



## The Ag Tyre & Wheel Specialists



### Pirelli\* agricultural tyres to be rebranded Trelleborg

In 1999 Pirelli Tyre, a division of Pirelli & C. S.p.A, made a decision to move its attention from agricultural tyres to focus solely on the automotive industry. Trelleborg Wheel Systems (TWS), a company focused on agricultural and industrial tyres, with no interests in the automotive tyre industry, took the opportunity to increase its position at the leading edge of technology and innovation within the agricultural tyre sector. Acquiring the Pirelli brand through negotiations with the Milan-based group made Trelleborg the leader within the pneumatic tyre market for agricultural applications.

Acquiring the use of the Pirelli name until 2010, TWS began extending the range of sizes manufactured, particularly specialising in the high horsepower, high load area of the market. Having established the "TM" designation of high performance agricultural tyres at the top of the market, TWS now feels that it is time to introduce a gradually staged replacement of the Pirelli name with its own, Trelleborg. The name Pirelli will only be removed from the sidewalls of the tyre, leaving the heritage of quality and history of cutting edge technology in the hands of a like-minded company, pursuing the interest of manufacturing agricultural tyres able to meet the requirements of the most demanding machine and operator.

\* Trademark licensed to Trelleborg for Agricultural Tyres.



#### EMPLOYEE PROFILE:

<b>Name:</b>	Stuart
<b>Role:</b>	Sales, Technical Advice & Warranty Claims
<b>Favourite teams:</b>	St Kilda & England
<b>Hobbies:</b>	Soccer & Music
<b>Best quality:</b>	Humour

Stuart is the newest team member at Armstrong Tyres, having been with us for six months. Prior to working with Armstrong Tyres, Stuart worked in the automotive industry and in transport logistics. His only downfall is that he thinks the English cricket team is a good side - however this can probably be excused given that he came to Australia from England four years ago. If you have any tyre or wheel conversion queries, please do not hesitate to contact Stuart.

Contact us with your questions, or to find a dealer close to you:

Armstrong Tyres  
83-85 Midland Highway, Epsom, Victoria 3551

Phone: 03 5448 4822  
Fax: 03 5448 4785

Website: [www.armstrongtyres.com.au](http://www.armstrongtyres.com.au)  
Email: [sales@armstrongtyres.com.au](mailto:sales@armstrongtyres.com.au)

**FREE PHONE 1800 037 091**



## Continental 24" super volume tyre carries great expectations

The brand Continental is quickly becoming synonymous with meeting challenges within the agricultural industry that set them apart from the field.

Matching the demands of high performance machinery such as the Claas Lexion 580 rotary combine harvester requires tyre technology delivered from outside the square of traditional thinking. The new 500/85R24 is a 24" tyre designed for the rear axle of machinery such as the Lexion 580R, yet it has a greater carrying capacity than many traditional front tyres such as the 30.5L32. A load index of 171A8 in a free-rolling application allows this tyre to carry an incredible 6,150kg at 40km/h.

The "Super Volume Tyre" (SVT) series of sizes in the Continental range has been developed to facilitate the increased loads placed on modern machinery as operators try to bring their cost per ton down. The SVT range allows operators to carry a greater payload while still managing to tread lightly to minimise the damage caused by soil compaction, as well as provide a more comfortable ride for operators spending long hours in their machinery. Being steel belted also ensures that the life expectancy of the tyre should satisfy the operator covering many road miles.

This tyre provides another example of why Continental agricultural tyres are fast becoming a preference as original equipment for many of the world's leading agricultural equipment manufacturers.



## Trend indicates how difficult marketing is

A new trend has developed in the agricultural tyre industry that has seen large, well-known and established tyre manufacturers sell their agricultural divisions.

Manufacturers are finding that the demands new machines place on agricultural tyres are pushing them beyond the capabilities of older designs. The cost of researching new materials and manufacturing techniques capable of meeting these expanded roles is inhibitive to companies whose major focus is on the automotive industry. We are now seeing these companies sell off their agricultural manufacturing to those with a major focus on the agricultural sector. Examples include Pirelli selling its agricultural arm to Trelleborg Wheel Systems, Continental selling to C.G.S. and just recently, Goodyear in America selling to Titan. The common thread being that the selling company could not justify the product as it became more and more advanced, whilst the purchasing companies shared a majority focus on the agricultural industry.

We are seeing the same trend in our own market as machinery dealers that were previously happy to sell automobiles and general produce etc, narrow their focus towards specialty agricultural machinery and like products. The same is true in the tyre industry with either a shift away from the agricultural sector altogether or a sharpening of the focus towards it. The breadth of knowledge now required for this important sector of the tyre industry has seen many dealers shift away from offering options on machinery with a Front End Loader (FEL), heavy implements or higher speed ratings. Litigation has reached the point where the person supplying the product needs to be completely satisfied with the suitability of the tyre for the application, otherwise they will be held accountable for any incident involving the machine.

