

Valtra Team

CUSTOMER MAGAZINE 2 2011

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EDITORIAL



As we come to the close of 2011 I'm delighted to report that in the UK and Ireland sales volumes are up on previous years and, much to our delight at Valtra, up on our expectations; particularly T Series. The reason behind this move appears to be the growing awareness in the farming population that our Direct (CVT) and Versu (5 speed power shift) transmissions are indeed excellent; ideal for all UK and Irish conditions. In Ireland, where conditions have been difficult to say the least, sales have passed all our predictions which does credit to our dealers, their staff and of course our own team.

What of the future? Valtra Team is published to coincide with Agritechnica in November where the latest N3 models will be introduced to run alongside their T3 counterparts. Both will be at LAMMA in early 2012. Also, 2012 will see the return of our popular Roadshows – The Valtra Experience; we will be touring the UK and Ireland from February until the end of April. This will be your chance to learn more about N3 and T3 Models and take a test drive. To learn more about the Roadshows keep in touch with your Valtra dealer or keep an eye on our web site: www.valtra.co.uk Remember, there's a lot more to our web site than details of forthcoming events so it's worth clicking on from time to time.

There's a lot of exciting developments coming to fruition at Valtra. I hope we can show them to you in the coming months.

Mark Broom

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SCR technology offers fuel savings.



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03



Most powerful four-cylinder tractor

Innovation

New engine and redesigned nose for **THE N SERIES**

The Valtra N Series will get new SCR engines at the start of next year. At the same time the front of the chassis has been redesigned and the nose gets a new look.

SCR engine technology reduces fuel consumption by 5 to 10 percent, resulting in net savings of approximately 5 percent when the cost of the AdBlue urea-water solution is taken into consideration. In addition, the SCR system extends the engine life, reduces the need for engine cooling and helps save the environment.

The front of the chassis has been redesigned to allow the front tyres to turn more, reducing the turning radius considerably. The integrated front linkage and front loader make the N Series even more agile than before. New driving lights also improve safety when driving in low visibility.

- Driving lights with long and short beams
- Greater steering angle
- Integrated front linkage and front loader
- Excellent visibility
- Up to 171 horsepower with boost

News



Valtra makes further investments in individual customer service

In the past five years Valtra has invested over 50 million euros in product development projects. As a result, Valtra's model line-up has in practice been completely renewed – and this trend is continuing. The latest tractors are just a taste of all the new models that will further renew Valtra's model line-up in the coming years.

The Suolahti factory has been modernised in recent years with investments worth tens of millions of euros. A new 23-million-euro investment is currently being planned for building a new paint shop and modernising the start of the assembly line. New production systems will further improve productivity, which will shorten waiting times and enhance cost efficiency. The modernised factory will allow Valtra to serve customers on an even more individual basis; for example, a wider range of forest equipment can be factory fitted.

AGCO is also investing in its ERP and IT systems, as well as work methods. Valtra's Suolahti factory is serving as a pioneer in this project. Approximately 100 people have been working full time over the past 18 months with this project at Suolahti. This investment of over 20 million euros is aimed at improving productivity at Valtra and further developing co-operation within the AGCO corporation.

These major investments will be manifested for farmers and contractors in the coming years in improved service and the possibility to specify even more precisely the tractors they need for their own work. Valtra has manufactured tractors solely on the basis of individual customer orders for over 20 years, and the new investments will further increase Valtra's lead over competitors.

NEW GENERATION OF THE S SERIES

The S Series has now entered its third generation, as denoted by the last number in the model designation. The new models are the S233, S263, S293, S323 and S353.

The SCR engines on the new models use the AdBlue urea-water solution, which is sprayed into the exhaust to clean emissions more effectively in the catalytic converter. The torque ratings of the new models have also been increased, while cab noise has been reduced to 70 decibels. The new 630-litre fuel tank increases range, while the volume of the AdBlue tank has been increased to 60 litres.

The new catalytic converters are situated inside the exhaust pipe, which has a new oval design to improve visibility. The S353 and S323 models come as standard with a heavy-duty front axle, which is also optionally available on smaller S Series models.

