



Truck

No. 12 JULY 2012 – The magazine for transport professionals

EVENTS / ESSEN
News from
the show
PAGE 12



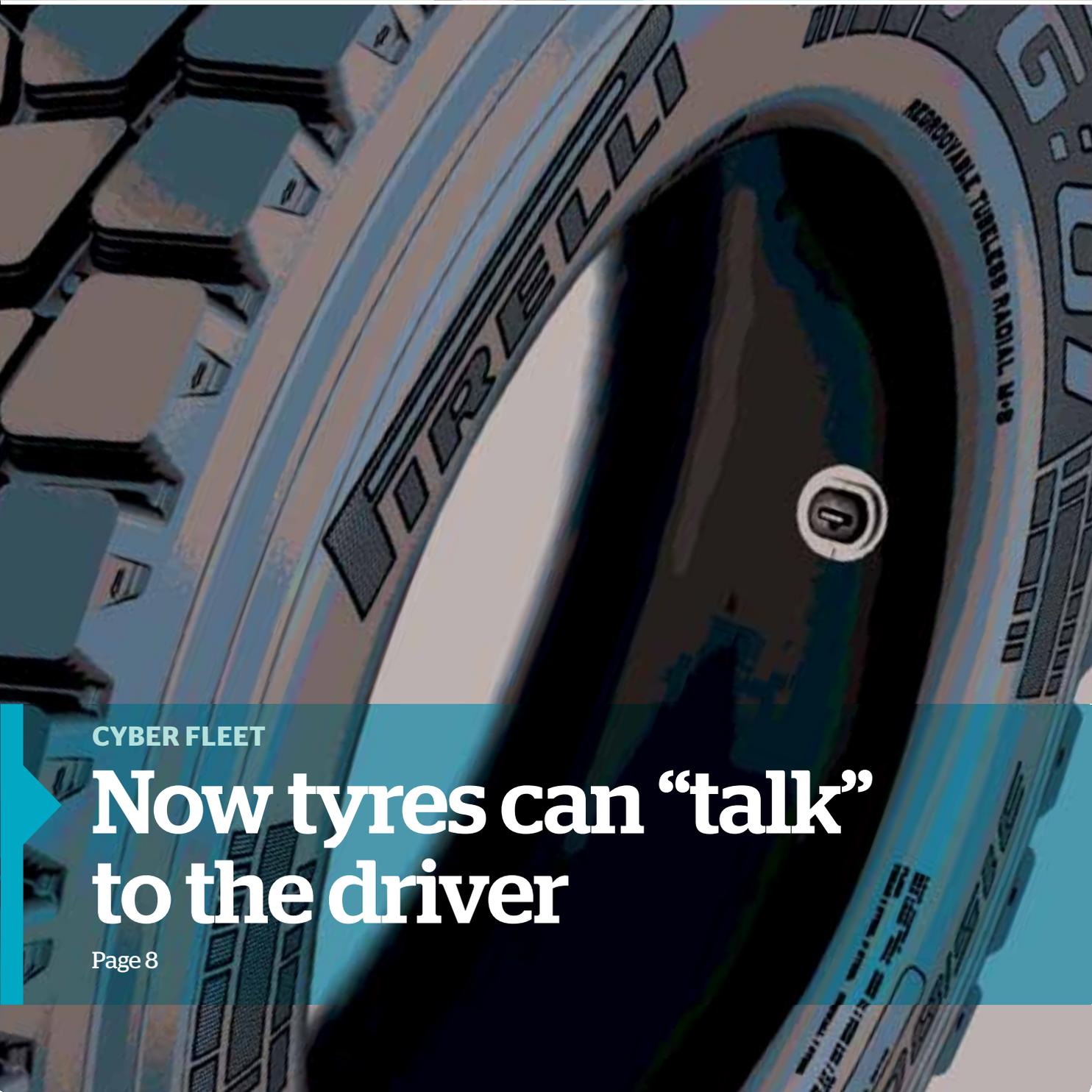
PAGE
4

STRATEGIES / ALBERTO VIGANÒ
«Now the focus must
also be on services»



PAGE
6

BEST PRACTICE
All in
the family



CYBER FLEET

Now tyres can “talk” to the driver

Page 8

FW:01
TW:01



Winter Grip



High Retreadability



Energy™ Efficient



Low Noise



pirelli.com



NOW WINTER IS SAFER.

PIRELLI SERIE:01 WINTER TYRE: THE NEW TRUCK TYRE GENERATION.

You are not the only one to think about your safety, Pirelli does it as well. This is why Pirelli FW:01 and TW:01 have been created: the latest technology that gives you grip, traction and reduced braking distance with no compromise on mileage.



POWER IS NOTHING WITHOUT CONTROL

Contents



EDITORIAL / ALBERTO VIGANÒ
«Now's the time to focus on services»

PAGE
4



BEST PRACTICE
Transnoli,
all in the family

PAGE
6

PAGE
8 INNOVATION
Cyber™Fleet,
the smart tyre, is here

ROLLING RESISTANCE
Beyond durability

PAGE
10

PAGE
12 ON DISPLAY
ST:01 & R:01,
resistance champions

EVENTS / REIFEN MESSE
News from the Essen trade show

PAGE
16

PAGE
18 TRENDS / COMMUNICATION
At the wheel,
connected with the world

TRUCK SPEAKS WITH READERS
FAQ

PAGE
20

NEWS
Pirelli in brief

PAGE
21

PAGE
22 TRANSPORT DESTINATIONS
LE HAVRE

IN PRACTICE
Travel Guide

PAGE
25



Success in progress

The Editorial

Alberto Viganò

marketing director
industrial business unit



Revolutions aren't made in a day. The future is built one brick at a time. And as Lao Tzu once said, «A journey of a thousand miles begins with one step». So it is that, year after year, Pirelli has continued to regularly put out a series of cutting-edge products and unique service solutions, while also confirming the company's role as a leader in innovation

by Simona Gelpi

The plan is an impressive one: for Pirelli to invest over €400 million in the industrial segment from 2012 to 2014, with most of this figure being earmarked for the truck sector, where the company has been focusing both energy and resources. In recent years, Pirelli has continued growing and pursuing innovation, while managing to gain strength in its key markets and opening the doors on new opportunities. Of course, it has taken a lot of hard work in order to be successful. In Europe, the market for truck tyres has contracted by roughly 30% (based on Pirelli marketing data as of last May). Emerging markets, too, are beginning to

being to see declines in the original equipment manufacturer (OEM) market. It is a situation that requires some thought and which gives an idea how much effort it takes to keep moving forward. The figures published by Confcommercio in their Libro Bianco sui Trasporti e le Infrastrutture (White Paper on Transport and Infrastructure), for example, show that Italian infrastructures are lagging behind those of other European nations and point to the reduction in resources that Italy is allocating to infrastructure investment. As the white paper notes, this has led to decreased development of Italian motorways and excessive truck traffic as a result.

Quality is not enough

In order to be competitive in today's marketplace, launching new products is not enough, because this leads to a series of problems that go well beyond product (tyre, in this case) quality and the buyers' budgets. The solution? Focus on services, too. This is the key that opens doors in the marketplace. Only by improving logistics and offering other innovative solutions can one create the conditions needed for a business to grow. And this is where Pirelli is focusing the organisation's efforts in 2012. One more step on the road to organisational growth. Indeed, in recent years, progress has taken place in very precise steps and

with an increasing focus on services, all of which fall under the "Pirelli Fleet Solutions" umbrella.