This situation is demanding that the average agricultural tyre and machinery dealer increase its understanding of what is needed to get the job right the first time and what can happen if it gets the job wrong. It is a testing time in the industry, but without specialised knowledge, it will get a lot worse before it gets any better.

## WIN A SLAB OF PREMIUM BEER!

Be the first to email us the correct answer to this question:

**Q:** What name will be written on the sidewall of all Pirelli agricultural tyres as of 2008?

Winner will be notified immediately, with name printed in next edition.



## Understanding & controlling power hop / radial bounce

Power hop or radial bounce are defined as a condition in which the tractor exhibits severe bounce and/or pitch (jump) at field working speeds.

It is usually associated with front wheel assist tractors pulling towed implements at medium to high draft loads. Power hop commonly occurs on loose, dry soil on top of a firm base and/or when climbing hills. As a result, the tractor cannot maintain pull due to either loss of traction, rough ride, or both.

So, why are we seeing more power hop issues on today's tractors than on older tractors?

Radial tyres greatly increase traction. In fact properly set up, a radial tyre will improve performance and traction by 25% over the same sized bias ply tyre. Because radial tyres do such a good job of delivering power to the ground, they require more attention to detail than bias tyres do.

Another primary cause of power hop is the increased power level and torque reserve built into today's tractors.

The combination of increased radial tyre efficiency, increased engine power and higher torque reserves is the main reason for increased complaints about power hop.

In reality, optimising tractor performance and power hop control are essentially the same thing. This means that having the correct tyre air pressure and ballast (weight split) for the application are the two most important factors in power hop control.

Ballasting is best done with OE cast weights. Water can be used in radial tyres, but it is recommended only after the use of cast weights has been exhausted. Radial tyres gain their performance edge over bias tyres by their ability to flex; water largely reduces a radial tyre's ability to flex, hence reducing its performance. The main aim of ballasting is to balance the tractor so that all four wheels are able to perform as designed. This requires the operator to determine where and how much ballast needs to be applied (or taken off) to balance the tractor. This is best achieved by applying a small amount of weight and then trialling, and repeating until the required balance is found.

Having balanced the tractor, air pressure is next. The right air pressure for the tyre load and application is that which is recommended by the tyre manufacturer (see data book or ask Armstrong Tyres). Using this as a start, it is recommended to increase front tyre air pressure by increments of one psi and trialling, and repeating, until power hop is controlled. (Note: Do not inflate above recommended maximum as per data book.)

If the above procedure is applied in a correct and disciplined fashion, most power hop occurrences will be controlled. If however the tractor is "under tyred", it will be difficult at best and in some cases impossible to control the power hop without changing tyre size.

## Turf Tyre Solution

The Melbourne Racing Club, located at the Caulfield race course, Melbourne, had a big problem. Its tractor (McCormick CMAX85, fitted with narrow diamond pattern tyres) used for track mowing and maintenance was leaving "ruts" in the grass track, which in turn caused the soil to become compacted. This led to difficulties in maintaining the track and more importantly was causing problems with the horses during training and racing.

Workshop foreman David Meeve was referred to Armstrong Tyres in Bendigo through Rural Farm Equipment in Lilydale to find a solution to the problem. Armstrong Tyres' technical advisor, Mick Carbone, was more than familiar with the effect of narrow tyres used on turf and immediately recommended wide flotation tyres and wheels.

**"The tractor's ride and handling has been improved and you can hardly tell where they have been on the track," Mr Meeve said.**

The flotation tyres and wheels used in this application were 600/55-26.5 (rear) and 500/45-22.5 (front). Why these tyres can solve the racing club's problem is due to their ability to spread the weight of the tractor over the tyres' larger "foot print" whilst running at a considerably lower air pressure. The lower air pressure is an important factor in flotation and soil degradation reduction because it puts a softer tyre on the ground, hence reducing soil compaction and rutting.

"The tractor's ride and handling has been improved and you can hardly tell where they have been on the track," Mr Meeve said.

The Melbourne Racing Club has been so happy with its "flotation tyre solution" it has since fitted two more tractors with the same sized tyres and wheels, and plans to fit all future tractors with flotation tyres.



Contact us with your questions, or to find a dealer close to you:

Armstrong Tyres  
83-85 Midland Highway, Epsom, Victoria 3551

Phone: 03 5448 4822  
Fax: 03 5448 4785

Website: [www.armstrongtyres.com.au](http://www.armstrongtyres.com.au)  
Email: [sales@armstrongtyres.com.au](mailto:sales@armstrongtyres.com.au)

**FREE PHONE 1800 037 091**