PACCARWORLD

DAF in action

Magazine of DAF Trucks N.V.

number 2, 2005

DAF XF105
The new standard

DAF

A PACCAR COMPANY

Safety and profitability – with technology from ZF

80
40
ZF-Intarder

Heavy goods have to be transported – at best at speeds between 40 and 80 km/h. This is where the ZF-Intarder is at home. Service and engine brakes become a perfectly functioning brake system in combination with the ZF-Intarder.

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"The ZF-Intarder is a product which always pays for itself. Service costs are reduced for the tractor and the trailer, lowering whole-life costs and improving profitability."
Jan de Rooy, Managing Director

Driveline and Chassis Technology

In this issue

Driven by quality

In the first quarter of 2006, production of the XF105, DAF's new flagship for the international transport, will start. A gem of a truck for contractor and driver. A truck that we, as DAF, are exceptionally proud of. Because it sets new standards. In the fields of quality, efficiency and transport performance. In interior design, comfort, ergonomics and driving characteristics.

We are proud that we can offer the market such a fantastic new truck. We are also proud of the fact that we have so many dedicated experts, with whom we have realised the XF105, within our organisation. And I am not only talking about our colleagues in the development departments or about the product planners in Marketing, but also about the employees of numerous support services, of Purchasing and of Production, from production engineers to the skilled people on the production lines. Suppliers have also played an important role; many of them were involved in the development of the XF105 at a very early stage.

However, at DAF, product development starts, traditionally, with our customers. They provide us with valuable information from daily practice. By carefully incorporating their ideas and wishes into a programme of requirements, DAF is capable of developing, time and time again, products that exactly fit market needs. The new XF105 is the latest proof of this. Our customers also play an important role in the test phase. Besides extensive test programmes in our test centres, on our test track complex and on the road, our development programmes are invariably concluded with a field test by customers, to be sure that the highest possible quality is delivered right from the very start. Therefore, during the past year, the new XF105 was extensively tested in daily practice by just under thirty hauliers in various European countries.

With the presentation of such a fantastic product as the new DAF XF105, it is only fitting to express our thanks and gratitude to everyone who has contributed to its development. Our own employees, our suppliers and their employees and, last but not least, all those customers and drivers who directly or indirectly co-operated in the development of the DAF XF105. Only through the passion, effort and quality of all these people can we live up to our new slogan: ***driven by quality.***

Aad Goudriaan
President
DAF Trucks N.V.

Colophon

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DAF Frankfurt commences operations

DAF is constantly working on further expanding its dealer network in Europe. A recent example of this is DAF Frankfurt GmbH, which was established during the second quarter of 2005. Just like the dealer companies in Prague, at London Heathrow and in Budapest, DAF Frankfurt GmbH is 100% group owned.

Sales activities are at present still taking place in a temporary building, but construction of a modern, new facility started recently on a piece of land of over 16,000 m², which is strategically located alongside the important A661 motorway. The building will have a surface area of 2,757 m², of which 1,764 m² is destined for the ultra modern workshop with seven entrances. In addition, a 29 metre car and truck wash has been allowed for, fitted with a high-pressure cleaning system.

The waiting area for clients and drivers, which will have showers, toilets, vending machines for drinks, TV and data connections, etc., will provide a view over the workshop. Naturally, all due care and attention is being paid to the environment. Various floors are being fitted with a 6 millimetre thick liquid-tight covering to prevent harmful substances entering the groundwater.

The opening of the new building is planned for the second quarter of 2006.

50 CFs for Borusan Logistics

At DAF Trucks in Eindhoven the first ten CF85 trucks from a series of fifty were transferred to the Turkish company Borusan Logistics in the middle of June. The vehicles were handed over to Borusan drivers by DAF employees and DAF's Turkish partner, Tirsan.

Borusan Logistics forms part of Borusan Holding, the parent company of no fewer than 22 subsidiaries, where a total of more than 3,500 people work. Borusan Holding's four main activities consist of steel, technology, car importing and logistics. Borusan Logistics was founded in 1973, in the first instance to provide logistics support to the associated companies, but later on also for external partners. Borusan chose DAF because of the favourable price-performance relationship, the CF85's low own weight and the high residual value.

DAF successful in South Africa

In October 2002 DAF entered the South African market with ambitious aims. Now, over two and a half years later, expectations prove to have been fully substantiated: DAF is the fastest growing truck brand in the South African truck market; the market share in the segment above 15 tonnes GVW has now reached 10%.

This success is due, in no small measure, to the partnership with Tyco Trucks who recently delivered the 1,000th truck in South Africa. Tyco Trucks is DAF's importer and has its own assembly facilities. The company assembles the CF and XF types for the South African market based on Semi-Knocked-Down (SKD) packages. An SKD package consists of entire components such as cabs, engines and rear axles and an entirely bare chassis. In addition to the CF and the XF, DAF's LF is becoming increasingly popular in South Africa. DAF supplies this type as a complete vehicle.

The 1000th DAF in South Africa (a 4x2 DAF CF85) will be used as a special demo vehicle for Tyco Trucks.

DAF hydraulic platforms for Eindhoven Fire Brigade

DAF has recently supplied two hydraulic platforms to the Eindhoven fire brigade, the town in which DAF Trucks N.V. is based. The new vehicles replace two DAF ladder trucks.

The Eindhoven Fire Brigade chose DAF once again after an extensive evaluation. This took place after the DAF FAN CF75 had emerged from the required European procurement procedure as the best vehicle. The steered trailing rear axle thereby provides significant manoeuvrability and a high payload. The new hydraulic platforms have a maximum vertical operating height of 34 metres and a maximum horizontal reach of almost 25 metres. The vehicles are not only used for fire extinguishing operations, but also for rescue operations. A remote-controlled water cannon with a capacity of 2,500 litres of water per minute is fitted onto the basket. The high engine output of 265 kW (360 hp) appealed to the fire brigade in Eindhoven because with this, the hydraulic platform, of over twenty-five tonnes in weight, can reach a speed of 80 km/h in 33 seconds.

UBN Auto's senior management. Left: Vasil Kalev, Vice President Right: George Zagorov, Sales Director.

New DAF distributor in Bulgaria

DAF and UBN Auto recently signed a partnership contract in the Bulgarian capital of Sofia. UBN Auto, which has already been DAF's service partner in the Bulgarian market for ten years, is now also responsible for importing DAF trucks.

Although the market in Bulgaria for new trucks over 6 tonnes GVW is still relatively small, only 700 trucks were sold in 2004, the country has excellent future prospects. In 2008 a total market of 4,000 trucks is expected and when Bulgaria enters the EU in 2007 the economy will be given an additional boost. Bulgaria is an important transit country, a good reason for DAF and UBN Auto to pay a great deal of attention to ensuring that the service network is staffed in the best possible way. To this end, UBN Auto has concluded a partnership with dealer companies in Plovdiv, Burgas and Varna.

First DAF XF95 8x4 heavy transport tractor unit in Poland

DAF dealer Warschau Truck Center recently delivered a XF.95FTM 8x4 tractor with a steered leading rear axle to ZRE Katowice. The 530 hp-strong tractor is the first of this type on the Polish market.

ZRE Katowice, which was set up in 1955, specialises in heavy and exceptional load transport. The XF will be used for transports with a maximum GVW up to 120 tonnes. ZRE selected the XF due to its excellent performance and the fact that the truck specifications meet its needs exactly. The favourable experiences of other heavy transport companies using DAF's XF - in particular with regard to low operating costs - played an important role in purchasing the XF.