VALTRA IS THE OFFICIAL TRACTOR OF SANTA CLAUS

Valtra has become the official tractor of Santa Claus. The Santa Claus theme will be introduced to Valtra's tractors and marketing activities during the coming Christmas season. Like Valtra, Santa Claus is a native of Finland.



Internet: valtra.co.uk

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Valtra is a worldwide brand of AGCO



Elenthorpe Lady Emma in all her finery – just think of the polishing!



John chooses to spend his days in a Valtra – 'they're comfortable and reliable.'

Valtra – the best features

SAYS ISLE OF MAN STOCKMAN

TEXT AND PHOTOS ROGER THOMAS

John and **Margaret** farm some 80 acres of sandy loam in the north of the Isle of Man. A livestock farm, the land is mostly down to grass with some whole-crop oats and grass for baled silage. John, a Manx Man, has spent most of his life on the Island, "I did have a spell on Anglesey running a dairy herd but most of my life has been spent here," he comments. "I add to the farm's income by supplying contracting services to farmers in this area, mostly ploughing and silage making – mowing, baling, wrapping and carting." John and Margaret's livestock enterprises are a little unusual, they specialise in pedigree stock: Shire Horses and Shorthorn Cattle and with a good yearling Shire fetching between £1,000 and £25,000 it's easy to see why John and Margaret spend so much time preparing for shows during the season. Do they show both cattle and horses? John raises

an eyebrow, "the horses take all our time." They do however advertise their Shorthorn breeding stock and find a ready market for both bulls and heifers.

At the 2011 Royal Manx Show John came close to sweeping the board in the heavy horse section. Judge and Shire expert Mr A. J. Wass commented that John's five year old mare Faradale Honey was 'as near perfect as any he'd seen'. John came away with the Heavy Horse Supreme Championship. His mare Ellenthorpe Lady Emma took the harness prize and mother and daughter scooped the best pair prize.

So, with an eye for good livestock what does John prefer to drive? "Since 1998 it's been Valmet and then Valtra." John explains, "We visited the Great Yorkshire Show and I saw my first Valmet. Understandably the Yorkshire dealer was reluctant to supply a machine – the only



John's Shorthorn stock bull.

one – onto an island on the other side of the country." John phoned Valtra and spoke to **Mike Richmond** and the rest, as they say, is history. "Mike arranged a demonstration of an 8050 which I bought. That was followed by a 6550, an M series, T130, T141 and a T151 – which is awaiting replacement by a second T151." With no Valtra dealer on the Island, sales are handled through John Bownes Ltd of Winsford in Cheshire with servicing undertaken by local man **Paul Crawley**; a system that works well for the increasing number Isle of Man Valtra owners. "Mike Richmond from Bownes does a good job – crosses the Ts and dots the Is – you get what you want," maintains John. "Paul is good too; not that he gets a lot to do, Valtras are reliable." •

SCR technology

SAVE THOUSANDS OF EUROS A YEAR

How does a thousand or even two thousand euros in extra cash every year sound? These amounts are easily achievable in terms of fuel savings thanks to the latest Selective Catalytic Reduction (SCR) technology.

TEXT TOMMI PITENIUS PHOTOS VALTRA





Experience with SCR technology has been gathered in both practical work and testing. Tests have been carried out by independent research institutes, by engine manufacturer AGCO Sisu Power and in-house at Valtra too. The test results vary according to tasks and conditions. At best, the fuel consumption of Valtra tractors equipped with SCR technology has been about 20 percent lower than competitors. Averaged over the different conditions, it can be said that SCR technology offers fuel savings of at least 5 to 10 percent compared to tractors without SCR technology.

Fuel consumption comparisons must take into account the consumption of AdBlue. In engines that comply with 3B emissions requirements, the consumption of the urea-water solution is slightly higher than with less advanced engines. The consumption of AdBlue is typically 3 to 5 percent of the amount of fuel. Consumption is higher in hot conditions and under high loads. When driving for short distances in the Scandinavian winter, very little AdBlue is consumed. ➔

According to the calculations, the Valtra T203 saves around a euro per hour compared to the T202.