For example, just to name one, there is Pirelli's road assistance service, **CQ24 International**, which offers a full range of solutions for the needs of fleets that work long-haul routes, covering any type of tyre damage wherever the vehicle may be and at any time of day or night, 365 days a year. It takes just a simple phone call to activate the most appropriate service, at a predefined price, in order to make the vehicle fully operational again, and the road service team is committed to arriving on-site within two hours. Another service, **Novateck**, helps to take full advantage of tyre carcasses through a select network of certified retreaders and the provision of Pirelli-original premoulded tread bands. **Fleet Check** is a tool that provides fleet managers with detailed reports on tyre status for the entire fleet, including actual and forecasted miles travelled and any recommendations for corrective action. But that's not all. **Fleet Management** is an online centralised invoicing solution based on the conditions agreed upon by Pirelli and the fleet manager. This system ensures that all transactions related to tyre management are carried out efficiently and accurately and are updated in real time.

Beyond the label

In other words, the provision of services needs to follow in step with the distribution of new products. Let's take the first line of the Series O1, the R:O1 launched in 2009, for example. This tyre provided the utmost in tyre life, regularity in tread wear, retreadability and safety. But creating a high-quality tyre is not enough if the customer is not "educated" in order to understand and take full advantage of its performance potential. Mandatory European labelling for all tyres, known as the "eurolabel" in Italy, is a considerable step forward in this regard and will certainly provide much-needed help to the consumer in terms of evaluating and selecting a tyre; however, it is an insufficient tool in evaluating the overall performance of a tyre because it only takes three quality indicators into account: rolling resistance, rolling noise and wet braking.

In contrast, a proper assessment must also take other characteristics into account, such as traction and grip in a vari-

ety of surface conditions (both in curves and in a straight line). But that's not all. Retreadability and tyre life, both key characteristics for truck tyres, are also not including among the eurolabel's quality indicators. In the same way, no reference is made to parameters specific to the evaluation of winter tyres. For this reason, Pirelli believes that the help of a properly trained reseller is crucial in orienting consumers towards the product that is best suited to their needs.

One foot after the other

As mentioned, the first line of the Series O1 was launched in 2009, and in 2011 the line was fine-tuned and extended with an increasing emphasis on producing environmentally friendly tyres, including improvements to material regeneration and tyre life, all without sacrificing

«Only by improving
logistics can one create
the conditions needed
for market expansion»

on product performance.

Another key milestone was the arrival of Cyber™ Fleet, which features a sensor mounted on the tyre which constantly monitors data such as tyre pressure and temperature and distance travelled. With the help of GPS, the system tracks the truck and can even provide information regarding driving habits (e.g. travel times, driving speed, number and length of breaks, and so on). This helps to improve not only vehicle maintenance, but also logistics and the real-time sharing of information between individual trucks and fleet managers. Following a period of testing abroad, distribution of Cyber™ Fleet is to begin

in September of this year, first in South America and then in Germany, with additional testing to follow in Turkey and Egypt.

Having started with an emphasis on the "smart tyre", 2012 will, as mentioned, be continuing with a sharp turn in the direction of service provision, with services designed to reduce the gap between the manufacturer and product users, as well as to provide potential answers to today's pressing needs of mobility. And that's not all. It will also be a year



in which corporate efforts will intensify in the area of social responsibility. Together with Total Tool (a creative architecture and design firm based in Milan), Pirelli is working on the project KmZero Road, which is a project to create the first "green" road made using environmentally friendly materials and technologies, a road which will even be able to produce clean, renewable energy by taking advantage of vehicle traffic. **T**

Truck
No. 12 – July 2012

European quarterly
of the Pirelli Group

Registered at the Court of Milan
n. 210 of 29.04.2009

www.pirelli.com

Published by
Pirelli & C. S.p.A.
Corporate Communication
& Media Relations

Editorial Coordinator
Maurizio Abet

Director
Francescopaolo Tarallo

Editor-in-Chief
Simona Gelpi

Editorial staff
Carlo Saponaro

Email
Truck.Magazine@pirelli.com

Editorial Office
Viale Piero e Alberto Pirelli, 25
Milano, Italia

English Text Editing
Studio Associato Bozzola

Grafica
Studio Cancelli - Milano
www.studiocancelli.it

Stampa
Graphicscalve S.p.A.



BEST PRACTICE / TRANSNOLI SRL

All in the Family

Founded in 1976 and based in Casorezzo, Transnoli today plays a dual role in both shipping and transport. In order to manage the crisis, the company has specialised in just a few key destinations. We spoke with Giulio Mancadori, who leads the business together with his brother, Franco, and his mother, Silvia

by Paola Pignatelli

A large, open-plan office space with desks in the middle, all lined up facing each other. At one end are the desks of the Mancadori brothers, Giulio and Franco, the "different twins" («We're heterozygotic», they claim) who manage the firm. At the other end is their mother, Silvia Sirini, the company's sole director and head of accounting. Between them, all of the other employees. Their two dogs, Pimpi and Snupi, are also a part of the staff. «Their names are written Italian style, without the "Y". Get it right!», Giulio clarifies. We spoke with Giulio, the untiring factotum at Transnoli Srl, who told us how this family business operates and how it has evolved, having "worn" Pirelli tyres on their trucks for fully 20 years. And just recently, the com-

pany has moved from Milan to Casorezzo, just outside the Lombard capital and not far from both the new Rho exhibition complex and Malpensa international airport.

«The U.K. and Normandy are our primary markets, and for these markets we are now able to provide both competitive and high-quality services»

In 1976, when the company was founded, Transnoli was a shipping company. The company then gradually evolved to fill a dual role as both shipper and transporter. This illuminated vision has likely been the key to the company's success through these years of crisis.

«When Mum and Dad founded Transnoli, the bulk of the business was in rail transport. Then the market changed, and deliveries had to be made faster and faster. Not to mention that train cars were often lost. So we moved to truck transport and soon even bought our own vehicles. So it's because of this dual role that we've been able to manage a crisis that has been having terrible effects on the industry. But we have also dealt with the crisis by focusing on specialisation. In other words,

In the control room ▶

The two Mancadori brothers, Giulio (right) and Franco. In the middle, their mother, Silvia Sirini, the sole director and head of accounting.



no wide-spectrum transport that wastes both energy and financial resources, but rather deliveries to just a few, select destinations».

What effects has the economic crisis had on your business?

«For the transport industry, the crisis began with the move from the Italian lira to the euro, the opening of borders and the arrival of eastern Europe into the market. Over the last ten years, fixed costs have skyrocketed, but transport prices in Italy have remained the same. It doesn't take a lot of math to realise the scope of the disaster. We needed to save wherever we could in order to survive. To give you one example, we used to renew our fleet every three years. Today, that would be unthinkable. Then last January, things got even worse. With the collapse of imports, trucks are stuck on the lots waiting for cargo. That's something we hadn't seen in 20 years. Add to that the fact that the Swiss and the British are practicing protectionism at the borders and keep creating obstacles for Italian trucks, and what you get is a truly depressing marketplace».

Let's talk tyres. Pirelli has been your go-to manufacturer for a long time now. What are the benefits you've seen?

«We've been loyal Pirelli customers for about 20 years now. And not because it's an Italian firm. The company's tyres offer

«We've been using Pirelli tyres for 20 years, but not because they're Italian. They offer excellent quality for the money»

excellent quality for the money and are suited to all types of uses. Often, competing products are less versatile. Especially in times of crisis, both vehicles and their component parts have to serve multiple purposes. But you mustn't diversify too much, and Pirelli's range of tyres are robust and reliable and do multitasking».

What is Transnoli's approach to safety and the environment?

«Not a good question. Because the crisis has forced us to scale back our efforts in both of these areas. Nowadays, all of our resources are being absorbed by operating costs. Fuel and tolls have knocked us to our knees. And despite cuts, the average price of a delivery by an Italian firm is still €500 higher than one handled by a truck from eastern Europe. In fact, many Italian companies are going there to register their vehicles directly. About

safety, though, I have to underscore one thing: our trucks are 'guaranteed' in that we have our own internal maintenance unit. It's the only way to make sure trucks are always in good working order. It used to be that it was mostly owner-drivers on the road, and they were the ones who took care of their own trucks. Now the owner-driver has disappeared, "killed" by truck fleets, and salaried drivers obviously don't have the same care for their trucks and how much they consume».

