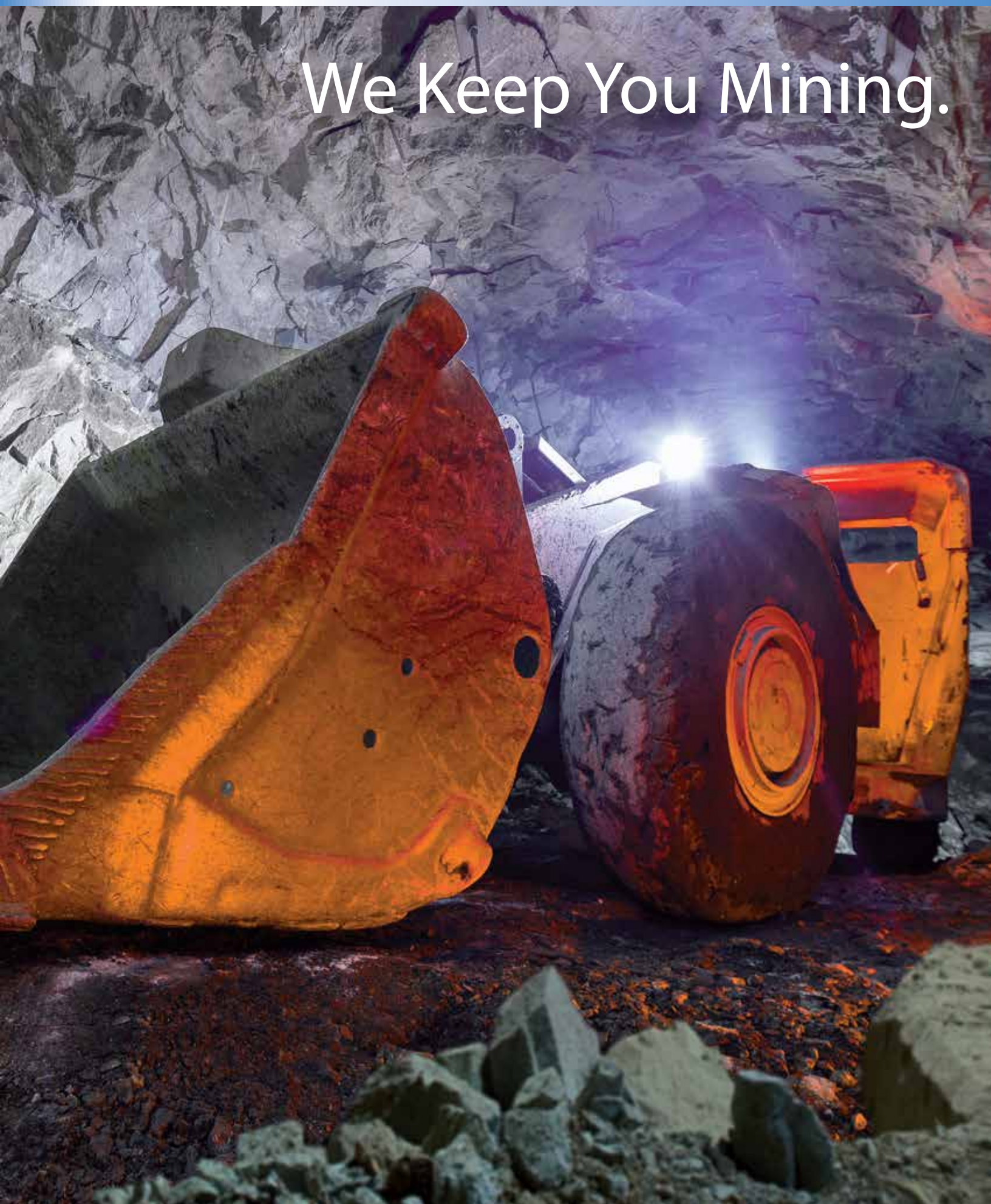


# We Keep You Mining.







# TyrFil™

## High Performance Flatproofing Technology



**TyrFil** is a proven polyurethane fill system engineered for the extreme demands of mining operations. Pumped into Off-the-Road (OTR) mining vehicle tyres, it replaces all the air and cures into a durable, elastomer core that eliminates flats and blowouts completely. Acting as a built-in shock absorber, TyrFil reduces vibration, improves stability, and helps protect operators and equipment in hazardous underground and surface conditions.