100-tonne refuelling tanker

Airline KLM recently started using a special combination: a DAF CF75 with a kerosene semi-trailer with an 80,000 litre capacity. The maximum permissible towable weight of the combination is 100 tonnes and the total length is more than twenty metres. In order to have sufficient traction under all conditions, the DAF 75.310 tractor has a 26 tonne double-drive tandem axle. The truck has a 9.2 litre engine of 310 hp, coupled to a fully automatic five-speed gearbox. The semi-trailer's steering is switched off when manoeuvring backwards, so that driving backwards becomes easier. To operate the refuelling system, an entire lifting platform has been built at the back of the tank that can reach a height of 4.2 metres. The refuelling truck combination was developed by DAF dealer Truckland Schiphol in partnership with DAF Trucks Nederland and Kar Kunz Aviation Refuelling.

New top model with state-of-the-art PACCAR MX engine:

XF105 sets new standards

DAF has launched the new XF105. This new flagship model, an addition to the DAF programme, features a restyled exterior, a completely new interior design, a new chassis layout and the new 12.9 litre PACCAR MX engine, available in both the Euro 4 as well as the Euro 5 specification. DAF's XF105, which will go into production during the first quarter of 2006, sets new standards for quality, efficiency and transport performance, as well as in interior design, comfort, ergonomics and driving features.


XF
DAF
XF

▲ ▲ *At an angle behind the driver's seat: an easily reached bottle holder*

▲ *A 45 litre refrigerator, in which even large bottles can stand upright, can be placed in one of the storage drawers.*

The generous top bunk (205 x 70 x 10 cm) can be reached by an ergonomically-shaped stylised aluminium ladder.

The new steering wheel can be delivered with integrated switches for cruise control, down hill speed control and telephone, etc.

Retractable gear lever for unhindered movement in the cab.

Trend-setting durability and reliability, the lowest possible operational costs and maximum transport performance and efficiency, combined with Euro 4 and Euro 5 emission values, were the most important criteria behind the development of the DAF XF105, together with superior comfort and a perfect working environment for the driver. In order to distinguish the new top model from the XF95 Euro 3, the XF105 has a restyled exterior, for which the point of departure was: evolution instead of revolution. DAF's own Design Centre gave the XF105 its refreshingly individual character, while retaining the striking stylistic elements of the successful XF95. The entirely new Super Space Cab roof provides, along with the new top and bottom grille that continues through into the newly designed steel bumper, a quality that is robust as well as friendly. The Xenon headlamps with clear Lexan glass that can be supplied as additional features, the cat's eye combi lamps in the bumper and the integrated spotlights in the Super Space Cab roof are characteristic stylistic features of the XF105.

New standard in interior design

The XF95 had already set new standards in interior space and design. With the XF105, DAF once again takes a leading position in the industry with regard to ergonomics and interior styling, materials and colours used, space and its use, finish and overall quality. From the new door panels with stylish upholstery and further increased storage space, to the new instruments panel, the new dashboard layout or the new sleeping compartment, DAF's new top model offers top quality in every detail.

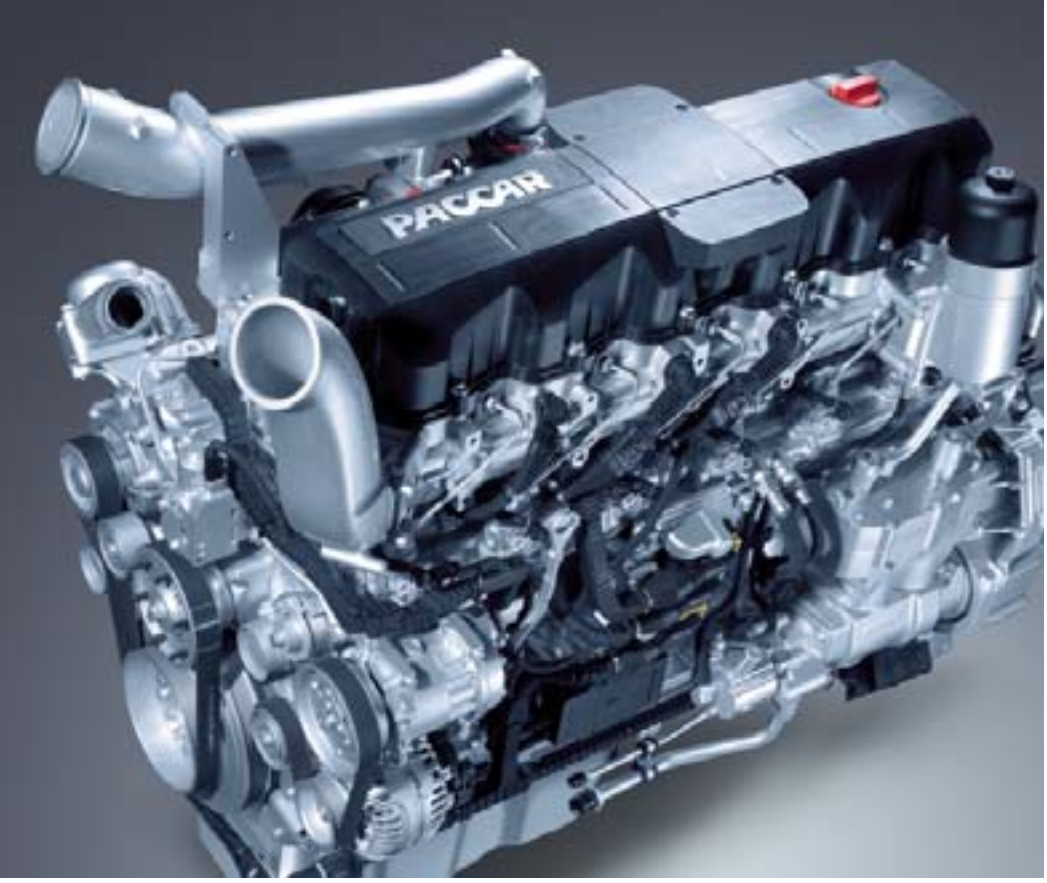
When taking the seat behind the new steering wheel with optional airbag, it immediately becomes apparent that comfort, safety and ease of use were given the highest priority during the development phase. The new steering wheel is available with integrated switches for operating cruise control, downhill speed control, telephone, etc. Other important functions, including those of the AS-Tronic gearbox, are easy to use via stalks on the steering column. The handbrake control is now integrated in the dashboard. This makes it easier to reach, whilst also providing more space on the cab floor.
In the dashboard, which has been developed like a cockpit around the driver, are three DIN slots, so that, aside from an audio system, a large navigation or telematics system screen can be fitted. All four electrically-adjustable mirrors and the electrically-operated door window on the driver as well as the co-driver's side are operated from a central panel on the door.

Semi-level floor

In addition to the fact that the XF105 offers the best possible working environment, the cab is also a home-from-home for the driver, stylish and well co-ordinated. The stylish materials and colours that have been carefully selected to match each other, and the interior lighting, chosen with care and with amber coloured night lighting, provide a calm and efficient working environment.
The engine tunnel has been lowered to 15 centimetres in order to achieve a semi-level floor. This has made it easy to pass through the cab and has resulted in a generous standing height, both in the Space Cab (1.75 m) as well as in the Super Space Cab (2.10 m). If the truck is fitted with the automated AS-Tronic gearbox, the cab floor is entirely empty, providing the maximum mount of living space. The versions with manual transmissions have a retractable gear lever, which means that drivers can move through the cab unobstructed.
The lowered engine tunnel has made even more spacious storage options under the bed possible. Here DAF offers the choice between a fixed storage option or one or two storage drawers. It is possible to install a 45 litre fridge in one of these storage drawers, in which even large bottles can be placed upright. In addition, to the right behind the driver's seat, a bottle holder has been placed that can easily be reached.
The newly designed sleeping area underlines the attention that DAF has traditionally given to drivers' requirements, and provides two generous bunks. The bottom bunk has a length of 210 cm and a width of 81 cm, whilst the mattress, which is in one piece, is 15 cm thick. The top bunk, reached via a handsomely-styled and ergonomically-shaped aluminium ladder, has generous dimensions (205 x 70 x 10 cm).

