



# Don't Hinder Your Work!

## WHAT IS TYRFIL®?

TyrFil® is an elastic and durable filling material moving like a shock absorber pressed into the tires and eliminates flat tires forever! Unlike solid tires or tube tires, TyrFil® can be compatible to process any cross country tire either knobby or pneumatic tires. TyrFil® is used most widely in leased industrial equipment, military, construction, mining, excavation, iron, steel, scrap and materials transportation applications.

## WHY DO I NEED TYRFIL®?

Flat tires in rough terrains and explosions due to heat and pressure may cause expensive disassembly time, rollovers, equipment damage and injuries. Although solid tires are explosion proof, they may cause driver injuries and vehicle depreciations in industrial workplaces.

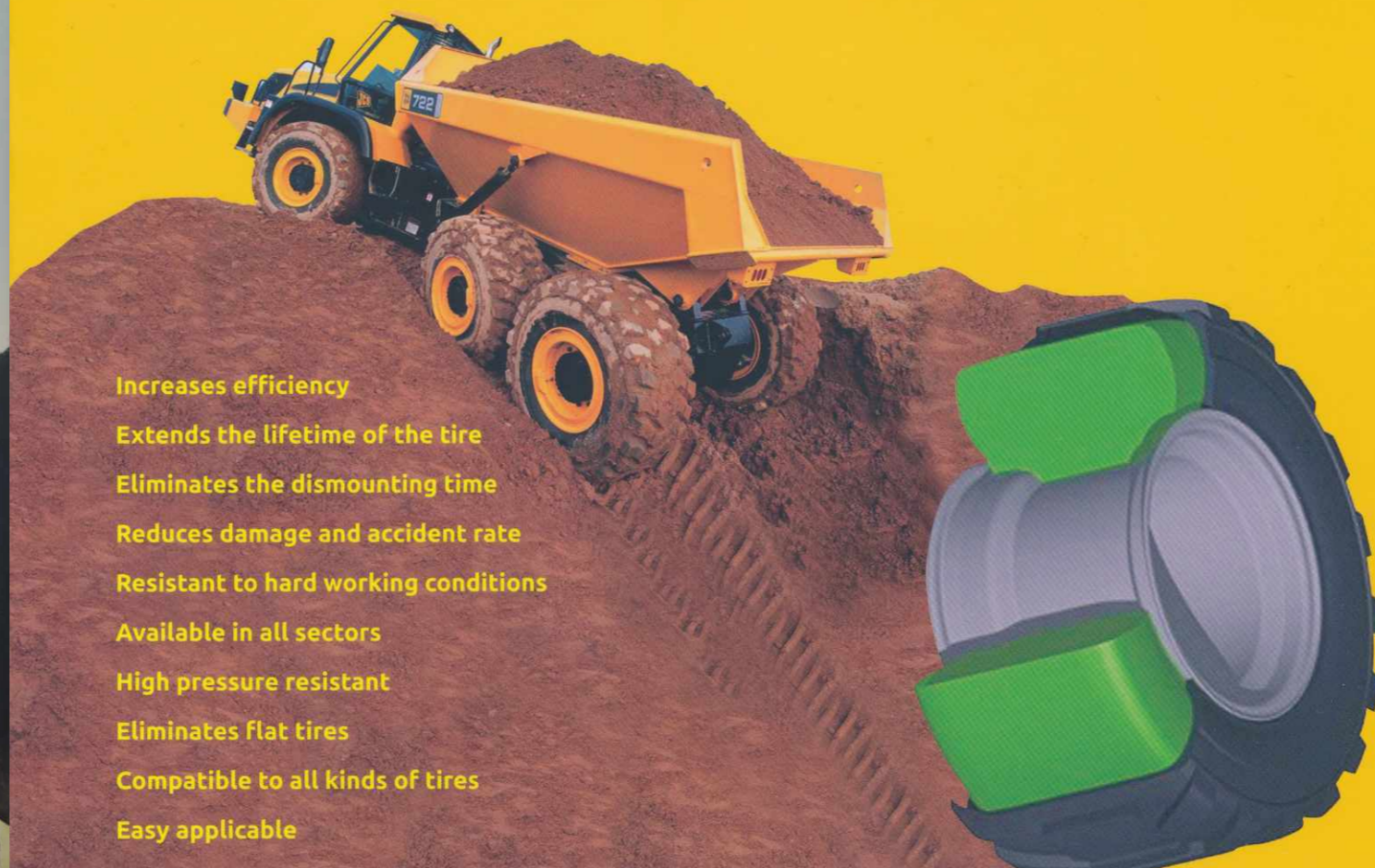


**GUARANTEED SOLUTION**

Against Explosions and Tears



## TIRE FILLING SYSTEMS



- Increases efficiency
- Extends the lifetime of the tire
- Eliminates the dismounting time
- Reduces damage and accident rate
- Resistant to hard working conditions
- Available in all sectors
- High pressure resistant
- Eliminates flat tires
- Compatible to all kinds of tires
- Easy applicable



## TYRE FILLING SYSTEMS

The World's Most Reliable and Effective **Flatproofing Tire** Technology



SYDNEY: 02 9688 8888

ADELAIDE: 08 8262 8699

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MELBOURNE: 03 9931 0237

TOWNSVILLE: 07 4774 8006

AUCKLAND NZ: 09 253 9097



## DEFINITION OF TYRFIL®

TyrFil® is a two component fluid urethane injected to pneumatic tires with constant pressure. After vulcanizing at a temperature higher than 20°C in the required time period, TyrFil® becomes a soft, elastic elastomer providing elasticity of the pneumatic tire.