Typical savings around 1000–2000 euros

Together with the TTS Work Efficiency Institute, Valtra has developed a fuel consumption calculator to compare fuel consumption between the second-generation T202 and third-generation T203 models. The calculation is based on the amount of work in hours or hectares and the cost of fuel and AdBlue.

“These calculations provide us with the specific consumption curves for five different types of tasks. The work consumption calculation is based on the amount of work performed on two hectares. Naturally, work efficiency is higher on bigger fields, which should be taken account if you cultivate a lot of land,” says **Veli-Matti Tuure**, Director of the TTS Work Efficiency Institute.

According to the calculations, the Valtra T203 saves around a euro per hour compared to the T202. The heavier the work, the higher the savings. Accordingly, if the tractor is used for a thousand hours a year, the savings amount to around a thousand euros, and if the tractor is used for 2000 hours, the savings add up to around 2000 euros. The savings are even higher if the farm or contractor runs a fleet of several tractors. If the tractors are in heavy use throughout the year, SCR technology can potentially save tens of thousands of euros a year. •



New SCR models in the T Series

The line-up of SCR models in Valtra's T Series range has been expanded to include the T133 and T153 powered by the 6.6-litre AGCO Sisu Power engine and the T163, T173 and T193 models powered by a 7.4-litre engine. The T163 models also feature an EcoPower switch that allows the drive to select between Eco and Power modes. The new tractor models offer even more power and torque.

SCR engine technology reduces fuel consumption by approximately 5–10 percent. In addition, the particulate and nitrogen oxide emissions are reduced to a fraction compared to the previous technology. Tractor users also benefit from the fact that the SCR technology reduces the need for engine cooling and keeps the lubrication oil cleaner, which extends the engine life.

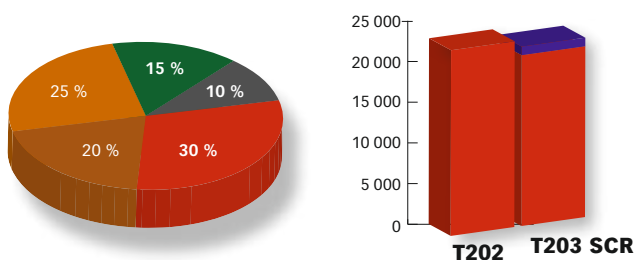
Valtra has years of experience with SCR technology. The Valtra S Series introduced in 2008 was the first agricultural tractor in the world to feature SCR technology. For tractor users SCR technology is simple, as electronics take care of the system. The driver's only task is to fill the AdBlue tank. •



FUEL SAVINGS with SCR technology

ANNUAL WORK	H/A	HA/A
Heavy pulling work	300	939.8
Medium pulling work	200	1 102.1
Light pulling work	250	677.1
Medium PTO work	150	256.5
Transfers	100	
TOTAL	1 000	

DISTRIBUTION OF WORKING HOURS



FUEL COST

Fuel cost, €/l	0.90
AdBlue cost, €/l	0.60

Annual consumption (l/year)

	T202	T203 SCR	Difference
Diesel	23 744.9	21 845.1	1 899.8
AdBlue		1 092.3	1 092.3

Annual cost savings

1 054 € (4.9 %)

Using AdBlue is simple

TEXT ASTRID ZOLLIKOEFER

At the Hohenroth farm in Germany, Valtra tractors are put to heavy use. In addition to three Valtra S Series tractors, both a T190 and an N142D are employed on the farm. The S Series tractors all feature SCR engine technology from AGCO Sisu Power, which together with the AdBlue urea-water solution ensures that tractors comply with the most stringent emissions standards.

Bernd Grom, who runs the farm, stores his 1.000-litre AdBlue container in his warehouse so that it remains frost-free during the winter. "The AdBlue is replenished every day when the tractors are refueled to ensure that the amount available in the tractor is always sufficient, even when carrying out heavy work," Grom reports.

The farmer thanks Valtra for preventing the mixing of AdBlue and diesel by accident. "It is a good thing that diesel fuelling nozzles don't fit in the AdBlue tank, otherwise it could be possible to accidentally fill the urea tank with diesel. Fortunately, at Valtra such mistakes are prevented in the first place."