In other words, the situation is rather bleak. Nonetheless, you've been able to provide your customers with services like real-time delivery tracking via satellite.

«We've been doing that for many years. But it's not so much a service for the customer as just another tool of the trade. By doing this, we always know exactly where the goods are, and we can take action in the event of problems and optimise delivery loads, all while having total control over the fleet. Not to mention the savings in terms of personnel».

Can you give us a few numbers to give us an idea of Transnoli's size?

«In terms of personnel, we have 35 drivers, 2 workers in truck maintenance, 3 warehousemen and 8 office workers (plus our two dogs). As for the fleet, we have 35 tractors, 40 semitrailers and 2 trucks».





INNOVATION

A Tyre with a Brain

Keeping track of tyre pressure and mileage, detecting punctures, and sending data to an on-board computer. All of this is done by the Cyber™ Fleet sensor mounted inside the tyre. Testing is already under way, and distribution is to begin after the summer

by **Ettore Pettinaroli**

The smart tyre is here thanks to Cyber™ Fleet and a sensor mounted inside the tyre, which gathers real-time data on wheel status, from temperature to tyre pressure. This is no small innovation and is one that will, as you can imagine, offer great benefits both in costs and safety. Correct tyre pressure helps you to save a great deal on fuel consumption due to its effect on rolling resistance,

while also extending the life of your tyres and generally helping you to manage your vehicle better. «And we mustn't forget the role that Cyber™ Fleet plays in terms of safety», adds Giorgio Audisio, head of Cyber development projects for Pirelli. «The sensor detects punctures and warns the driver immediately. But that's not all. Because of where it's positioned on the inside of the tyre - and so not on the rim - it tracks the true number of

The sensor accompanies the tyre throughout its useful life and can tell its whole story. It remains intact even after retreading

Anti-theft

Cyber™ Fleet is also a valuable defence against theft, because the device shuts itself off when tyre pressure is lowered enough to take off the tyre.

kilometres travelled and is an excellent aide in the event of theft, given that the device shuts itself off when tyre pressure is lowered enough to take off the tyre. In this way, the person receiving the sensor data will know exactly when and where a tyre has been taken off (or 'changed')». Great, but who receives the data that Cyber™ Fleet transmits? The recipient of choice is the fleet manager, who can use the data to monitor every single tyre in the fleet. In the event of problems or other anomalies, the fleet manager will determine the urgency and tell the driver what needs to be done. When the Cyber™ Fleet system is

stem mounted on the truck or bus. «The electronic sensor accompanies the tyre throughout its useful life and so can tell that tyre's whole story - Audisio explains - . It remains intact even after retreading, and in such cases, the fleet manager can decide whether to reactivate it without losing any of the data recorded previously. It is also an invaluable tool in inventory management».

Testing of Cyber™ Fleet has been going on for a few months now in collaboration with a major private fleet engaged in the provision of municipal goods and people transport services. «We have installed it on 13 vehicles, including buses, trucks and waste-collection vehicles, in order to test the system in a wide range of conditions - Audisio says - . In half of these cases, data management is handled by the various fleet managers, but Pirelli is centrally monitoring all of the vehicles using the sensor. In this way, we can compare the two management systems and determine the actual (or

There is no way to tamper with route data

so contacted the dealers, who have shown a great deal of interest in the technology - Audisio explains - . The dealer acts as a sort of intermediary between the tyre supplier and the fleet manager and can provide services directly to the fleet manager. The dealer can act in various roles: either selling sensor-equipped tyres solely for internal management purposes and without even notifying the customer; selling the sensor as an added service; or using a combined system. We also mustn't forget that many dealers sell at cost-per-kilometre, and the sensor can certify the total kilometres travelled by each individual tyre with absolute precision».

**◀ A true aid**

Pirelli monitors all vehicles fitted with the chip and provides fleet managers with tips for managing their trucks.

**◀ Indestructible**

The sensor cannot be damaged and will not lose its data when reconstructing a tyre.

fully operational, there will be two ways of reading the data. With the cheaper, static method, all you need is the sensor and a device within the company that can receive the data. The other, "dynamic" method includes an on-board data reader that can receive the sensor data and retransmit all of the data to the fleet manager and just the safety-related data directly to the driver, all using a computer and communication sy-

potential) savings, while also recommending how fleet managers can take full advantage of the new technology. The data that Cyber™ Fleet gathers needs to also be used to control the overall operating costs of the vehicle. For us, the information helps to understand how long a tyre actually lasts, and such a reliable set of historical data will help us to further develop our tyres». In July, testing also began in Germany. «Here we have al-

After the summer, once testing has been completed, the sensor-equipped tyres will be available for sale. «But first we will be organizing various training events for fleet managers and our sales force - Audisio concludes - , so that all of the hands-on experience of those who work with the tyres on a daily basis can be distributed throughout the system, making the new technology both beneficial and easy to use». ▣



ROLLING RESISTANCE

Beyond durability

Beginning this autumn, rolling resistance (RR) will be one of the parameters shown on truck tyre labels in accordance with EU regulations. The challenge for tyre manufacturers is now to find the best compromise between grip and rolling resistance.

Fabio Montanaro and Roberto Pediconi tell us what is being done at the Pirelli research labs

by **Ettore Pettinaroli**

As of 1 November, the obligation to start using the "eurolabel" (as it has been dubbed in Italy) will put tyre rolling resistance (RR) in the spotlight, as it will be one of the three factors that will be shown on tyre labelling to make comparison shopping simple. But what is rolling resistance exactly? How is it taken into account when developing a tyre? What factors affect rolling resistance, and what do consumers looking for the best performance need to know? We've asked **Fabio Montanaro**, head of research and pre-development

for Pirelli Truck's R&D unit, and **Roberto Pediconi**, International Technical Truck Manager for Pirelli, to enlighten us.

«We all understand the underlying technology, but only a few top brands can find that extra something»

Roberto Pediconi

«Rolling resistance is a force that inhibits the rolling motion of a tyre - Pediconi explains -. In order to determine how much rolling resistance a tyre has, we use a special machine that measures the (absorbed) force needed to keep a road tyre turning at a constant speed. The European Union has required that we disclose this figure (on a scale ranging from A to F for mid-sized and heavy-duty vehicles), which all manufacturers are to measure using the same system, given its importance as a parameter that directly affects fuel consumption.

But this doesn't mean we just race to

achieve the least possible friction. We need to find the proper balance between grip and rolling resistance for each product».

So research labs are constantly working to balance all of a tyre's various components to improve each individual part.

«For example, we try to reduce the internal running temperature of a tyre - says Montanaro -. Even lowering temperature by just 5°C means extending the life of the tyre. A good example of this is the latest series H:01. But most of our focus needs to be on the tread in order to reduce rolling resistance. Tread patterns and compounds account for nearly 60% of the cause. In particular, we have had a great deal of success by increasing the amount of silica in the tread compound, which significantly reduces hysteresis, which is the amount of energy absorbed by the compound and which, in turn, gen-

«Lowering the internal running temperature of a tyre by just 5°C extends the life of that tyre»

Fabio Montanaro

erates heat. In short, the lower the hysteresis, the lower the rolling resistance. Tread patterns, too, have a significant impact on rolling resistance. By limiting groove depth, tread size and,

For more information

Do you have any questions about rolling resistance and the new "eurolabel"? You can find all the answers on the Pirelli web site at

www.pirelli.com/tyre/ww/en/truck_bus/genericPage/tyre_labels

Here you will find a concise explanation of the EU legislation introducing this new system of tyre labelling, along with explanations as to how to read the label and a thorough section of frequently asked question (FAQs).

