

What is TyrFil Flatproofing?

TyrFil is a polyurethane liquid that is pumped into pneumatic tires to replace air with a resilient, synthetic elastomer core that eliminates dangerous and costly tire flats on off-the-road (OTR) equipment. Even in the most hazardous environments, tires filled with TyrFil will never go flat. Despite cuts and punctures, filled tires will keep performing - increasing productivity and eliminating costly downtime for field operators.

TyrFil Process:

- 1 Pre-Stretch Tires**
 for 24 hours to compensate for in-service casing growth.
- 2 Inject TyrFil**
 (ISO+CAT) through valve stem with the TyrFil Pump.
- 3 Vent Carcass**
 with a hypodermic needle until the liquid flows out through the hole.
- 4 Plug the Hole**
 with a nail or sheet metal screw and pressurize the tire with TyrFil to the recommended PSI.
- 5 Lay the Tire**
 flat on a pallet.
- 6 Cure**
 for 24 to 48 hours at 72° F.

Product Catalog

■ Carlisle TyrFil recommendation
 ● Review operating conditions

Equipment / Application	Product Name / Durometer			
	Flex 10 Maximum Deflection <i>Better than Air-Ride</i>	Pro 30 Medium Deflection <i>Used in 90% of tire fill applications</i>	Ultra 30 Medium Deflection <i>When the environment is extreme</i>	HeviDuty 55 Minimum Deflection <i>For slow speeds / heavy loads</i>
Wheel Loader / high temperature, load and carry		●	■	
Wheel Loader / scrap metal, waste management, loose material, only load		■	■	
All Equipment*/ underground mining		●	■	
Skid Steer Loader/ any application	■	■	■	
Forklift / 1, 2 shifts	■	■	■	
Forklift / 3 shifts		●	■	
Aerial Work Platforms/ all applications		■	■	
Backhoe / all applications except high heat	■ Front Tire	■ Front & Rear Tire	■ Front & Rear Tire	
Piggyback Forklift / all applications	■	■	■	
Telehandler / all applications except high heat		■	■	
Cranes / slow movement, construction		●	●	■
Slag Pot Carrier / slag transportation		●	■	■
Agri Tractor / all applications	●	■	■	
Agriculture Implements / all applications	■	■	■	
Buggy / all applications	■			

* LHD (scoop), Roof Bolter, Drill, Shuttle Car, Jumbo, Scissor Bolter, and Mining Dumper

In case your specific application or equipment is not listed or if you are not sure about the product you should use, please contact your Carlisle TyrFil representative.

Cost Savings Analysis

Here you can estimate your profits from switching to TyrFil	Example – 12 x 16.5 Tire
A. Flat Repair Cost – this includes road service charges, demounting, puncture repair, remounting and any other charges associated with flat tire repairs.	\$125
B. Downtime Per Flat – average in hours.	2
C. Number of Workers Idled – this includes the equipment operator and all other workers idled due to the downed equipment.	2
D. Hourly Pay Rate – include the cost of fringe benefits.	\$25
E. Production Rate – in dollars per hour.	\$80
F. Total Flats for Tire Life – an average from past records if possible.	3
1. Repair costs = (A x F)	\$375
2. Cost of idle labor = (B x C x D x F)	\$300
3. Cost of lost production = (B x E x F)	\$480
4. Total costs for flats = (1+2+3)	\$1,155
5. Projected cost to flatproof	\$250
6. Savings with flatproofing (4-5)	\$905

Benefits



Eliminates 100% flat tires



Utilize total tire life



Experience air-ride deflection

Objections

WEARS OUT TOO FAST!

- The proper PSI and product for the application will result in optimum wear
- Remember, use the right tire for the application

TOO HEAVY!

- TyrFil is lighter than most solid tire options
- TyrFil is a supporting weight, not a hanging weight

IT RIDES TOO HARD!

- Lowers G-force impact to operator and equipment
- Reduces operator fatigue
- Less stress on machine components

Industries

- Mining
- Military
- Ports
- Agriculture
- Airports
- Forestry
- Steel Mills
- Recycling
- Housing Development
- Construction
- Sugar Mills
- Rental Equipment
- Waste Management
- Scrap Metal
- Industrial Maintenance
- Concrete Pre-Cast

Equipment

- Wheel Loaders
- Skid Steer
- Telehandler
- Piggyback Forklift
- Backhoe
- Agri Tractor
- Aerial Work Platform
- Toe Tractor
- Grader
- GSE
- LHD
- Slag Pot Carrier
- Cranes
- Forklifts
- Light Equipment
- Shuttle Cars
- Drills
- RTG Cranes
- Roof Bolter
- Scraper

We keep the world rolling.

No flats, smoother ride, more protection.

Carlisle TyrFil

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