Despite the need for a second tank for AdBlue at the refueling area, Grom confirms that "using the new technology is simple!" •



The driver's elevated position provides good views down banks.

VALTRA ON TRACK

TEXT AND PHOTOS ROGER THOMAS

The railway track, sometimes known as 'the road' suffers from encroachment of trees and bushes in much the same way as any country lane or dual carriageway. Specialist contractor Trac Engineering Ltd., a division of Trac International has recognised this niche area and commissioned a pair of 160 hp Valtra N121 TwinTrac tractors fitted with high ride rail equipment from Rexquote Ltd. A front mounted PTO powered Vandaele chipper and a rear mounted 7 metre reach Noremat mulcher complete the equipment and while the mulcher and chipper are pretty much standard pieces of kit that is where any similarity to any agricultural or highways operation ends. Expensive certification is necessary to ensure the unit is safe and, importantly, operates within the rail system's loading gauges; will fit under bridg-

es, overhead wires and beside platforms. Remember standards vary between metros and the Network Rail system which themselves can have network or regional variations.

Trac's Valtras are normally operated by three men teams plus a Network Rail safety officer but gaining access to the track is not simply a case of turning up. With the job priced and agreed there is then the small matter of arranging for line closure and then occupation by the team. Remember, very few parts of the rail system operate in isolation; restrictions in one area can have knock-on effects to both passenger and freight services many miles away. As a result much of the work is undertaken at night, weekends and, where possible, in conjunction with other engineering works. With the occupation period agreed the team and equipment gather at a suitable access point, safety procedures

and certifications for both men and machines are checked by the Network Rail representative and the closure confirmed. Only then can the tractor drive onto the track.

Once in position the rail wheels lowered until they are tucked under the road wheels and then, most importantly, the steering is locked using a pair of hydraulic valves. With the tyres pressing on the flanged rail wheels travel is simply a matter of selecting a suitable gear but, to travel forward the driver has to engage reverse; the equivalent of another gear has been inserted into the drive system. It's most odd seeing the tractor travelling forward with the wheels revolving in the wrong direction.

Part of the rail operators' machine certification system establishes speeds at which the tractors can travel on rails. In the case of the Valtras its 20mph forward,



↑↑ While the mulcher controls will be familiar to most operators.

↑ Standard hydraulics are used to operate rail axles and front linkage.

↑ Farm crossings make ideal access points and with rail wheels down and steering locked its ready for off.

➔ Working restrictions and operational certification.



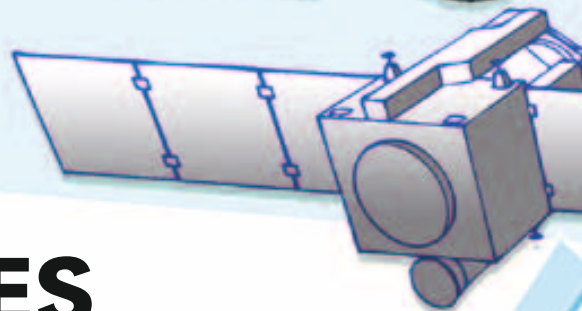
10mph in reverse and 5 mph over track points. In urban areas access points can be few and far apart but rural areas are easier with farm crossings a favourite. As a result it can be a long way to the work area and a long way back or to a suitable point where the tractor can cross from one set of tracks to another to work on the other side of the easement. With track re-opening set in stone, time is a valuable and with TwinTrac fitted Valtra machines can travel forwards in both directions, saving some of that valuable commodity.

So why use a tractor? Network Rail has other machines available, one alternative being the wheeled 360° excavator popularly known as a rubber duck. These are used extensively for various materials handling and excavation duties and, with the appropriate attachment, may be used for mulching line-side vegetation. However, their very design means the boom cannot operate while travelling; it's not a clever combination when working on excavations as accidental move-

ment could result in bent or broken booms. Mulching in a stationary arc efficiently requires a greater level of control and can lead to wood chippings being deposited on the track at an unacceptably high level. With time the important factor the machine's stop/start progress can also be rather slow. Conversely, the tractor is specifically designed to allow the hydraulic system to operate during travel. With the Valtra's smooth shuttle a practiced operator can mulch line-side scrub up to the machines full reach quickly and easily, should trees be too large for the mulcher they can be quickly delt with by the Trac team and a chain saw before being chipped with the chippings blown clear of the track onto the bank.