What is rolling resistance? How does it affect a car's fuel consumption? What other factors are at play? What connection is there between rolling resistance and grip in the wet? Brief but thorough explanations will satisfy your every curiosity.

above all, block movement, we limit deformation and thereby reduce the amount of energy dissipation.

Rolling resistance is a key parameter, but safety (and so grip and braking distance) and tyre life are equally important, so our research labs are constantly committed to finding the best compromise».

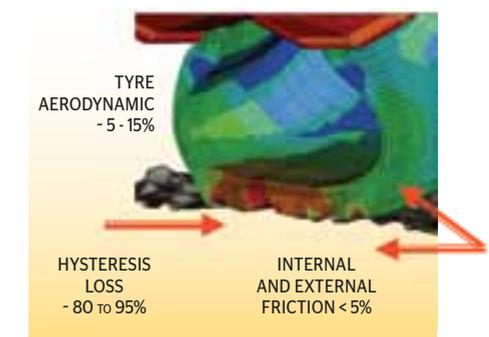
«All tyre manufacturers understand a tyre's underlying technology, and achieving one level is easy - Pediconi explains -. But finding that extra something can only be achieved by a few top brands, companies like Pirelli that invest more in research and that have the greatest know-how. This new labelling will also serve to certify the technology and research that a company is able to develop».

But who will be placing the greatest emphasis on RR?

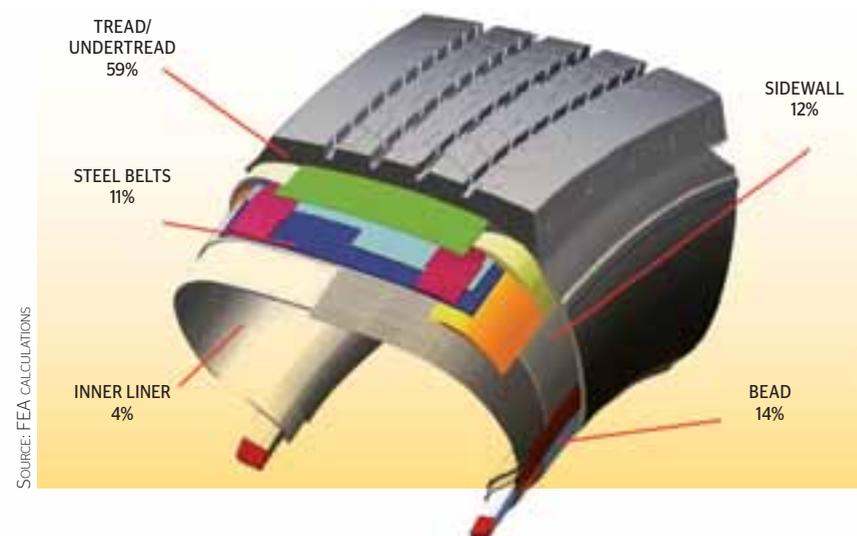
«Definitely those who need performance for the long haul or who otherwise expect to use their tyres primarily on roadways - Montanaro replies -. Construction work or off-road use, on

the other hand, extremely low RR is not so important and could even compromise other aspects of performance that are absolutely necessary for these applications. For the same reason, our winter tyres also put the emphasis on grip over resistance. But it's important

FACTORS THAT CONTRIBUTE TO RR



CONTRIBUTION OF TYRE COMPONENTS TO RR



to note that tyre structure stays the same for all lines. Our strength lies in customisation, which enables our customers to always find the tyre that is best suited to their needs. All the customer then needs to do is keep tyre pressure under control. Otherwise, in addition to the negative effects in terms of rolling resistance (and so fuel consumption), that could compromise the life of the tyre and its retreadability. In that regard, however, we can only do so much, and the whole wheel (tyre + rim + valve) always has tiny losses of pressure that needs to be restored.

In any event, we've provided all of our dealers with charts that show the tyre's recommended pressure based on the vehicle's load. We want to educate tyre buyers because the better you treat a tyre, the more it lasts. And a happy customer is the best form of marketing. **T**

ON DISPLAY / ST:01

One lifetime is not enough

Made using dual-layer technology and reinforced sidewalls, these tyres can even stand up to side-on impacts and lacerations. Like their siblings in the R:01 line, they also ensure longer life and a high degree of retreadability, while also reducing both fuel consumption and CO₂ emissions

by Francesco Orsenigo

When the goals are lower operating costs and respect for the environment, you don't want to have to compromise, so you need just the right tyre. For trailers, just one name will do: Pirelli ST:01. This tyre, specifically designed for trailers and semi-trailers, runs for many more kilometres and is highly retreadable. Practically speaking, this means the tyre lasts longer and, when it reaches the end of its first life cycle, it can be put back on the road just like

new without spending a lot of money. In addition, low rolling resistance ensures lower fuel consumption and lower CO₂ emissions. And like all of the tyres of the Series 01, the STs, too, are very quiet for excellent driving comfort.

These same characteristics can also be found in the low-profile versions for 17.5" and 19.5" rim sizes, which are now being sold and have been designed for long-haul transport on motorways and highways, where wear and tear on the tread is very low. But for medium to long-haul transport

on moderately abrasive surfaces or winding mountain roads, tyres that bear the letter "R" on their sidewall are your best choice.

However they are used, ST:01 tyres raise the bar for durability thanks to the innovative materials and compounds with which they are made and their redesigned structure, which ensures greater load resistance and strength. The greater width and deeper grooves in particular help to increase tyre life, while the reinforced sidewalls enable them to stand up to side impacts and scrapes. Cut resist-

▼ Safe all around

Thanks to more highly rust-resistant belt cords, the new tyres are even able to resist against side impacts.

The interior structure is designed to reduce the generation of heat and increase tyre integrity and regularity of wear

ance, too, is ensured by the tyre's four strong bands. Zigzag grooves and an optimised profile maximise lateral grip and regularity of tread wear. The ST:01's tread features dual-layer technology that combines two types of compound. The outer layer makes the tyre stronger and reduces both rolling resistance and braking distance. The interior structure, on the other hand, reduces the generation of heat, while increasing tyre integri-

ty, regularity of wear and retreadability. Our special zero-degree structure also contributes to the success of the whole by giving the tyre wider belts for greater integrity and regularity of wear, and a thicker separator belt between the main belts increases stress resistance. Finally, the more highly rust-resistant belt cords provide greater resistance to side-on and other impacts. **T**

Wearproof

ST:01	
SIZE	LOAD INDEX/ SPEED CODE
205/65 R 17.5 FRT	129/127J (130/130F)
245/70 R 17.5 FRT	143/141 J (146/146F)
215/75 R 17.5 FRT	135/133 J
235/75 R 17.5 FRT	143/141 J (144/144F)
245/70 R 19.5 FRT	141/140 J
265/70 R 19.5 FRT	143/141 J
285/70 R 19.5 FRT	150/148 J





Greater safety ▶

The four zigzag grooves in the tread and the longitudinal bands have been designed to reduce braking distance.

ON DISPLAY / R:01

Built to Last

A line designed to stand the test of time and kilometres, but which provides both safety and comfort at the same time. With these tyres, precision in handling increases and braking distance decreases. And since there's more to driving than safety, noise is kept under control

by Francesco Orsenigo

They last longer. This, in just three words, is the key characteristic of the FR:01 and TR:01 tyres. Longer life means more kilometres travelled, less maintenance and fewer costs, and that's no small benefit, especially in times like these. But that's not the only selling point of this range of tyres, which represents an extension to the family of 19.5" rim sizes and share the latest generation of the SATT structure with the 22.5" rim size launched in 2009. In addition, they are equipped with sidewall

reinforcements to be stronger against side impacts and abrasion. In addition to improving tyre life, these new tyres also provide great levels of comfort, low rolling resistance and the highest standards of safety, including lower braking distance in any usage conditions.