PACCAR MX engine

The XF105 is equipped with the new 12.9 litre PACCAR MX engine, developed and produced at DAF Trucks in Eindhoven. Initially, the engine will be available with outputs of 300 kW (410 hp), 340 kW (460 hp) and 375 kW (510 hp), with torques of 2,000, 2,300 and 2,500 Nm respectively, available over a broad speed range of 1,000 to 1,500 rpm. At a later stage a 410 kW (560 hp) version will be available. The six-cylinder in-line engine combines excellent performance and flexibility with favourable fuel consumption. Reliability and durability were other important aspects behind the development of the MX engine, developed for a design life of 1.6 million kilometres.
The PACCAR MX engine distinguishes itself by a combination of tried and tested, state-of-the-art technologies and a number of technical innovations, as well as the use of hi-tech materials such as Compact Graphite Iron (CGI), and maximum function integration. For example, in the design of the engine block and the cylinder head, piping has been integrated to keep the engine as uncluttered as possible on the outside and to minimise the number of



engine parts. Even the SMART high-pressure fuel-injection system is fully integrated into the engine block. Further innovative technical details are the Poly-V belt drive for the alternator and air conditioning, the composite valve cover with integrated crankcase ventilation, the timing gear at the rear of the engine, the steel pistons, the combined steering pump/fuel supply pump and the aluminium flywheel housing.

The new Jacobs decompression brake doubles the engine brake's performance, especially in the most commonly used speed range between 1,000 and 1,500 rpm. To meet the Euro 4 and 5 emission requirements, the DAF XF105 will be equipped with an SCR DeNOx catalytic converter

New chassis layout

By moving the air reservoirs and other components to the inside of the chassis, extra space has become available for large fuel tanks. This has led, along with the carefully considered placement of the DeNOx installation and the 50 or 75 litre AdBlue tank, to the ability to use a tank capacity up to 1,500 litres, the legally permitted maximum in Europe. The XF105 is fitted, just like the XF95, with electronically controlled disc brakes, while systems such as ABS, ASR, Vehicle Stability Control and Brake Assist mean additional safety and comfort for drivers.

XF95 for Euro 3

Due to the significantly higher prices of Euro 4 and Euro 5 engines, and because market demand for these trucks will depend to a large extent on incentives and road tax benefits, such as for the German road toll, DAF expects drivers in countries where there are no, or scarcely any, incentives, to continue to purchase Euro 3 vehicles for as long as possible. That is why DAF Trucks will continue to supply the XF95 in Euro 3 specification so long there is a demand for it in the European market and in countries outside the EU where the Euro 4/5 legislation does not apply.

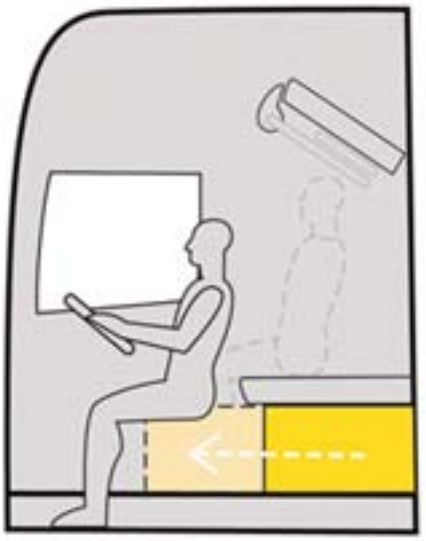
Bart van Lotringen, DAF Design Center:

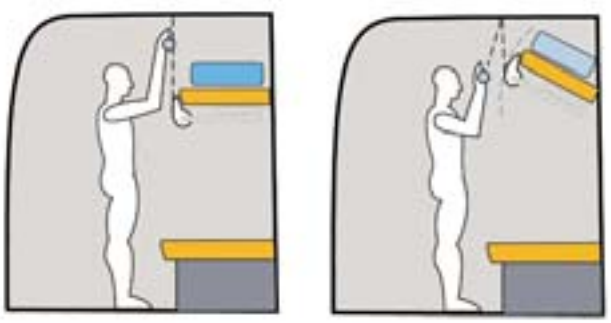
"Comfort and optimum use of space"

"The aim for the interior design of the XF105 cab was clear", says Bart van Lotringen, Design Director at DAF: "Comfort and optimum use of space without any concessions. An example: For some of our competitors, the bunk can be converted into a bench. This would appear to be a clever idea, but it means that the mattress has to be divided. That is non-negotiable at DAF. A one-piece mattress is much more comfortable and so that is the one drivers will be given. The ladder to get up to the top bunk is sturdy and solid. It can simply be moved out of the way to the foot end, so that it is never in the way if the driver wants to sit or lie down on the bottom bunk.
These examples illustrate that we have fully imagined ourselves in a driver's life. He spends many hours in his cab. Not only to work, but also to live. We have created a homely atmosphere with warm colours and soft materials with a natural appearance. Just like modern home interiors."

Optimum space for moving around in

All switches and instruments that are directly to do with driving have been placed immediately around, or even on, the steering wheel, to ensure optimum ergonomics when driving and maximum freedom of movement when resting. When combined with the semi-level cab floor it leads to optimum movement space for the driver. Bart mentions another such example: "The top bunk of the XF105 can be lifted up in two seconds using a clever easy-lift system so that the driver can comfortably sit upright on the bottom bunk. He can also hang up his towel to dry on the easy-lift system."
The semi-level cab floor has – in addition to the extra living space – another benefit: because the floor is 15 centimetres higher in the middle than in front of the chairs, the so-called dirty zones are separated from the clean ones. The middle section remains clean, which is nice if the driver wishes, for example, to get into bed in bare feet.
Thanks to the use of the semi-level cab floor, the storage drawers and the fridge under the bunk were able to be no less than 45 centimetres tall. For the fridge this means that large, soft-drink bottles can be placed upright. "Easier to get hold of when driving and the fizz isn't lost as quickly", says Bart. "And in the unlikely event that the cab needs tilting forward, we have fitted compartments in the fridge. That way the bottles do not fall over."





New DAF XF105:

Investing in efficiency

The new industry-leading DAF XF105, which will be presented at the Amsterdam RAI Show, is a world class product with the highest quality, reliability and durability. It offers a superior cab design with semi-flat floor in all models, as well as a completely new 12.9 litre PACCAR MX engine with SCR exhaust gas after-treatment for Euro 4 and Euro 5 emission levels. "Investing in the DAF XF105 means investing in lower costs and higher yields. Our new flagship offers excellent return for operators in many applications", says Kerry McDonagh, Director Marketing & Sales of DAF Trucks.

The service interval of the XF105 is extended from 120,000 to 150,000 km with the use of synthetic oil.

The facts speak for themselves. Depending on the operational conditions, the new PACCAR MX engine offers up to 4% better fuel efficiency. Consequently, the AdBlue consumption is more than compensated by improved economy. Furthermore, several countries in Europe have now introduced an incentive program to partly or even fully offset the investment in cleaner operating Euro 4 and Euro 5 engines; for example, the discount on the German Maut.

Residual mileage

The new 12.9 litre PACCAR MX engine has a design life of 1.6 million kilometres, which means that when the first owner trades in his XF105 after 800,000 km, for example, the next owner buys at least as many kilometres in 'residual mileage'. This improves the trade-in value of the XF105, which can be up to 15% higher after four to five years of service, compared with a Euro 3 vehicle.