With the work complete leaving the track is as simple as arriving; travel to the designated point, lift the rail wheels and drive off. If the next job is relatively close the Valtra can travel quickly and simply on its own wheels otherwise it's onto a truck and away. •





TELEMETRY MAKES WORK MORE PRODUCTIVE

Valtra's S, T and N models are available with AGCOMMAND telemetry designed and patented by parent company AGCO. The system improves productivity by means of measuring, monitoring and reporting. It also allows the tractor's location, work hours, functions and possibly even other functions in the future to be monitored in real time over the internet.

TEXT PANU KANTOSALO ILLUSTRATION KALLE TALONEN

The advantages of telemetry include monitoring logistics and tasks on large farms or contracting jobs, especially when multiple tractors are involved. In addition, the system can be used to ensure access to the right work area and the intended tasks at the site.

AGCOMMAND can be accessed by the internet from any location and at any time of day. The system also stores data, making it easy to monitor working hours, for example. This information can also be utilised by contractors to invoice their customers.

"Telemetry can improve safety, efficiency and economy. At the same time, it makes managing tasks easier, and servicing schedules can

be optimised. The system can also be utilised in logistics, reporting and planning," says **Lasse Kauranen**, an R&D expert at Valtra.

To illustrate the versatile uses of AGCOMMAND telemetry, one can consider a modern and large-sized farm that uses numerous tractors. The system allows the farmer to monitor in real time where the machines are, what they are doing or what they have already done. The farmer can also choose to let the system notify the Valtra service centre directly about maintenance requirements or any faults so that a service technician can pay a visit with the correct parts. The telemetry can also instruct drivers and manage other resources for the intended tasks. •