The FR:01, for example, is an all-position tyre that is extremely quiet (with noise levels being in line with 2012 European directives) and ensures a very comfortable ride. The four zigzag grooves in the tread and strong longitudinal bands have been designed to

reduce braking distance and increasing driving safety, while the low-profile rotated shoulder rib (patented by Pirelli) optimises the distribution of pressure placed on the road for greater regularity in wear and longer tyre life. Moreover, the geometry of the central grooves in the contact patch has been optimised to promote the elimination of any gravel that should get stuck in the tread.

The tread compound has been made with our special dual-layer technology. An outer layer provides greater scratch resistance, optimal grip in all

conditions, and lower braking distance, while an inner layer features mechanical properties that have been designed to reduce the generation of heat, limit rolling resistance and increase structural integrity. The new composition of the belts also ensures highly regular wear and increases precision in handling, while the fully rubberised belt cords prevent oxidation and slows carcass ageing. Finally, these tyres can easily be reused thanks to the high degree of retreadability and use of recyclable materials without high aromatic oils, which harm the environment.

These overall characteristics are similar to those of the TR:01 series, tyres for drive axles for use in average-impact conditions on vehicles that travel mid-range and longer distances on moderately abrasive surfaces or on winding mountain roads. But one of

The high degree of retreadability is another strength of these tyres, which are made using recyclable materials with no environmentally harmful components

the distinctive features of these tyres is their directional tread pattern (for a specific rolling direction) with a sequence of grooves that has been optimised to ensure the best traction, and the same pattern also makes a great contribution to reducing noise. Moreover, thanks to the lateral grooves

with variable depths and geometries, tread wear is always balanced and gravel is readily eliminated. But that's not all. The deepest grooves remain visible and maintain traction until the end of the tyre's useful life. And when it's time for more grip, retreading and reconstruction are no problem. Not even for the environment! [▶](#)



No intruders ▶

The geometry of the central grooves in the contact patch helps to eliminate gravel from the tread.

A Life on the Road

FR:01	
SIZE	LOAD INDEX/ SPEED CODE
245/70 R 19.5	136/134 M
265/70 R 19.5	140/138 M
285/70 R 19.5	146/144 L
305/70 R 19.5	148/145 M
TR:01	
SIZE	LOAD INDEX/ SPEED CODE
245/70 R 19.5	136/134 M
265/70 R 19.5	140/138 M
285/70 R 19.5	146/144 L
305/70 R 19.5	148/145 M



IN THE SPOTLIGHT / REIFEN MESSE

On the offensive

In today's economy, the most vibrant companies are reinventing themselves and blazing new trails. That's just what is happening in the tyre industry, and the (recently concluded) trade show in Germany has confirmed it. The Pirelli stand attracted a great deal of interest with the opportunity to experience applications of the revolutionary Cyber™ Fleet system

by Ettore Pettinaroli

Again this year it was a great success. The 27th edition of Reifen (www.reifen-messe.de), the international tyre show held in Essen (Germany) in early June, where Pirelli chose to focus for the presentation of new products, was certainly no disappointment.

A total of 653 exhibitors from 44 countries were featured at the German event, which attracted 19,000 visitors, an increase of 5% from the previous edition. Of these visitors, roughly a third actually made business deals at the event.

So it is not by chance that 93% of the exhibitors have said they will be back for the next edition, which is scheduled for 2014.

The vitality shown by the industry, despite an economy that is anything but favourable, was also underscored by industry experts. «The Essen trade show featured the presence of a great many leading and emerging brands, as if to reiterate the desire and the ability to continue investing in a marketplace that continues to show promise despite current difficulties», said, for example, Lucia Tonini of **PneuNews.it**, an online



Italian magazine for the tyre industry. «The hottest issues, both officially and not, were European labelling (which, amidst both commitment and scepticism, is beginning to be used by manufacturers as a selling point and topic for marketing) and devices for measuring tyre pressure, which is another change going into effect this year», Tonini added. And in reference to the truck segment specifically, she concluded: «Also in the spotlight were innovative products and services for fleet managers, which are increasingly in need of tools for monitoring safety and operating costs, which are the key factors to take into account when selecting a tyre».

Along similar lines, German journalist Anro Borchess, from **Neue Reifenzeitung**, said: «The European truck tyre market is currently suffering as the numbers clearly show, and no one can dispute this». Nonetheless, he added: «However, what we've seen at the Reifen show is at least encouraging. Rather than giving in, many market leaders have actually gone on the attack by presenting new products and, in particular, new services. In this way, they are trying not only to remain highly competitive, but also to gain a foothold in a market that should, in the second half of the year, make a significant recovery. In any event, it will be interesting to see how economic development generally, and in southern Europe in particular, will affect the market for truck tyres».

Indeed, continuing to develop new products and services, despite the fairly unfavourable period for the economy, is a part of the Pirelli strategy, as well, so much so that the company came to Essen with a wealth of new products and services in all industry segments in which Pirelli operates.

Rather than giving in, many groups have gone on the attack, presenting new products and, in particular, new services



First and foremost, the company presented its new Series :01 truck tyres, which feature all of the latest technological innovations to come out of Research & Development in terms of structure, compounds and tread patterns. The H:01 (315/70 R 22.5 FH:01 for steering axles and 315/70 R 22.5 TH:01 for drive axles) is designed for use on highways and motorways and generally on surfaces that cause the least wear on tyre treads. The ST:01 (435/50 R 19.5, 445/45 R 19.5, 245/70 R 17.5), on the other hand, is made for trailers and semitrailers. The world premier of the results of the first phase of testing for Cyber™ Fleet, the system uses an electronic sensor to provide both drivers and fleet managers with real-time tyre data (e.g. pressure, temperature, distance travelled, etc.), also generated a great deal

of interest. Testing currently underway has shown that Cyber™ Fleet saves €1,000 per year per vehicle in fuel consumption and that the initial investment to purchase the sensor is amortised entirely in just six months of use. Not to mention the benefits it provides in terms of safety.

In an area of Pirelli's stand in Essen, visitors were given the opportunity to "field test" the new system. Using the system connected to several vehicles, visitors

were able to monitor tyre pressure and temperature, track the vehicles (using geolocation software) and see how many miles the tyres have travelled and how they have performed. As the company had previously announced, the sensor will be available for purchase by the end of 2012.

Another topic that was on everyone's lips at the Essen show was the introduction of the EU tyre label, which is to become mandatory on 1 November of this year. It is important to note that Pirelli tyres developed for heavy-duty vehicles have received the highest scores for this new label. For example, the Super Single ST:01 earned a score of "A" for wet grip, and the FH:01 received a score of "B" for rolling resistance. In July, EU-label grading for the entire range of truck tyres is to be released. [T](#)



TRENDS / COMMUNICATION

At the wheel, connected with the world

It used to be CB radio. Truck drivers used it to share information and just to chat. Nowadays, Facebook and Twitter have taken over in truck cabs. Not to mention the countless blogs and other sites dedicated to truck drivers, and in the US in October, there will be a convention dedicated entirely to social media for the industry