Extended service interval

The service interval is extended from 120,000 to 150,000 km with the use of synthetic oil. This means not only less oil over the service life of the truck, but also that on average, the XF105 only has to go to the workshop once a year for a service. Moreover, service after the first 10,000 km is no longer required and the oil change interval for gearbox and rear axle is extended to over half a million kilometres; 540,000 km to be precise. All this means fewer hours in the workshop and thus more uptime. In addition, the great reliability of the XF105 ensures maximum uptime too, while

The XF105 will have a 10 to 15% higher purchase price, compared with the DAF XF95 Euro 3, largely due to the cost of the SCR installation for Euro 4 and Euro 5 emission requirements.

repair and maintenance costs are up to 10% lower.

SCR installation

Obviously, with all these features and benefits for both driver and operator, the new DAF XF105 model is priced higher than the XF95. "Operators ordering the new DAF XF105, which enters production in January 2006, will see a 10 to 15% higher purchase price, compared with the DAF XF95 Euro 3, largely due to the cost of the SCR installation for Euro 4 and Euro 5 emission requirements. The good news is that the operational costs over the total service life of the truck are lower, making the XF105 a great proposition for cost conscious operators." McDonagh noted.

Kerry McDonagh: "Investing in the DAF XF105 means investing in lower costs and higher yields."

The best excuse

"For those operators that prefer the significantly lower initial investment in a Euro 3 vehicle, the DAF XF95 will be in production as long as there is market demand. In recent tests in leading European trade magazines, the DAF XF95 is again recognized as the benchmark in many aspects. One of the British magazines wrote: 'With the XF95, DAF has given British operators the best excuse not to buy a Euro 4-tractor before they have to.' And that obviously goes for many operators in other non Maut-related countries as well, given the continuously high demand for the DAF XF95 Euro 3. However, the XF95 Euro 3 production will come to an end for EU countries, when Euro 4 emission requirements become mandatory in October 2006. Euro 3 vehicles have to registered before then, which effectively means that they can only be sold up to summer 2006. Up to then, DAF offers two strong business solutions to it's customers: the new XF105 for Euro 4 and Euro 5 and the popular XF95 for Euro 3 – both providing winning performance and superb driver comfort and interior space," Kerry McDonagh concludes"

XF105: investing in efficiency:

- ***Up to 4% better fuel efficiency***
- ***Up to 10% lower repair and maintenance cost***
- ***Up to 15% higher resale value***
- ***Euro 4 or Euro 5 emission levels for Maut reduction***
- ***Service interval extended to 150,000 km***
- ***Oil change interval for gearbox and rear axle extended***

▶ **TIRE: MARATHON LHS**
▼ LOWERS COSTS PER KILOMETER

This month's hardest worker? The new Marathon LHS. Its wider tread and low aspect ratio gives 15% more mileage and lower rolling resistance for reduced fuel consumption. Along with Marathon LHD+ drive and Marathon LHT megatrailer tires, it gives maximum payload and cargo volume. So next month's Employee of the Month is a foregone conclusion.

GOODYEAR

▼

BECAUSE NOT ALL TIRES ARE THE SAME _

The European Road Transport Show 2005

More DAF news at the European Road Transport Show 2005 at the Rai

As is traditionally the case, DAF's stand at the European Road Transport Show 2005 at the Rai will be in the Europahal. That is where DAF's full model range will be displayed, and a great deal of attention will be given to the services underlying the products.

October 2005: DAF will show its complete model range at the European Road Transport Show 2005 at the RAI. Here, the top model will be the DAF XF105. In addition to this new flagship model, DAF will show another first on the 2,200 m² large stand at the well-known location in the Europahal: the new 9.2 litre PACCAR PR engine for Euro 4 and 5. This will go into production next year for the DAF CF75.

This year, DAF has its largest stand ever at the top of the Europahal. With space for no fewer than twelve vehicles, including several with bodywork. DAF will show its complete product range, from the LF for distribution transport, to the CF for a broad range of applications and the XF for international road transport. Naturally, the new DAF XF105 will have a very prominent place on the stand.

PACCAR PR-engine

A second DAF first at the European Road Transport Show 2005 at the RAI is the new 9.2 PACCAR PR engine for Euro 4 and 5. This engine uses several revolutionary technologies that are also used on PACCAR's 12.9 litre MX engine. For example, the PR engine also has the SMART high-pressure fuel-injection system that was developed in co-operation with Delphi. Just as with the PACCAR MX engine, all electrical wiring for the engine has been encapsulated for maximum reliability. The PR engine also uses the SCR DeNOx technology to meet the Euro 4 and Euro 5 emission values.

For maximum reliability and durability, important innovations have been made to the engine block, cylinder head, pistons and valves, etc.
The 9.2 litre 6-cylinder PACCAR PR engine will go into production during the course of 2006 and will be supplied in power output versions from 183 kW/250 hp to 265 kW/360 hp with maximum torques from 1,050 to 1,450 Nm at 1,100 to 1,700 rpm. The new engine, which offers high reliability, excellent performance and favourable fuel consumption, will be built into the DAF CF75.

Services surrounding the product occupy centre stage

To underline the importance that DAF and its dealers (about 1,000 sales and service dealers) place on excellent service behind their leading products, services such as After Sales, PACCAR Financial, PACCAR Parts and TRP are given a prominent place on the DAF stand, as will DAF's International Truck Service (ITS), MultiSupport Repair and Maintenance Contracts and the systems that are available to DAF dealers for giving our customers the best purchasing advice.

Besides low costs per kilometre, hauliers demand maximum vehicle availability and efficiency. Therefore, DAF dealers apply the 'one stop shopping' formula: all services and support under one roof, so that the haulier can concentrate on his core business'.

DAF in the Netherlands

With almost 9,600 registrations up to and including August of this year, the Dutch commercial vehicle market from 6 tonnes upwards was almost as large as in the same period of 2004. With a market share of more than 32 percent during the first eight months of 2005, DAF remains the undisputed market leader. In the class from 6 to 15 tonnes, DAF has a share of almost 22%; in the segment above 15 tonnes, DAF's market share in the Netherlands is more than 33%.

Director Johan van den Heuvel: "Truck business is people business. A good dealer is always available, thinks along with you and takes matters up quickly."

PACCAR MX engine tested extensively

Prior to newly-developed engines going into series production they undergo millions of test kilometres. To be precise, 35 million for the PACCAR MX engine. In part these were driven under laboratory conditions on test rigs where, in particular, the durability and reliability of the engines were tested. However, most of the test kilometres relate to road tests so that performance under various real road conditions, such as cold, heat and altitude, can be tested.

The last phase of the development process is the so-called field test, where vehicles with the new engine are put into service at various clients, such as at HeuvelTrans from Tiel in the Netherlands. In particular, the aim of the tests is to make final adjustments based, amongst other things, on clients' and drivers' opinions. In the case of the PACCAR MX engine, this involved no fewer than 100 vehicles at 29 clients in various European countries.

Confidence

HeuvelTrans' logo leaves nothing to guesswork with regard to the company's most important activities: national and international chilled transport of fresh vegetables, fruit and citrus fruit. With its fleet of 90 trucks, HeuvelTrans – part of the Van den HeuvelGroep – is one of the Netherlands'

Glance under the cab: The PACCAR MX engine has already driven 181,000 kilometres in less than a year.

With its fleet of 90 trucks, HeuvelTrans is one of the Netherlands' biggest players in the national and international market of chilled transport of fresh vegetables, fruit and citrus fruit.

in daily use

biggest players in this market. In addition, HeuvelTrans has a joint venture with the Spanish Transportes Hnos Corredor, S.A, which has a fleet of a further eighty trucks. "We have 2,600 loads from and to Spain annually, and in addition we have many daily transports to and from England. The Netherlands' largest supermarket chains are included in our customer base", says director Johan van den Heuvel. "They need to be able to trust us three hundred percent, so initially I was not overly enthusiastic when DAF asked us to participate in the field test. For you never know what could happen. However, that concern was unwarranted: our field test XF is fully utilised in the normal schedule. In less than a year we have already driven 181,000 kilometres with it, mostly to England and Spain."

