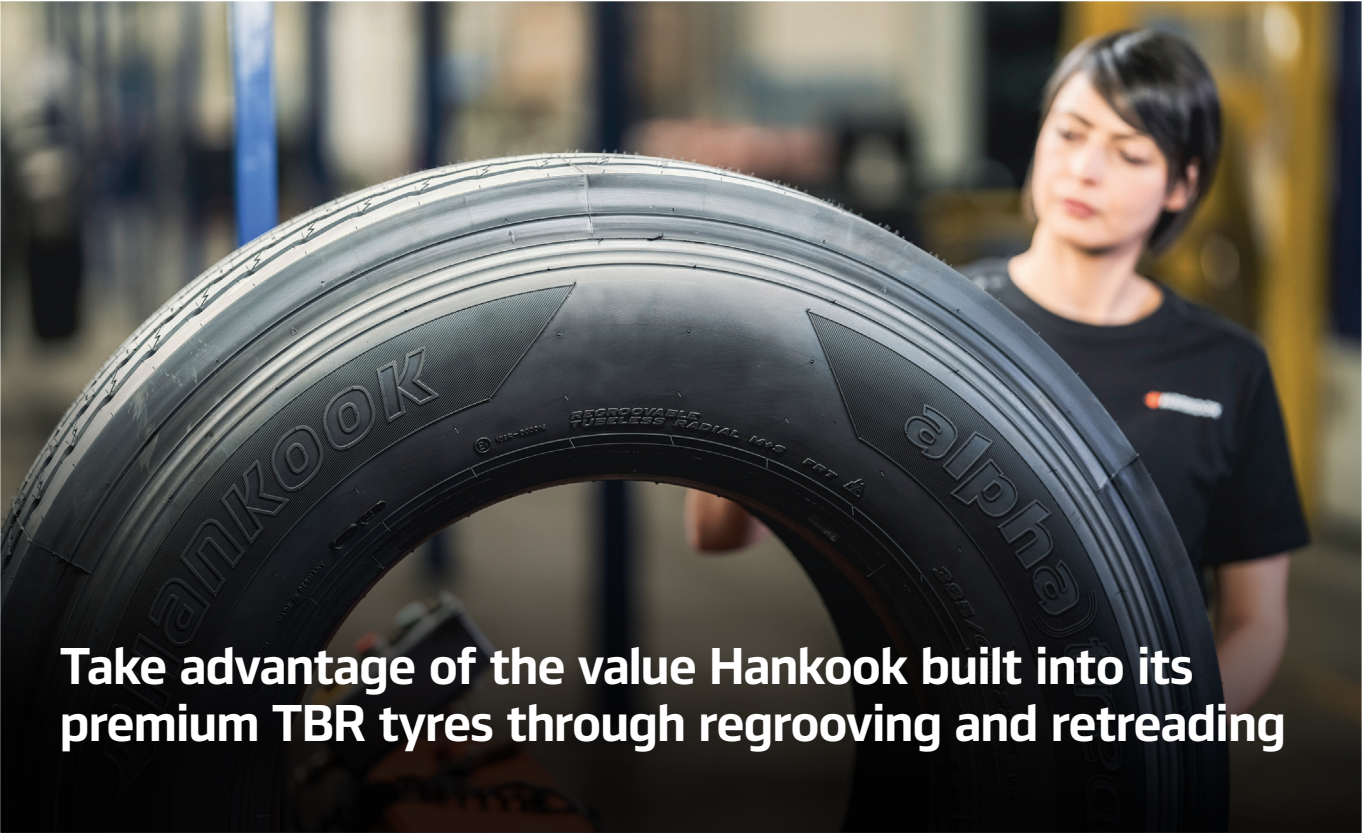
- Semi-zigzag design prevents stone drilling and groove cracks
- Wide and solid shoulder design for high mileage and belt separation prevention
- Kerfless centre rib enhances driving performance on free rolling axle

* A wide variety of patterns and sizes are available in our Alphas tread range.
Please visit www.hankooktire.com/uk or contact your local sales representative for more information.



Patterns and sizes

SRS	Pattern	Size	LI/SS	Tread depth (mm)	Regrooving depth (mm)	Regrooving width (mm)
TUBELESS						
80	R-DH05	295/80R22.5	152/148K	22.8	3	10~12
	R-DH05	315/80R22.5	154/150K	23.2	3	10~12
70	R-DH05	315/70R22.5	154/150K	19.5	3	10
80	R-DH31	315/80R22.5	156/150L	20.5	3	6~8
70	R-DH31	315/70R22.5	105L	19.5	3	9-11
65	R-TH31	385/65R22.5	160K	16	3	7.7
65	R-TH22	385/65R22.5	160J	17	3	12~14



Take advantage of the value Hankook built into its premium TBR tyres through regrooving and retreading



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