*Compared to solid tyres, liners, or cores, TyrFil delivers superior ride quality, better safety performance, and a lower total cost of ownership—making it the smarter flatproofing choice for mining fleets.*

## Performance

**Eliminates 100% of flat tyres**—no more downtime or blowouts

**Reduces G-force impact** to operators and equipment, minimizing fatigue and wear

**Maintains constant internal pressure** and evenly distributes heavy loads

**Extends tyre life** and helps reduce replacement frequency

**Provides above-standard heat dissipation**—for longer runs and optimum performance

**Eliminates rim slippage** for better control and reliability

**Adds ballast** giving stability & better steering control

## Safety

- Prevents catastrophic blowouts—critical for maintaining safety in underground mining operations
- Eliminates pneumatic bounce, reducing jarring impact to both operators and equipment
- Improves vehicle stabilization, delivering a smoother ride and minimizing operator fatigue
- Helps reduce risk of injury, supporting lower worker compensation claims and a safer work environment
- Supports safer navigation in confined, debris-filled spaces where flat tires can block access or delay emergency response



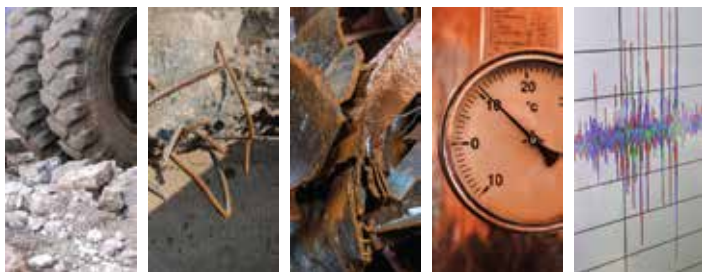
*Underground or on the surface, Carlisle TyrFil has the flatproofing solutions to keep OTR vehicles in your mining operation running safely and efficiently.*





# One Flat Tyre Can Shut Down Your Operations. TyrFil™ Flatproofing Keeps You Mining.

When your operation runs 24/7, your tyres need to keep up. Whether you're navigating rugged terrain on the surface or operating deep underground, your equipment and tyres must perform under relentless pressure and in unpredictable, high-risk conditions. When a vehicle goes down with a flat tyre in a narrow tunnel, it can block the entire route behind it, production crews are stuck, operations stall, and safety risks rise fast.



## **Rocks. Rebar. Debris. Heat. Vibration.**

Tyre damage is inevitable in environments this extreme—but it doesn't have to mean downtime. From loaders and haulers to shuttle cars and drill rigs, TyrFil™ flatproofing is engineered to perform under pressure—across jagged rock, extreme temperatures, and in the most punishing conditions the mining industry can throw at it.



## **That's why mining professionals worldwide trust TyrFil™ Flatproofing.**

For over 50 years, TyrFil has been the original—and most trusted—polyurethane flatproofing solution for OTR mining equipment. Since all the air is replaced, TyrFil eliminates flats and blowouts, maintains optimal internal pressure, extends tyre life, and significantly reduces replacement and maintenance costs.

## **No flats. No downtime. No compromise.**

You can't afford to stop rolling. TyrFil™ flatproofing isn't just a product—it's operational insurance.





# TLC

## TLC Tyre & Rim Protection



TLC Tyre and Rim Protection conditions the wheel and maintains cooler tyre operating temperatures. The liquid is added to the tyre air chamber and coats the inside of the rims to provide rust protection. TLC's rust-inhibiting formula, superior coating properties, and continual vapor dispersion extends the life of tyres and rims. Plus, TLC is non-toxic, non-flammable, and non-hazardous.