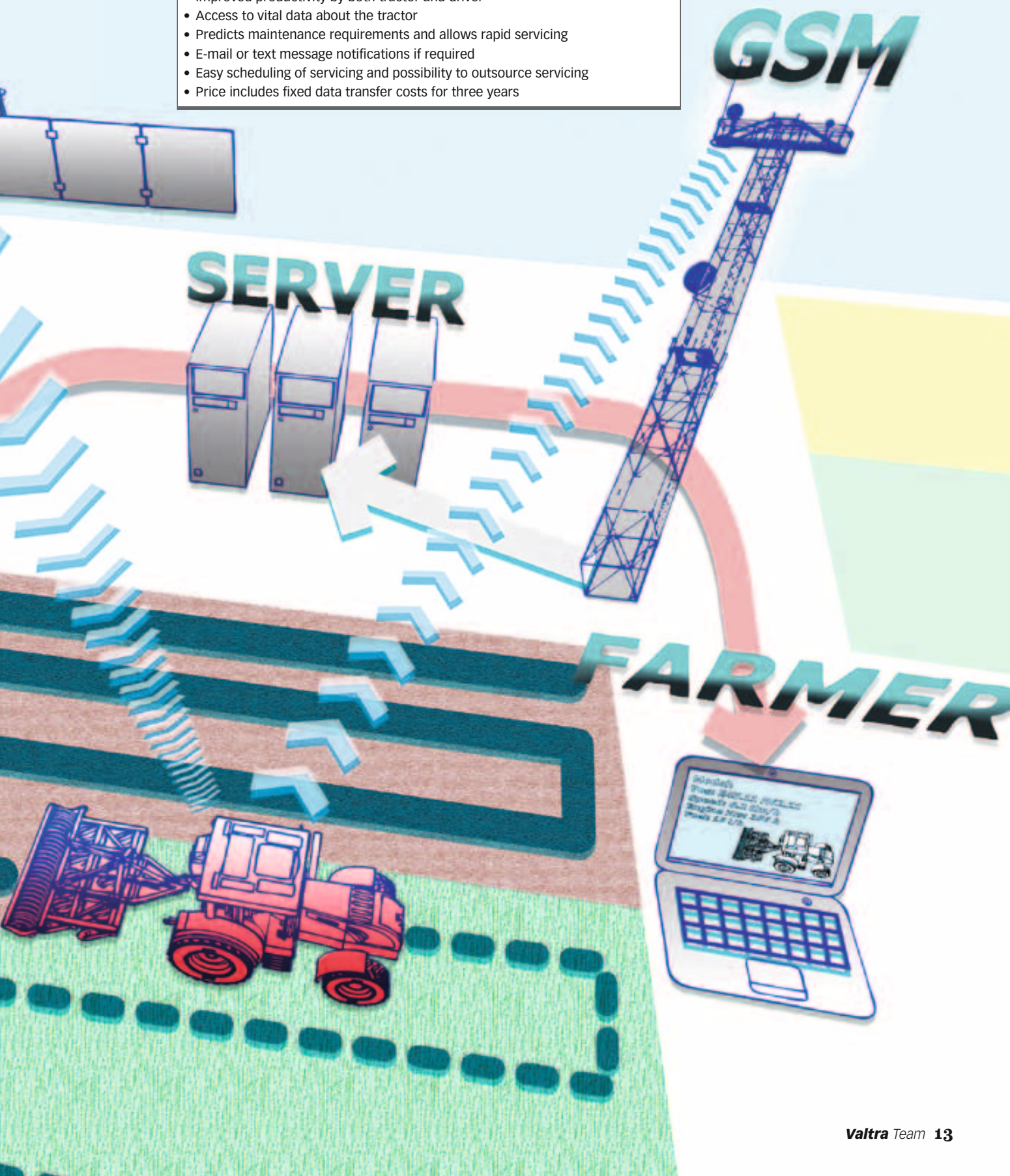
VALTRA
SERVICE



"Telemetry can improve safety, efficiency and economy."

ADVANTAGES OF AGCOMMAND TELEMETRY:

- Real-time remote monitoring of the tractor
- Automatic data storage
- Improved productivity by both tractor and driver
- Access to vital data about the tractor
- Predicts maintenance requirements and allows rapid servicing
- E-mail or text message notifications if required
- Easy scheduling of servicing and possibility to outsource servicing
- Price includes fixed data transfer costs for three years





AdBlue and SCR

SIMPLE AND ECONOMICAL

TEXT PANU KANTOSALO PHOTOS VALTRA ARCHIVE

The Selective Catalytic Reduction (SCR) system is used in new low-emissions Tier 3B engines, such as those in the Valtra S Series and new T and N Series tractors, to spray a urea-water solution into the exhaust gases. This reduces nitrogen oxide emissions by up to 80 percent while improving fuel economy by 5 to 10 percent.

The urea-water solution is sold by oil companies under the brand names AdBlue, Air1 or DEF. The solution should be stored in a warm place, as it congeals at -11° Celsius. However, it can still be used normally after reheating. Care should also be taken to prevent impurities from entering the SCR system when filling up with the urea-water solution.

Use of the urea-water solution improves the thermal efficiency of the engine, optimising the combustion process and maximising output without increasing emissions.

The urea-water solution is often

incorrectly referred to as a fuel additive. In fact, it never comes into contact with the fuel but instead is sprayed under high pressure into the exhaust system.

Consumption of the urea-water solution is generally 3 to 5 percent

of diesel consumption, so it is not necessary to fill up with AdBlue every time the engine is tanked. However, it should be noted that consumption varies considerably according to how the tractor is used and temperature conditions. •



Adding of AdBlue is as easy as refuelling of diesel or adding washing fluid.

ADBLUE UREA SOLUTION

- 67.5 % water and 32.5 % urea
- Harmless, colourless and odourless pH 9–9.5
- Converts nitrogen oxide in the exhaust into water and nitrogen gas
- Converts into ammonia at temperatures above 200° Celsius
- Congeals at -11° Celsius
- Reduces smoke and soot in the lubrication oil
- Reduces fuel consumption by 5–10 %
- Brand names include AdBlue and Air1
- Available in bulk quantities of 1000, 200, 30, 15 and 10 litres
- Distributed by oil companies
- Can be stored unopened for over a year



With TwinTrac the tractor can be positioned safely; that large branch falls away from the machine.