Tire filled with TyrFil® can operate continuously at high speed everywhere available and it has loading ratio appropriate to its dimensions. In short; as long as the wheel rotates and there is profit flow Tyrfil® means "economy". Tyrfil® means better tire performance because of negligible maintenance costs and stance, better fuel mileage, maximum tire life and optimum traction and slip resistance of the tire filled with TyrFil®.

If you are losing money because of flat, early ruined tires, stopping work equipments and labor loss that means you need TyrFil®.

TyrFil® equipment makes your tire explosion proof. This means your tires will not blow out from now on. TyrFil® changes all of the air inside your pneumatic tire with a fixed pressured soft, elastic urethane tire.

The World's Most  
Reliable and Effective  
**Flatproofing Tire**  
Technology

**TyrFil®**



## FREQUENTLY ASKED QUESTIONS ON TYRFIL®

### WHY USE TYRFIL®?

To reduce the overall operating costs by increasing production, reducing stoppages, removing the program cuts, to improve equipment safety and not to leave any requirement for auxiliary equipment



### ARE TIRES FILLED WITH TYRFIL® ECONOMICAL?

Yes... In enterprises with frequent tire explosions and cuts, TyrFil® eliminates the costs for repairs, changes, stoppages of equipments, idle labor force, production stops and extra working hours in order to complete the scheduled tasks. For the enterprises having frequent tire problems total cost saving can reach to a very significant amount.

### WHERE TO USE TYRFIL®?

It is used everywhere where the work stops due to tire problems such as junkyard, dump site, loading areas, mines, stone quarries, farms, oil refineries, asphalt distribution and purification equipments, airports, foundries, construction areas, stonemasonry fields, street cleaning equipment, transportation vehicles, military and police vehicles. Vehicles of army and air force and tires of helicopters filled with TyrFil® are resistant against shrapnel, they never explode, never cause any problems. Overall, as much as the working conditions for the tire are harder the requirement for TyrFil® will be greater.

### WHAT IS THE ADVANTAGE OF A TIRE FILLED WITH TYRFIL® COMPARED TO A TIRE PRODUCED IN FULL AIR?

Operator comfort due to elasticity, better traction power due to more pressing trace, equipment speed not limited to 15 mph (24 km/h), and equipment body is less damaged because of decreasing vibration and better energy storage.

### DOES THE TIRE DIMENSION CHANGE IN A TIRE FILLED WITH TYRFIL®?

No. The dimensions of a tire filled with TyrFil® don't change. It doesn't require any change in the equipments.

### DOES THE INTERNAL PRESSURE CHANGE IN A TIRE FILLED WITH TYRFIL®?

No. The tires should be filled in recommended amounts by the manufacturer or 70% of the operating pressure. Pressure remains constant throughout tire life; there is no need to control pressure repeatedly.

### WHICH BRAND OF TIRES CAN BE FILLED WITH TYRFIL®?

All pneumatic tires meeting specifications of the manufacturer of tire and having solid tire casing.

### IS IT POSSIBLE TO RECAP THE TIRES FILLED WITH TYRFIL®?

Yes. If the tire is in good condition, it can be recapped by "pre-core recapping" methods.

### DOES THE TYRFIL® FLOW OUT IF THE TIRE IS CUT OR BLOWS-OUT?

No. After TyrFil® solidifies it becomes like a soft, elastic rubber and does not flow out from the tire that is cut or burst. However, if there is a large cut during the operation (usually a cut larger than 15 cm uncovers TyrFil®) there may be a very small cleavage. The cut in the tire should be repaired as soon as possible.



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### IS IT POSSIBLE TO USE TIRES FILLED WITH TYRFIL® AND INFLATED TIRES TOGETHER AT THE SAME VEHICLE?

Yes. But this means deviating from the aim. Indeed, TyrFil® has been designed for enterprises requesting riding comfort of pneumatic tires but do not want explosions.

### IS IT A PROBLEM THAT TYRFIL® HAS AN EXTRA WEIGHT COMPARED TO AIR?

No. In fact, extra ballast weight, additional traction power and loader requiring stability are a high weighted advantage over tractors and other equipments. TyrFil® has the same weight over water.

### HOW CAN YOU COMPARE TIRES FILLED WITH TYRFIL® TO THE TIRES FILLED WITH FOAM?

TyrFil® is an imperforated urethane elastomer and has a better heat distribution feature than foam. Foam is a natural insulator because of dispersed air bubbles inside, it prevents sufficient heat distribution. TyrFil® operates cooler than foam.

### HOW TO COMPARE THE POWER LOSS OF PNEUMATIC AND FOAM FILLED TIRES WITH THE POWER LOSS OF TIRES FILLED WITH TYRFIL®?

Many experiments have shown that the power loss of tires filled with TyrFil® is lower than half of the tires with foam and equal to the pneumatic tire. In other words, vehicles working with battery and fuel require less energy to do the same job. To prove the truth of this "Synair Power Loss Histogram" can be obtained.

### IS IT POSSIBLE TO USE TYRFIL® UNDER BAD WEATHER CONDITIONS?

Yes. Tires filled with TyrFil® operate well at all ambient temperatures.

### IS IT POSSIBLE TO REUSE RIM AND SNAP RING OF THE TIRE FILLED WITH TYRFIL®?

Yes. When the tire is worn, cut or damaged as much as it can't be recapped the rim can be removed and used again. But after filling with TyrFil®, wear rate should be controlled in order to make recapping as much as allowed by tire casing.