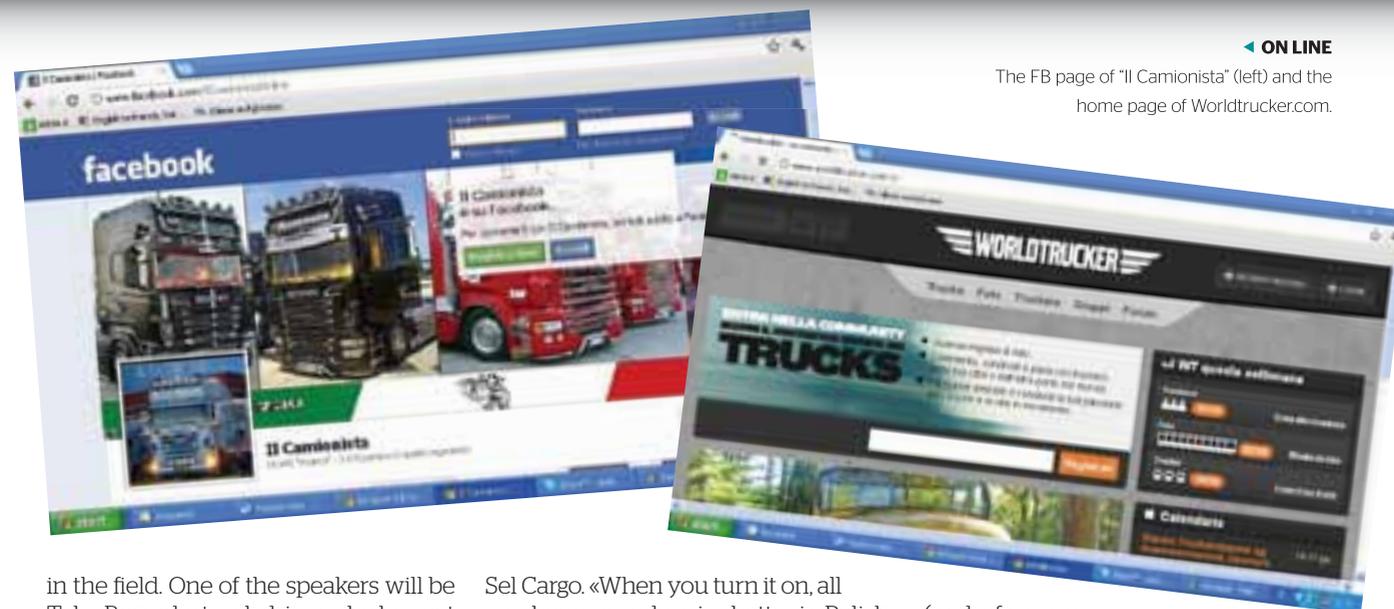
by Guido Sassi

Pioneers of communication. That's what truckers are, after all. In times long before there were mobile phones, truck drivers were already creating a sort of "social network" using their CB radios, which they used both to share traffic and safety information and to just have a chat with their peers. Now the world of communication has changed completely, but they have managed to stay one step ahead. «It used to be that mobile media was just an adaptation of fixed-line technologies, but today communications are be-

ing designed from the start for people on the move», explains Nicola Bigi, responsible for PR and marketing for Tiwi, social media production firm. «One example is the power of Twitter together with a tool like Siri, the iPhone's 'dictation' system. This setup provides two huge benefits. First of all, it makes it possible to follow multiple discussions at the same time and, secondly, to communicate with no physical constraints and with the entire world. But the relationship that truck drivers have with social media is particularly interesting both for the tools used and for the con-

tent they share. One of the most intriguing examples is the Scania community (www.scania.com/social-media/), where individuals can share both ideas and opinions as well as actual solutions to problems».

So truckers are always on the cutting edge when it comes to exploring the frontiers of sharing information on the go. In Kansas City this October, the second annual Truck Driver Social Media Convention (www.truckingsocialmedia.com) will be held. The event is sure to attract thousands of truckers and several of the most influential experts



◀ ON LINE

The FB page of "Il Camionista" (left) and the home page of Worldtrucker.com.

in the field. One of the speakers will be Toby Bogard, a truck driver who has not only driven will over a million miles, but is also the spokesperson for both one of the world's leading organisations in the field of GPS and CB radio systems and another powerhouse in Bluetooth communication. Bogard reaches out to his peers using both modern and more traditional technologies. His first book, *On the Big Road: A driver's trip plan for success* (published by CreateSpace), was written by a trucker for truckers. In it, the "truck-writer" - as he likes to call himself - shares his own experiences in order to teach others to find a way to drive safely while ensuring their own physical and mental wellbeing. «Being a professional in this job means making healthy choices - Bogard writes on his web site - and there are various forms of communication that can be used to send this message. There are many sites and Facebook groups and even companies that use the web to spread positive messages like this. All we need to do now is start with this first step and keep moving forward».

Indeed, who better than a truck driver, who spends an average of 4.6 days each week on the road (source: worldtrucker.com), can find solutions to not being isolated from society and to keep communicating with peers?

With today's technologies, there is no lack of possible solutions. CB use is waning fast, at least among Italian truck drivers, in part because the frequencies are all being taken up by drivers from eastern Europe. «For about 15 years now, we Italians have been using CB radio less when on the road internationally», explains Matteo Fumaneri, a driver for

Sel Cargo. «When you turn it on, all you hear nowadays is chatter in Polish, Romanian, Russian... Personally, I don't even keep a CB radio on board anymore. It used to be useful to get weather or traffic information and to keep me company. But now, with navigators, radio and mobile phones, you can find all you need to know».

In other words, news comes in through other channels, and to socialise Italian drivers switched over to more advanced, more complex media years ago. According to a study last year by the University of Bergamo, Facebook is used by over one-third of all Italian

Today communications are being designed from the start for people on the move

truck drivers, and active web presence generally is also significant. Just to give an idea how much truckers "like" the web, the FB page "Il Camionista" ("The Truck Driver" - www.facebook.com/IlCamionistaOnline) has attracted ten times more "likes" than Belen Rodriguez's page. Other similar groups, such as "Camionisti per sempre" ("Truckers forever" - www.facebook.com/pages/Camionisti-x-sempre/146247308742649) and "You truck me" (www.facebook.com/.../You-Truck-Me/108285322616825), are constantly on the rise.

In addition to growth on Facebook

(and, of course, Twitter), there is also no shortage of blogs and other online communities. Indeed, the Internet has provided an outlet for all sorts of expression for the industry, ranging from blogs that recommend the best truck stops to sites such as that of the Lady Truck Driver Team (<http://buonastrada.altervista.org/>) dedicated to the world of female truckers. But companies, too, are building their own platforms, with truck manufacturers leading the way. Volvo Trucks is particularly committed to the cause, having launched Worldtrucker.com, a highly popular web site where truck drivers themselves can add content in the form of articles, photos, video and related comments.

Pirelli, too, has been promoting more than one initiative in recent years in order to create broad-based awareness of the issue of accident prevention. The company's most recent effort is the online contest for truck drivers, "Dai voce alla sicurezza" (Give voice to safety), which was launched last autumn. «Nowadays, it's not enough for companies to just send out their own information - explains Niclas Hermansson, digital marketing strategist for Volvo - The tools made possible by technology provide an extraordinary opportunity to interact more openly and directly with the target audiences».

In other words, the sharing information is becoming faster, more spontaneous and more of a two-way street. Today, that information travels on the Internet, but it continues to be truckers who lead the way forward as the true pioneers of mobile communication. **T**



TRUCK SPEAKS WITH READERS

FAQ

An opportunity to answer questions about tyre use and maintenance in the transportation industry

What do the names of Pirelli's truck tyres mean?

When we design a new tyre, we need to consider how it will be used and optimise performance for that use, but of equal importance is informing the customer as to the proper use of the product.

For this reason, manufacturers of tyres for professional use have created a commercial naming system that clearly identifies the intended application for a given tyre.

For mid-sized and heavy-duty vehicles in particular, there is a vast difference between tyres for drive axles, those that are intended mainly for use on steering axles, and tyres designed for trailers. For this reason, Pirelli has decided that the first letter of the commercial name will indicate this use (i.e. F = steering axle, T = drive axle) and that (semi-)trailer tyres are to be identified by two letters (i.e. "ST").