### Performance

#### Reduces Downtime

- Tyres run cooler, increasing tyre life
- Eliminates premature failures caused by rust
- Disassembly of wheel components is easier, safer, and faster

#### Reduces Operating Costs

- Reduces labor costs
- Fewer tyres need to be purchased

### Safety

#### Helps Prevent Catastrophic Failures

- Leak-safety—the “neon red” colour serves as an early-warning system of rim and/or component damage.
- Residue builds up where any air escapes—easier to identify slow leaks and cracks
- Greater visibility of problems during pre- and post-shift inspections
- Reduces operating temperatures to help prevent blowouts



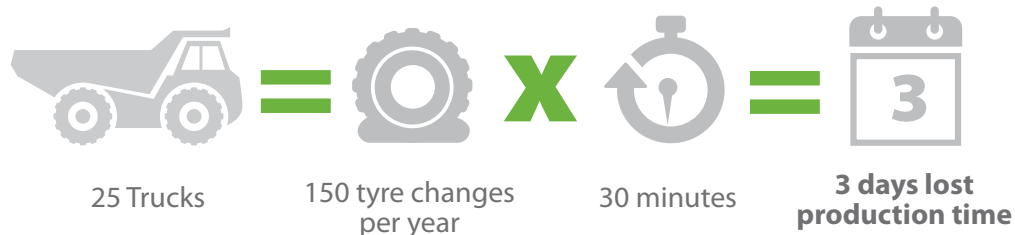
Without TLC


































With TLC

#### Reduced Operating Costs Per Year

Average additional tyre maintenance time without TLC:



## Select the right products for all your OTR vehicles and applications:

	TyrFil Flex Flatproofing Technology	TyrFil Premium Flatproofing Technology	TyrFil HeviDuty Flatproofing Technology	TLC Tyre & Rim Protection
<b>Durometer</b>	10 Durometer	30 Durometer	55 Durometer	
<b>Features</b>	Maximum tyre deflection	Medium heat resistance	Minimum tyre deflection	<ul style="list-style-type: none"> <li>▪ Liquid conditioner for inner rim and tyre</li> <li>▪ Reduces running temperatures</li> <li>▪ Protects rim from rust</li> </ul>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>▪ Soft air-like ride is easier on equipment and operators</li> <li>▪ Ideal for mine support vehicles</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provides optimum performance in the most severe operating conditions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provides rock-steady stability and safety</li> <li>▪ Ideal for moving tremendous weights over short distances</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increases hours on tyres</li> <li>▪ Promotes safety</li> </ul>
<b>Shuttle Cars</b>				
<b>Scoops</b>				
<b>Roof Bolters</b>				
<b>Uni-Haulers</b>				
<b>Scalers</b>				
<b>Drills</b>				
<b>Tractors</b>				
<b>Personnel Carriers</b>				
<b>Shield Haulers</b>				
<b>Fork Lifts</b>				
<b>Skid Steers</b>				
<b>Front End Loaders</b>				
<b>Haul Trucks</b>				
<b>Lube Trucks</b>				
<b>Mechanic Trucks</b>				
<b>Cranes</b>				
<b>Aerial Lifts</b>				
<b>Backhoes</b>				
<b>Graders</b>				

*If a flatproofing technology is not required, consult with a Carlisle TyrFil sales manager to learn how TLC can extend tyre life and reduce downtime in the equipment listed in the above chart.*



Each grade of TyrFil is designed to meet your particular load, ride, speed, and traction requirements:

#### TyrFil Flex

- 10 Durometer—Maximum tyre deflection
- Soft air-like ride is easier on equipment and operators
- Ideal for mine support vehicles

#### TyrFil HeviDuty

- 55 Durometer—Minimum tyre deflection
- Provides rock-steady stability and safety
- Ideal for moving tremendous weight over short distances

#### TyrFil™ Pro

- 30 Durometer
- Medium heat resistance
- This formula is a general purpose material for use in 90% of tyre fill applications

#### TyrFil Premium

- 30 Durometer
- Medium heat resistance
- Provides above-standard heat dissipation for longer runs and optimum performance



Each grade of TLC is designed to meet the temperature requirements of your mining operation:

#### TLC HT

20°F / -7°C

#### TLC PRO

0°F / -18°C

#### TLC EXTREME

-20°F / -29°C

- TLC formulas are also available in a concentrate.