Eindhoven

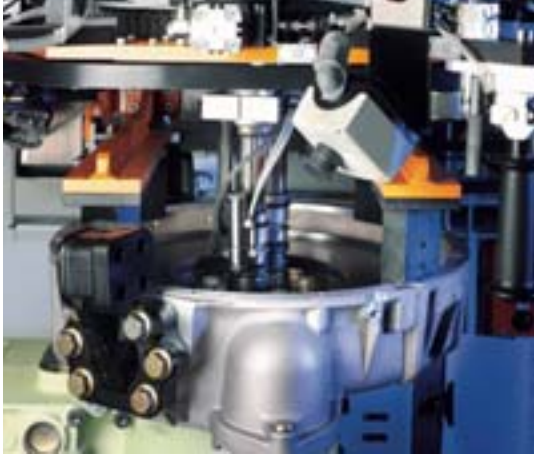
HeuvelTrans has its own tank installation for the urea fluid known as AdBlue, the additive that ensures that the PACCAR MX engine meets the Euro 5 emissions requirements. "There are no problems at all", says Johan. "The XF is used seven days a week, 24 hours a day. The truck has a dedicated driver, but if he is off, someone else drives it. This person is called a 'springer'. Both people are highly experienced and so are extremely well placed to assess the PACCAR MX engine's performance. Sometimes we drive it to the factory in Eindhoven, where the technicians check to see if everything is alright. And nine times out of ten that is the case". What is going to happen with the vehicle after the field test? "It will simply remain in our fleet", answers Van den Heuvel. "It has proven its reliability."

HeuvelTrans and DAF

In 1992 HeuvelTrans purchased its first DAF. "I can still remember its registration number off by heart, but I can remember that for all of our trucks and semi-trailers", says director Johan van den Heuvel, thus simultaneously showing his high degree of involvement in daily company affairs. HeuvelTrans' fleet is now 50% DAF, i.e. 45 CFs and XFs. "We're very happy with them", states Johan. "They are reliable, economical and the drivers love them, particularly due to the space in the cabin and the driving features." He has a firm opinion on the relationship with the dealer: "Good service is perhaps more important for a dealer than selling cars", he says. "Truck business is people business. A good dealer is always available, thinks along with you and takes matters up quickly. HeuvelTrans aims for a service level of 100% towards its clients. That is only possible if the also dealer does so. The relationship really needs to work well. We have a very good relationship with our dealer Van Tilburg-Bastianen."

Driver Gerrit van Holland: "Plenty of pull power"

The designated driver of HeuvelTrans' field test XF is 58-year-old Gerrit van Holland. He mostly drives to England. "That goes on for seven days a week", he says. His years of experience as a driver provided the reason to Johan van den Heuvel for having Gerrit drive the field-test XF. What has his experience been? "It works perfectly", says Gerrit simply. "It is reliable and has a great deal of pulling power. I have only had to visit the dealer a few times for a small problem. That is part of the deal, after all, it is a field test. I just had to get used to the AS-Tronic gearbox, }especially when going downhill. But that's down to me, I've driven with a manual for years; as far as that goes I am a driver of the old school. I must admit that an automatic like that works brilliantly." Gerrit reports his experiences with the PACCAR MX engine using extensive check lists. One of the most important items on the list is of course fuel consumption. "On average, the truck uses around 30 litres per 100 kilometres, which includes a considerable amount of time spent in traffic jams and at 40 tonnes", he says. "Not bad, given that this is still a field test. I am convinced that more can be got out of it."



The cracking of the big-end bearing cap, which is cast together with the PACCAR MX engine in the engine block. The engine and the cap are separated with great force and extreme accuracy, to make assembly of the crankshaft possible. Advantage: a unique and extremely robust joint. .

Critical bolt joints are made automatically, whereby the computer checks that the bolts are tightened with the correct torque.

World-class trucks from a wo

The engines are automatically placed in the most ideal position for the workers.

In the sheet metal component factory, skilled workers use advanced welding robots, plasma cutting machines and impressive presses, etc. to produce a wide range of supports, brackets, cab and axle parts and fuel tanks.

The production line of DAF's Assembly factory in Eindhoven was extended by 50 metres to be able to realise a higher production capacity.

In the Axle factory in Westerlo, the spraying process of the axles is fully automated. This improves both the quality and the working conditions.

Welding robots play a very important part in the assembly of the cabs in the Cab factory in Westerlo.

rld-class factory

During the past years, important investments have been made in DAF's production facilities in Eindhoven and Westerlo. These now belong to the most modern in the world and are at the forefront in the fields of quality and efficiency.

In the first quarter of 2006, DAF will start the series production of the new XF105, fitted with the new 12.9 litre PACCAR MX engine developed by DAF. This engine has been completely designed from scratch and is characterised by a combination of advanced, proven technology and a large number of technical innovations.
The production process of this engine is characterised by minimum tolerances and maximum cleanliness, to achieve the highest possible quality. With an eye on maximum reliability, a large number of pipes, for example, have been integrated into both the engine block and into the cylinder head of the MX. Engine blocks and cylinder heads are therefore placed at different angles, as required, for the many fine drilling and milling operations. In addition, no drilling or milling swarf may remain in the channels, which is why the engine blocks and cylinder heads are constantly carefully cleaned internally and externally during the process.

Maximum accuracy

Kwaliteit als centrale thema. In DAF's Here, quality is the central theme. In DAF's engine factory, employees receive standardised work instructions on screens. At those places where technology exceeds the human being in accuracy, robots are used. For example, for fitting the gasket between the engine block and the flywheel housing. Or for fixing the flywheel. The robot also takes over from humans when heavy physical work is involved. Along with the completely new fitting-out of the engine factory, high priority was also given to optimum working conditions. Engine blocks are automatically transported to each successive workstation and offered at the ideal working height. This too represents quality.

Expansion of capacity

World Class Manufacturing (see box) means that only the best is good enough. This applies not only to the engine factory, it applies to all DAF factories. Such as the Sheet metal component factory, where skilled workers use advanced welding robots, plasma cutting machines and impressive presses, etc. to produce a wide range of supports, brackets, cab and axle parts and fuel tanks. Or the Axle and Cab factory in Westerlo, Belgium. During the past year, new, hypermodern CNC-controlled machines and welding and spraying robots have been installed here to raise quality and working conditions to an even higher level. And, of course, to increase the efficiency even further, needed to be able to realise an even higher production capacity. After all, the demand for DAF trucks continues to be as high as ever.

The production line of DAF's assembly plant in Eindhoven has been extended by 50 metres for the same reason. The line process has been included within the existing infrastructure through such measures as further standardisation of the piping sets used and the assembly of cable trees, etc. This allowed a further increase in efficiency and quality.

All these innovations mean that world-class DAF trucks produced in world-class factories guarantee the customer the highest possible quality, reliability and durability.

World Class Manufacturing

DAF is aiming for 'World Class Manufacturing' (WCM), an endless race to increasingly raise quality and efficiency even further. The motto: there is always room for further improvement. Within WCM, there is a continuous effort to do everything right first time. Without unnecessary waste of energy and materials and with the best conceivable quality. Here, the input of all the employees involved is essential. After all, they are the specialists who know how their work can be done even better and more efficiently. The knowledge and skills of DAF employees forms the basis for the continuous further improvement of the processes. Thus, a world-class product is not only produced in a world-class factory, but also by world-class people.

Service Rapido 2.0

The next step in optimum service

Maximum deployability is one of DAF's spearheads for client service. The less time trucks spend in the workshop, the more money hauliers can earn with them. In a time when margins are reducing and fuel costs are constantly increasing, this is an essential condition for continuity.