The second letter (and potentially a third letter for "ST" tyres) indicates the

usage conditions for which the tyre is intended (e.g. H = low-impact use; R = standard usage; G = on/off usage, and so on).

With the great deal of development that the product line has undergone in recent years, exceptions for products designed for very specific markets are now rare.

What aspects of a tread pattern have the greatest effect on noise?

Tyre noise is one of the aspects of performance that has getting a great deal of attention in recent years due, in part, to changes in regulations and legislation.

Therefore, tyre manufacturers have been investing heavily in reducing noise by studying the phenomenon using specific, highly complex equipment.

Indeed, the tread is the leading cause of the noise generated by a tyre in use. The various grooves around and across the tyre tend to trap air, which is expelled within the tyre's contact patch (through a "pumping" effect), thereby generating noise. As the tread blocks impact with the road surface, they vibrate and so also make noise.

The challenge of achieving a drastic reduction in tyre noise lies in maintaining all of the other performance aspects, such as grip, tyre life, balanced wear, and so on, at the same time. In some cases, changes that could reduce noise can also compromise the overall performance of the tyre.

Breaking down the causes of noise and studying



sound quality has led to the development of tread patterns with varying sizes of tread blocks and staggered transverse grooves to reduce frequencies that are irritating to the human ear. Even reducing groove depth is a popular trend, particularly for tyres to be used at high speeds for long periods of time, along with tread patterns that are becoming increasingly "solid" (i.e. with a higher ratio of blocks to grooves). Studying tread patterns using mathematical models has led to a more intelligent use of sipes and new groove geometries, which have enabled the new tyres of the :01 series to reach such low levels of noise generation that they already comply with future standards. 

You, too, can write for Pirelli Truck

This magazine can grow and improve with the help of our readers. Would you like to share your experiences on the job and on the road? Need information about Pirelli products? Looking for the digital edition?

Write to
Truck.Magazine@pirelli.com



"MILES AND MEALS": FROM THE PADDOCK TO THE PAN

Pirelli unveils the secrets from inside the company's motorhome in the cookbook "Miles and Meals - Handcrafted by Pirelli", created to offer a glimpse behind the scenes in Formula 1.

"Miles and Meals", offered as a gift for guests, is a sort of game, a way of connecting tyres and recipes, compound and ingredients. The goal is to open a window that looks onto the world of tyres from a different angle, one that can bring out the less technological spirit of tyres.

The initiative includes a collection of recipes by Fabrizio Tanfani, the head chef of the team led by Cristian Staurengni, manager of the Pirelli motorhome, that take us on a journey from one race to the next through the best dishes to come out of the Pirelli hospitality motorhome.

Series 01, the voyage continues

Pirelli is continuing with the company's strategy to gradually bring the Series 01 to all nations.

The latest editions are now continental Africa and the Persian Gulf.

The Pirelli facilities in Izmit, Turkey, is once again the ideal stage from which to show the most important dealers in the Middle East and Africa the potential of the Series :01 tyres. Visitors to the exhibit celebrating the 100-year anniversary of the Truck division were given the opportunity to get an up-close look at the new product lines R:01, G:01, ST:01 and H88, as well as the flagship G88 line in the size 325/95 R 24TT, which is an innovative size with greater load capacity and longer life that can be fitted in place of the 1200 R 24, which is highly popular in the Persian Gulf markets.

These new developments represent another step forward in the field of performance.

Out of the Blue into the black

The Cinturato line has been expanded with a new tyre, the P7 Blue. With the 235/45R17 XL size on display at Essen from 5-8 June, a total of 16 sizes Cinturato P7 Blue are to be available to the European market beginning in July 2012. Developed for mid-sized cars, this next step in the evolution of the Cinturato P7 retains its ecological nature. Its main features include long tyre life, reduced braking distance and low rolling resistance, whereas the name of the tyre evokes the wet compound used in Formula 1, which has provided some of its technological components. Indeed, it was the tyre's rolling resistance and braking in the wet that enabled the Cinturato P7 Blue to earn top marks, 'AA' and 'AB', under the recently introduced European Tyre Label standards, which are to become mandatory on 1 November 2012 for tyres used on cars and both light and heavy-duty commercial vehicles.

NEWS

Pirelli in brief

Our new premium plant in Mexico

Pirelli has inaugurated the Silao, Mexico, production facility, the company's first in the country. The new plant will focus mainly on the premium segment, producing tyres for cars and SUVs for sale in Mexico and throughout the NAFTA area, thereby strengthening the company's presence in one of the areas that could make a great contribution to the success of Pirelli's premium strategy. The manufacturing site, which covers a surface area of 135,000 square metres, has been constructed with a great deal of emphasis on reducing the environmental impact of both its processes and its products.



Another "diamond" joins the Pirelli product range

In Alexandria, Pirelli has launched the new Diamante Nero ("black diamond") line of tubeless tyres for buses and commercial vehicles designed specifically for the Egyptian market. The new line offers two different tyre types, the FH95 295/80 R 22.5 for long-haul buses and the AP95 315/80 R 22.5 and 325/95 R 24 for mixed-roadway and construction use. The most important innovation can be seen in the AP95 325/95 R 24 series, which is a tubeless tyre that can be fitted in place of the more popular 1200 R 24 (tube-type) tyre.

This tubeless tyre gives users all of the benefits that are typical of this type of tyre: greater safety and simple repairs, lower costs as a result of lower rolling resistance and longer tyre life. But this tyre is also able to support heavier loads (with a load index ranging from 160/156 to 162/160).

The new line was launched in March. During the event, Pirelli also introduced two new supplemental services for fleet management, i.e. Pirelli Fleet Check and Pirelli Cyber™ Fleet.

TRANSPORT DESTINATIONS / LE HAVRE

Normandy is definitely worth an invasion



With the city's unique blend of industrious tradition and architectural creativity, its centre was the first modern urban complex to be named an UNESCO World Heritage site.

by Ettore Pettinaroli



View of the beach



Inside St. Joseph's Church

Le Havre

Out of the aftermath of the Second World War, a star of the highest order was born, one that, in just a few decades, managed to become one of the elite members of the UNESCO list of World Heritage sites. That star is Le Havre, in Normandy, an historical industrial and port city in northern France. From here, ships once set sail for the colonies (to then return with their cargo holds full of precious goods). Later, it was where transatlantic cruise ships weighed anchor. In short, the city was no stranger to wealth. With this wealth came great artists, attracted by the atmosphere of the city and the purses of the great patrons. And it was these artists who gave life to the monuments and

other historical heritage of which the city is so proud. For the city's rebirth after the devastating bombings of 1944, Le Havre chose the masterly path of the arts and other original solutions. The reconstruction of the 150 hectares of the city centre was entrusted to the architect Auguste Perret, who united the principles and style of classicism with the use of reinforced concrete. Other greats from the world of 20th century architecture then followed in his footsteps, each trying to outdo the other in terms of innovation, but without forgetting about the more practical needs of this industrious city. The result is there for all to see. Boldly creating and most certainly unique. So much so that UNESCO was practically forced to alter its usual standards so that, in July 2005, the new centre of Le Havre could be the first 20th century European urban complex to be named a World Heritage site.

A proper trip to Le Havre mustn't be done in just one day. A tour of the city offers a unique opportunity to visit the few old buildings that survived the bombings right alongside the works of contemporary masters. One of the historic high-

lights is the Abbey of Graville (11th-19th century), which comprises a number of convent buildings and the Sainte Honorine church. Then there is the Notre Dame Cathedral (16th century), which houses

an organ donated by Cardinal Richelieu; the Museum of Natural History in an 18th century praetorian villa, the St. François district and its wealth of historic buildings, and the Docks Vauban, which were built in the mid-1800s in the style of the London docks.

One of the jewels of the "new" Le Havre, then, is St. Joseph's Church, designed by Perret. Also definitely worth a visit are Volcan, the cultural centre designed by Oscar Niemeyer, and the Malraux Museum, which houses France's most important collection of impressionist art after that of the d'Orsay in Paris. And this is not by chance. There are more than a few art historians who claim that Impression soleil levant, which Claude Monet painted in the city in 1873, was the

very first example of Impressionism. The tour of impressionists organised by the city's tourist office takes visitors right to where the artists of the time created their works. For a bit of relaxation at the end of the tour, one then heads for

the Le Havre beach, just a few hundred metres from the city centre. Most of the two kilometres of this beach are fully equipped for sports and recreation, including the largest skate park in Europe. The water is chilly but clean, as confirmed by the blue flag that has flown high above the sands since 1998.



The Volcan cultural centre



An evocative view of the city

NEW PIRELLI TRUCK TYRES SERIE 01 ARE THE BEST PARTNERS FOR YOUR WORK.

BUILT TO GIVE YOU TOP QUALITY, THEY OFFER ALL DRIVERS THE OPPORTUNITY TO FEEL SAFE AND TO CONCENTRATE ON THEIR JOB. THANKS TO THE HIGH LEVEL OF SERVICES OFFERED BY PIRELLI, TRANQUILITY BECOMES TOTAL. NEW PIRELLI TRUCK TYRES SERIE 01. THE STABILITY YOU ALWAYS WANTED FOR YOUR BUSINESS.

PIRELLI.COM



AS YOU CARRY SOMETHING PRECIOUS, CHOOSE SOMEONE YOU CAN TRUST.

PIRELLI

POWER IS NOTHING WITHOUT CONTROL



Where to stay• **Les Gens De Mer**

Modern and comfortable, right in the heart of Le Havre, across from the main covered market and not far from the Bassin de Commerce. 44, rue Voltaire
Rates: double room for €62
www.lesgensdemer.fr

• **Le Richelieu**

A small, quaint hotel located between the city hall and the cathedral and just 10 minutes on foot from the beach. Satellite TV and Wi-Fi connection free of charge. 132, rue de Paris
Rates: double room for €54
www.hotellerichelieu.fr

• **Comfort Hotel d'Angleterre**

Strategically located at just 100 metres from the sea and not far from the Malraux Museum. Soundproof windows, flat-screen TVs and satellite channels. The car part across from the hotel is free of charge at night and on Sundays and holidays. 1, rue Louis Philippe
Rates: double room for €48
www.comfortinn.com/hotel-le-havre-france-FR423

Dining• **Le Wilson**

Traditional Normandy cuisine at a fair price. The house speciality is diandouille, a crispy sausage made with tripe. 98 rue du Prés. Wilson
Phone: 0235.411828
Menu: starting at €20

• **La Petite Auberge**

Reservations are a must at this small restaurant. But it's well worth the trouble just to taste their tartare de canard (duck tartare) and great many pineapple desserts. 32 rue Ste-Adresse
Menu: starting at €22
www.lapetiteauberge-lehavre.fr

• **Au P'tit Mareyeur**

Primarily seafood on the menu at this quiet restaurant in Honfleur. Their bouillabaisse is not to be missed. 4 rue Haute, Honfleur
Menu: starting at €25
www.aupitmareyeur.fr

Shopping• **Centre Commercial Docks Vauban**

Opened in 2008 at the old docks, this shopping centre is worth a visit for its architecture and atmosphere alone. It includes 50 local and international shops ranging from fashion to sporting goods. 70, quai Frissard
www.docksvauban.com

• **Photo Trehet Marine**

Interior design in a seafarer style, including lovely replicas of ancient sailing tools and other objects. Collections of historical photos. 65, rue de Paris
www.photomarine.fr

• **Conserverie la belle-iloise**

Tuna, sardines, mackerel, packed in salt or oil or prepared according Le Havre tradition and all caught by local fishermen. Boulevard Georges Clémenceau, Anse des régates
www.labelleiloise.fr

The recipe | Norman sole**Ingredients (serves 4)**

- 4 sole (small)
- 1/2 glass of dry white wine
- 25g butter
- salt and white pepper to taste

Ingredients for the sauce

- 40g butter
- 30g flour
- 1/4L of cream (approx. 30g)
- 1 small tin of shrimp
- 250g mussels

Preparation

- Clean the sole
- Then heat the butter in a pan and add the sole, season with salt and pepper



- Lightly brown both sides, then add the white wine and let cook for about 20 minutes, Making sure that the sole remains firm
- Place the sole filets on a warm plate

For the sauce

- Fry the flour in hot butter while adding in some of the stock from the sole. Cook over a high flame for a few minutes
- Add in the cream and season with salt and pepper
- Strain the shrimp and mussels and add them to the sauce while it's still hot. Pour over the sole filets. Serve with boiled potato

FRANCE > NORMANDY > **LE HAVRE****SEA PORT**

The harbour may also be toured by boat. The tour lasts 90 minutes tel. 0235.289953

Le Havre is France's leading port in terms of foreign trade and container traffic. Boat tours run from April to November. Bus tours may be organised all year round. CDs for self-guided tours by car are available upon request.

**TOURIST OFFICE**

186, boulevard Clemenceau Tel. +33- 2 32740404 www.le-havre-turismo.it

With 193,000 inhabitants, La Havre is the largest Norman city. Each era throughout the city's history has left its mark on the urban fabric. This characteristic has enabled the city to be named a UNESCO World Heritage site despite being a highly industrial city.

**NOT TO BE MISSED****THE SUPER-TECHNOLOGICAL EDF POWER PLANT**
The guided tour lasts two hours. Info: www.edf.fr

The EDF plant is set right in the heart of Le Havre. Its annual output accounts for 1% of all power generated in France. It employs 337 people who work around the clock, and the facilities have been designed both to ensure high standards of safety and to protect the environment, with the power generated coming from just air and water. Roughly €200 million has been invested in order to develop and refine the plant's techniques for providing "green" energy. Tours of the plant are a truly fascinating experience. Due to strict security measures, tours must be booked at least 48 hours in advance, and all visitors must present proper identification before entering the plant. Children 8 years and older are allowed to visit the plant, and all minors must be accompanied by an adult. If you'd like to book a tour, it's best to avoid visiting on Wednesdays, as school trips are organised then from 10:30am to 2:30pm.

MONTGEON PARK

At 200 hectares, this is the largest of the city's 95 green areas.

Located in the city centre, it is home to the Maison de la Forêt and a tropical greenhouse, as well as lakes, sports facilities and camping areas.



WHEN TEMPERATURE FALLS DOWN
UNDER 7 DEGREES, STOP OFF
AT WINTER SPECIALISTS AND
PUT PIRELLI WINTER™ TYRES UP.
ONLY THIS WAY YOU CAN BE SURE TO HAVE
EVEN ON WET, ICE AND SNOW CONDITIONS,
THE PERFORMANCES AND CONTROL WHICH
ARE SINCE EVER THE TRADEMARK OF PIRELLI,
FORMULA ONE™ OFFICIAL TYRE SUPPLIER.
BECAUSE EVEN OUTSIDE THE RACETRACK,
THE ONLY STRATEGY THAT REWARDS
IS THE SAFETY ONE.

PIRELLI.COM

THE OFFICIAL WINTER TYRES.



POWER IS NOTHING WITHOUT CONTROL



The F1 FORMULA 1 logo, F1, FORMULA 1, FIA FORMULA ONE WORLD CHAMPIONSHIP, GRAND PRIX and related marks are trade marks of Formula One Licensing B.V., a Formula One group company. All rights reserved.