In 1994 DAF introduced the 'Parts Rapido' parts system. At the time it was unique in the market and nowadays it is still highly revolutionary. This system, which runs on DVD or online via the Internet, contains all parts information of each DAF currently on the road and can be accessed immediately, without having to consult parts books for minutes at a time. At chassis level, it is possible to see precisely and immediately which parts a particular truck consists of and which software versions are used in the electronic systems present. And whoever is aware that many tens of thousands of different truck configurations are possible at DAF, can also imagine the timesaving that can be achieved with Parts Rapido. A timesaving that can be directly translated into shorter standing periods for the client when the truck is unavailable.

DAVIE XD

Truck maintenance and repair mean going beyond simply replacing parts. It is above all a question of correct diagnosis and repair quality. In this process, 'DAVIE XD', the acronym for 'DAF Vehicle Investigation Equipment, Xcellence in Diagnostics', plays a large role. This unique diagnostic and programming system, developed specifically by DAF, can check 48 different electronic systems in the vehicle, thus generating major time and cost savings.

A new era

The introduction of DAF's new XF105 also heralds a new era as far as maintenance and repair are concerned: 'Service Rapido 2.0.' A unique system, whereby repair procedures, repair times, workplace instructions, special tools, technical data and parts required have been fully integrated for the first time. Per individual truck. The era of weighty workplace and parts manuals, well-thumbed and poorly indexed, is over. A laptop with an Internet connection is sufficient.

How does Service Rapido 2.0 work

After entering the chassis number of a particular truck and the service task, the engineer is given a detailed overview with all repair steps and corresponding repair times. A work plan with illustrations is given per step, and the technical data (such as tightening torque) and any special tools required are displayed. The engineer is also given an overview of the parts required. In addition, he can see exactly what they look like on the screen. And all of that with only a few simple mouse clicks. Service Rapido 2.0 has countless benefits, both for dealers as well as clients. Thus, using Service Rapido 2.0, workshops can plan the exact length of a particular repair and prepare for it even better. In addition, dealers no longer have to maintain their paper workshop documentation with weekly updates: Service Rapido is always up to date. What's more, the work instructions are much clearer than they are on

Service Rapido 2.0, unique in the market, confirms DAF's leading position with regard to After Sales. Where clients are always, unconditionally, placed first.

The future

Developments with regard to After Sales do not stand still. In order to demonstrate this, DAF possesses an 'Electronic Dealership' in Eindhoven, which is a showcase that allows the company to show how modern information means can optimally support company operations for its dealers and the end user. To that end, the most up-to-date information technology is used, both in terms of hardware as well as software.
Thus, clients who have a smart tag (contained in the ignition key) are automatically recognised at the entrance, so that all of their personal and vehicle data is available to dealer employees immediately. All PC applications are wireless, and special barcode equipment is used for warehouse operations. However, IT does not play the main role, it supports the service provision: functionality occupies centre stage, both for clients as well as for dealers.

paper, and are aimed at the precise truck in question. All of this is highly beneficial to clients, for now they can be sure that their trucks do not spend a minute longer in the workshop than is necessary, and that the risk of any mistakes (for example, ordering the wrong parts or using incorrect tightening torques) has been reduced to zero.

Service Rapido 2.0 is now being introduced at all DAF locations and is already operational at a number of DAF dealers in England. The system will be available at all European DAF dealers at the beginning of 2006. Service Rapido 2.0, unique in the market, confirms DAF's leading position with regard to After Sales. Where clients are always, unconditionally, placed first.

Success lies in more than simply a good truck

Clients sometimes ask me about the secret of DAF's success. "Do you have a moment?", I then reply, because the answer is not that straightforward. We do of course build fantastic trucks, but that only partially explains our success, for the organisation behind the product is at least as important. A client is not only buying a good truck, primarily he is buying certainty. The certainty that his fleet can be used optimally at all times, at the lowest possible costs. Indeed, margins in the transport sector are low enough as it is…

This encapsulates the essence of DAF's After Sales objective: optimum deployability on the one hand, low costs on the other. These are not only pretty words, we work hard on them on a daily basis. With excellent, reliable products of course, but also with a wide range of services and, quite simply, unique innovations, such as Service Rapido, about which you can read more on these pages. And some of those innovations are already thirty-three years old, such as DAF International Truck Service. Often imitated, but still never equalled.

However, the true secret of the DAF organisation is the people who work there. In the factories, in the development departments, in the offices and at the over 1,000 dealers and service outlets in Europe. People who know what clients want. They have not come to know this by reading expensive reports, but by talking to clients directly. About their wishes and requirements, about daily challenges in the transport world. That is where DAF's strength lies: knowing what motivates your client. Because however good our trucks are, and however extensive our range of services is: road transport is still a question of the people involved.

Pieter de Grauw, *Directeur After Sales DAF Trucks N.V.*

Impressive constructions improve infrastructure

Infrastructure that is out of date, traffic jams and congestion do not make it any easier for logistics service providers in Europe. However, there are a large number of infrastructure examples that do provide hauliers with the desired time and efficiency gains. For example, the new viaduct near the French town of Millau, between Clermont-Ferrand and Béziers and numerous other interesting constructional works of art in development.

Text: Hans van Zwet

The tallest pylon of the viaduct at Millau is taller than the Eiffel tower. The spans between the seven pylons are 342 metres in length.

The beautiful structure – designed by the world-famous architect Sir Norman Foster – was completed on 17th December 2004 and has turned the A75 into a much more efficient route. It was therefore warmly received by transport operators who drive to or from northern Europe and the south of France or Spain. Prior to its opening, they preferred to use the A6, A7 and A9 – the route via Lyon – in order to drive from Paris to Perpignan. The traffic in the Tarn valley around Millau (where the traffic had to worm its way through narrow streets) justified this 60 kilometre detour. Since the new viaduct has been opened to traffic the route via the A10, A71 and A75 is shorter and quicker. The price is not too bad: although articulated vehicles (class 4) pay a EUR 20.31 toll for the bridge (EUR 24.20 including tax), the total journey between Paris and Perpignan has become slightly less expensive than the journey via Lyon. What is at least as important is the time gain: at least half an hour in the low season and up to as much as four hours in the high season.

Large numbers

The owner of the viaduct near Millau, the Compagnie Eiffage du Viaduct de Millau, is proud of the large numbers associated with the bridge. The spans between the seven pylons are 342 metres long. The tallest pylon is 343 metres high, thus rising above the Eiffel tower by some 21 metres. The Compagnie will own the bridge for the next 75 years. The design has been calculated for a life span of 120 years. The first sketches were made in 1987, but construction only started on 14th December 2001. The viaduct was opened to the public exactly three years and three days later. The project cost EUR 400 million.

Messina and Gibraltar

Aside from the Millau viaduct, a couple of other impressive European constructional works of art can be expected in the long term, such as a bridge over the Strait of Messina and perhaps a permanent link between Europe and Africa at the Strait of Gibraltar.
The first construction project mentioned is intended to ensure that, in 2012, the town of Calabria in southern Italy will be connected to Sicily, the largest island in the Mediterranean sea and the most densely populated Italian region: five million people live on the 25,708 square kilometre island. The capital Palermo is the fourth largest city in Italy behind Rome, Milan, Naples and Turin, but at present the island is only connected to the mainland by ferries.

3,300 metres free span

At present, the tenders of two constructors are being assessed and the Italian government closed applications for insuring the project during construction on 1st September. The bridge will have two lanes in each direction with an emergency lane, a two-track rail link and a service road. That will make the bridge 604 metres wide. Italy expects that the first vehicles will be able to drive over it in 2012. The project will cost EUR 4.6 billion. The client, Stretto di Messina S.P.A., is talking about a free span of 3,300 metres. By way of comparison, the bridge crossing the Great Belt (between Denmark and Sweden), has a free span of 1,624 metres and the Fatih Sultan Mehemed bridge, the second bridge over the Bosporus at Istanbul, has a free span of 1,090 metres. The new bridge over the Strait of Messina will also beat the current world record holder: the Akashi Kaikyo bridge dating from 1998. That has a free span of a 'mere' 1,991 metres. The two towers over which the cables will be laid, will be 382.6 metre tall, more than sixty metres taller than the Eiffel tower.

Volcanoes and terror

The anticipated life span of the bridge has been calculated at 200 years if no earthquakes registering over 7.1 on the Richter scale occur in the meantime. The bridge is built to survive earthquakes that are less powerful. This concern regarding earthquakes is not without foundation: the bridge will be built near Mount Etna, the only volcano in Europe that is still active. In addition, the dormant volcanoes Stromboli

The bridge over the Strait of Messina will have a free span of 3,300 metres and will be able to resist earthquakes measuring 7.1 on the Richter scale.

and Vesuvius are also in the vicinity. The bridge needs to be able to withstand wind speeds of 200 kilometres. The concern for security has also been extended to terror attacks by aeroplane. According to the engineers, the construction will be able to withstand those as well.

Afro tunnel

An even more futuristic project is currently still in its design phase: a connection between Africa and Europe, which is due to be completed in 2020. No official name for the project exists yet, and what's more, it has not yet been decided whether it is to be a tunnel or a bridge. At present, various studies are being assessed as to their feasibility. There is a study for a bridge, but also a study with a 'floating' tunnel that would hang 150 metres below sea level and would be fixed to the bottom of the sea. The reason for this construction has to do with the depth of the Strait of Gibraltar: at the shortest distance of thirteen kilometres it is more than six hundred metres deep, which makes it technically impossible to build a conventional tunnel. An investigation is also being carried out into the possibilities of crossing the Strait of Gibraltar to the west of the narrowest pass. There the sea is only three hundred metres deep. Then it would have to be a tunnel of 38.5 kilometres in length.

Who is to pay?

The possibility for a permanent cross-channel connection to Africa came a step closer on 12th December 2004, when King Juan Carlos of Spain and King Mohamed the Sixth of Morocco both signed an agreement for further research. It is unclear whether the EU will respond to a request for subsidy. The connection to Africa is not, unlike the connection to Sicily, included in the Trans European Network (TEN), in which the governments of the 25 member states have set out what the most important connections in Europe are. The economic activity between both continents does not apparently justify a permanent cross-channel connection yet, even if Morocco in particular thinks otherwise. As far as security is concerned, the influx of illegals plays an important role with this connection. However, first of all research needs to carried out to see whether it all is technically possible and to ascertain who is to bear the extremely high costs. The comparable tunnel under the Channel cost EUR 20 million at the time, and was thus the most expensive infrastructure project ever. So for now, people and goods will still need to cross the Strait of Gibraltar by aeroplane or by ferry.

The longest and deepest tunnels

- ***The Seikan tunnel in Japan, a rail connection between two islands, is, at 53.9 kilometres, the longest tunnel in the world. The Channel tunnel follows at 39 kilometres.***
- ***The longest car tunnel is in Norway: the Lærdal tunnel near Bergen that was completed in 2000 is 24.5 kilometres in length.***
- ***The North Cape tunnel in the north is probably the deepest tunnel: the undersea, seven kilometre road has connected the Magerøya island to the mainland since 1999 and is 212 metres below sea level.***

AdBlue's availability is growing quickly

In order to be able to meet the new Euro 4 emission requirements, almost all European truck manufacturers have opted for the SCR system (Selective Catalytic Reduction). Indeed, for Euro 5 all European truck manufacturers have opted for this system, whereby the AdBlue liquid is squirted into the exhaust gases in order to reduce nitrogen oxide emissions. Now the big question is: what is the situation with regard to AdBlue's availability?

Text: Hannah Dyson

Univar, Dureal's parent company, has concluded an agreement with Texaco.

GreenChem collaborates with Q8.

It is also possible to fill up with AdBlue at the important border post at La Junquera in Spain.

All contractors who use trucks that are fitted with the SCR system will need to know exactly where this simple but indispensable liquid can be found. Various partnerships between suppliers, distributors and retailers already exist to ensure that AdBlue will make its appearance at hundreds of petrol stations throughout Europe during the coming months, as well as on the sites of many transporter and truck stops.

Leaders in the supply of AdBlue to European clients are Air 1 (a partnership between urea producer Yara and distributor Brenntag), Univar and GreenChem. As a trial, these three companies have already installed many AdBlue tank installations at truck stops, tank depots and public sites. They are also concluding agreements with the large oil companies in order to further increase AdBlue's availability at petrol stations during the coming two to three years. Other manufacturers and distributors are aiming in the first instance at one country at a time, for example Blue Sky in Germany (a partnership between SKW Piesteritz and KRUSE Chemie KG) and BlueCat in the United Kingdom (set up by J&H Bunn). The OMV oil company will have equipped 67 of its petrol stations with AdBlue facilities by 2007, particularly in Austria, Germany and central and eastern Europe.

The wide variety in storage and supply options offered by the AdBlue distributors enables the oil companies to vary their sales strategy according to their own views on this developing market. Accordingly, Shell will have some 1,500 AdBlue points of sale at the end of the year, but will only make it available in five litre cans. The French Total company will supply AdBlue to 400 petrol stations and AS24 truck stations in Europe within three years, both in bulk as well as in cans. Towards the end of the year, Q8 will offer cans at some locations and will have placed pump systems at strategically-located petrol stations such as border crossings.

www.findadblue.com

The British Integer Research consultancy bureau launched the FindAdBlue.com website in October in collaboration with AdBlue manufacturers, distribution companies and truck manufacturers. Transport contractors and drivers can find all European AdBlue points of sale simply by clicking the mouse here.

Opzeeland's 'Dutch Connection'

DAF pioneer on the other side of the

With an area of 270,000 km², wonderful nature, a wealth of raw materials and a population of only 4 million, New Zealand is also known as the last paradise on earth. No wonder that the country attracts a large number of people who wish to build a new life there. Likewise Cor van Opzeeland, who left post-war Holland in 1952 in search of a new challenge. When he started transporting various goods, including coal, with a single truck in 1956, he could not have expected that his name would still appear on the side of trucks almost fifty years later. Trucks from his own country of birth.

His son John is now Managing Director of a medium-size New Zealand company operating in the areas of storage, distribution and packing, with a fleet of 35 vehicles and various distribution warehouses throughout the country. The company transports a wide variety of goods such as wood, food items and packing material. Opzeeland employs some 55 people, of whom 35 are drivers. The head office is in Christchurch, on the eastern side of South Island. Father Cor, who is now 79 years old, still puts in an appearance on a daily basis and regularly gets down to work.

Son John (seen here on the left) is now Managing Director of the transport company set up by his father Cor van Opzeeland in 1956.

Pioneer

When DAF entered the New Zealand market some six years ago, Opzeeland was one of its first clients. Opzeeland's 'Dutch Connection' played an important part in the purchasing process of the Dutch trucks, says John van Opzeeland: "Of course it seems to be something of a gamble to buy trucks of a make that at that time was still completely unknown in New Zealand", he says. "But the specifications were promising and our contacts in the Netherlands confirmed DAF's excellent reputation. You must also understand that various family members in the Netherlands are also involved in road transport, some of them also under the Opzeeland name."

Everything works

Now Opzeeland has 13 DAFs in its fleet, namely CF and XF types. John van Opzeeland does not attempt to hide his enthusiasm. "Everything works", he says. "The DAFs are reliable, the price is good, they are reasonably economical and the drivers love them. What's more, the sales and after sales channels are extremely well organised. The DAF importer, Southpac Trucks, has a large number of service locations throughout the country and the communication lines are short, including those with the factory in Eindhoven. Questions we ask DAF are always answered quickly. It is as if they are right next door."

world

Four axles

The New Zealand traffic picture is dominated by a high percentage of four-axle rigid vehicles, which often have a four-axle trailer. The total length of the combination then measures twenty metres, for a GVW of 45 tonnes. All of this stems from national legislation, to John van Opzeeland's frustration: "The government is of the opinion that combinations above 39 tonnes must be fitted with eight axles and the truck with a tandem drive, i.e.: 8x4 or 6x4. Only in this manner would a driver be able to cope with conditions on the New Zealand roads", he says. "However, a modern two-axle truck with three-axle trailer can cope extremely well in New Zealand. So now we have a great deal of extra weight, less loading capacity and extra fuel costs."

Flexible deployment

The Opzeeland DAFs are used for long as well as short journeys. John calls road conditions in New Zealand "challenging for trucks": the country is extremely mountainous and the climate is very changeable. The Opzeeland DAFs drive between 75,000 and 175,000 kilometres per year. The CFs are mainly used on South Island. "The CF drivers set off at the end of the day and stop after a couple of hundred kilometres for their overnight stay. They often do that in driver hotels", says John. "The XFs with Space Cab are mostly used for transport to North Island. Those drivers are often on the road for three to four days and sleep in their truck. As far as space and comfort is concerned, the XF cabin is the standard. The drivers are very enthusiastic about it. The trucks arrive from the factory just as I want them. The dealer and I hardly need to change anything to them and that is a big advantage. It saves money and the trucks can be deployed more quickly upon their arrival from the Netherlands."

Small scale

"The New Zealand economy is small scale in nature", says John van Opzeeland. "That means that trucks have to be very flexible in order to transport a wide range of different goods. 'Anything, anytime' is the transport motto here. Our DAFs are highly suitable for this, in particular due their own low weight."

C510 Twin Steer heaviest Kenworth ever built

Kenworth Australia recently introduced the C510 Twin Steer, a workhorse driven on three axles for very heavy transports both on and off-road. It is the largest Kenworth that has ever been built and the largest truck still possible under Australian legislation.

The truck, developed in collaboration with Brambles Industrial Services, will be used in the mining and forestry industry, as well as for very heavy transport.

The exceptional Kenworth is suitable for GVWs up to 200 tonnes and has a 600 hp, 19 litre QSK19 Cummins engine. The C510 is fitted with two steered front axles and three driven rear axles. Development, production and homologation only took twelve months.

Industry Week Magazine: "PACCAR leading manufacturer".

PACCAR Inc, DAF Trucks N.V.'s parent company, was recently hailed by the authoritative American trade magazine 'Industry Week' as one of the fifty best manufacturers in the United States. "It is an honour for PACCAR to be able to share this recognition with companies such as Dell, Johnson & Johnson, Chevron and 3M", said Mark C. Pigott, Chairman and Chief Executive Officer. "In the year in which PACCAR is celebrating its hundredth anniversary, this recognition reflects the drive for innovation and the dedication of PACCAR employees worldwide."

To select the fifty best-performing companies, not only did Industry Week evaluate the growth in turnover, profit margins and return on assets, but it also looked at turnaround speeds for stock during the past three years.

"PACCAR's worldwide diversification has been essential for the continuous growth of its turnover and profits", remarked vice chairman Mike Tembreull. "In 2004 more than 50% of PACCAR's income was generated outside the United States. During the last ten years, PACCAR achieved annual profit growth of 16%, against 7% for the Standard & Poor's 500 Index, the list of best performing companies. PACCAR's return on capital and reserves averaged 21.5% during the past three years. In 2004 it was 27.9%."

PACCAR Foundation Europe supports research laboratory

Professor Alex Markham, director of Cancer Research UK, was full of praise about the "exceptional generosity" of the PACCAR Foundation Europe, due to its donation of £250,000 for a new cancer research laboratory in Manchester.

A laboratory of the Paterson Institute for Cancer Research will be extended and modernised. The laboratory, subsidised by Cancer Research UK, will be renamed as PACCAR Laboratory, to show appreciation for the donation.

PACCAR's Chairman and Chief Executive Officer Mark Pigott said: "The PACCAR Foundation is extremely happy to be able to contribute to Cancer Research UK's important scientific and clinical studies. Its progressive medical research is essential for improved diagnosis and hopefully a cure for this terrible disease. We admire Cancer Research UK's leading position and its proactive initiatives as far as fundraising for improving its laboratory is concerned."

Construction work at the PACCAR Laboratory has already started. It is to be ready in January 2006. The main field of work for the researchers in the new lab will primarily relate to the application of scientific discoveries to practical treatment methods for cancer patients.

250.000th Kenworth from Chillicothe

Production of the 250,000th truck was recently celebrated in the Kenworth assembly plant in Chillicothe (Ohio). The keys of this truck (a Kenworth T600) were handed over to Jon Vinje, director of Halvor Lines, a transport company possessing a fleet of 235 Kenworth trucks.
The factory in Chillicothe was opened in 1974 and is Kenworth's largest production facility. In addition to the T600, the W900, T800 and T2000 models are also built there.

From left to right: Scott Blue, Kenworth factory manager; Bill Kozek, Kenworth general sales; Jon Vinje, Director Halvor Lines; Larry Soule, general sales manager from dealer Rihm Kenworth.

DAF's first truck engines

DAF has been developing and manufacturing its own engines for almost fifty years already. During that time, the company has built up an excellent reputation as far as durability, reliability, fuel economy and low emission values are concerned.

When DAF introduced its first chassis to the press in 1948 they were fitted with 4.62 litre American Hercules petrol engines and an output of 102 hp. One year later customers were also able to choose from various Hercules and Perkins diesel engines. DAF did not build engines itself, and that was a conscious choice. The investments required for developing and building engines proved to be too high in the meagre post-war years, and DAF wished to concentrate on building good chassis and front and rear axles first. However, DAF had large-scale ambitions and it was already clear at that time that DAF would supply its own engines at a later stage.

With the fast increase in road traffic, a market need developed for engines with a higher output, and in the mid nineteen-fifties it became clear that the Hercules and Perkins engines, which by now had become outdated, were due for replacement. At the end of 1955 DAF reached an agreement with Leyland, where the British manufacturer would, for the time being, act as engine supplier, while DAF was given the right to build its own engine by licence when the new engine hall, which was to be built, was ready. The construction of the engine factory, adjacent to the existing truck factory, started in January 1956. All steel constructions for this new build were made by DAF itself; it was of course originally a steel construction company.

Engine factory

The new engine factory was opened to great fanfare as early as November 1957, at the same place where DAF's engine factory is still located. That is where construction of DAF's first engine commenced: the D575 type, which was in fact the licensed version of the Leyland O.350. The D575 had direct injection and a 5.76 litre cylinder output. The output was 120 SAE hp at 2,400 rpm. The engine was also built as an industrial engine and as a ship's engine. Within a short period of time the D575 gained an excellent reputation and it was obvious that this type was not the end of it all. At the beginning of 1959, DAF introduced four new engines that were derived from the D575: two petrol engines of 135 and 155 hp, a smaller diesel version of 100 hp and the DS575 type with no less than 165 hp. In order to achieve this high horsepower, the DAF developers used pressure filling for the DS575 by means of an exhaust gas turbo. Consequently, DAF was one of the very first truck manufacturers in the world who brought a turbo engine onto the market. This was the beginning of DAF as a leader in engine technology, a reputation that continues right through to today and that is further enhanced by the introduction of the PACCAR MX engine.

DAF's engine production in 1957 (left) and DAF's engine production in 2005: a world of difference.

DAF and PACCAR Financial: dedicated to transport

Investing in vehicles is an expensive and complex business decision. You are making choices which will directly affect the success of your business. PACCAR Financial offers a full range of financial products that can help provide real benefits to your business.

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