Bob Staley and son Kevin both enjoy driving Valtra TwinTrac – but initially it took some getting used to!

CONTRACTOR RELIES ON VALTRA

TEXT AND PHOTOS ROGER THOMAS

Some years ago he was invited to a product demonstration run by a leading machinery manufacturer, “Amongst the hedge cutting equipment on display was a machine adapted to work with Valtra’s TwinTrac. “There was something about it that looked right so, I arranged for the combination to come to me for a trial,” **Bob Staley** recalls. “True, it took some getting used to. But, once I got the hang of it, it was wonderful.” As a result of his experiences with the demonstration unit Bob ordered a Valtra T Series with TwinTrac and a hedge trimmer designed to work with the tractor in reverse. When it arrived Bob’s son **Kevin** had much the same experience. “At first he didn’t like it,” Bob recalls. “Insisted on staying with the older machine with standard drive, then, one day he had to drive my tractor – and he was hooked. Said if he didn’t get one then he’d go work somewhere else!”

All that was some years ago and those machines put in a lot of hours on the roads, lanes and woodlands along the Welsh border. As a result,

in 2010, Bob took the decision to swap his two older tractors for three new Valtra N111s; business had grown. “We’d expanded the business by specialising in cutting back overgrown hedges; two of the three machines purchased from South Wales Valtra dealer, David Evans Agricultural Ltd. in the Vale of Glamorgan, can be fitted with circular saw heads that have a seven foot cut. Bob and his team feel Valtra’s TwinTrac system is ideal for hedge trimming and restoration.

“It’s very easy to see exactly what’s going on and, importantly, the cut timber falls away from the tractor. I believe Valtra with TwinTrac is much safer than a similar rig on a standard tractor.” Bob’s new N111s are all fitted with forestry cabs and roof guarding, “The extra vision through the transparent roof panel also helps when we’re using the saw up high, we don’t have to keep bending our neck uncomfortably – that’s tiring.” The TwinTrac system is also useful when trimming up hedges on steeply sloping ground; simply reverse down to the hedge and swing

the trimmer arm left and right to cut the hedge. Drive up the hill and reverse down the slope a bit further along and repeat the process. “Much safer than driving across steeply sloping and often uneven ground.”

Bob’s machines also have 50 kph transmissions and front suspension. “We’ve built up quite a clientele round the countryside – purely by word of mouth of land owners needing overgrown hedges cutting back and we travel over quite a large area; Cowbridge in South Wales to Droitwich in the West Midlands. The 50 kph and front suspension is ideal for travelling between jobs.” But Bob does use a truck for longer distances. “It’s quicker, cheaper, more convenient, and helps reduce the time at a particular site, reducing the number of long journeys at the start and end of each day.” One final point, if you’re travelling in Bob’s area of operation you’ll recognise his tractors; they’re the ones with wider tyres on one side. “They’re heavier, hold more ballast and improve stability, especially when working at full reach.” •



T202 Direct in full wood
chipping action.

T-Series in cosmetics industry

ABIESSENCE

– THE VERY ESSENCE OF NATURE!



How do you produce a product that is 100 % natural while maintaining the integrity of the raw materials and creating jobs in a mountainous region? Since 1999, the French company Abies-sence has successfully found the answer to this equation.

TEXT AND PHOTOS SYLVAIN MISLANGHE

Founded by brothers **Joël** and **Emmanuel Ruiz** to produce essential oils Abies-sence makes use of the trees of Monts du Forez, taking an eco-friendly approach to production. Joël is very clear on his production ambitions:

“Our philosophy is to create natural products. One tree equals nine sub-products with no waste!”

The production of essential oils is based on the simple idea of harvesting 100 % organic certified conifers and aromatic plants, which are then chipped and distilled in a 1000-litre vat using woodchips as a renewable fuel. No less than seven types of conifers are distilled in the production of essential oils, including pines, firs, spruces, cedars and junipers, but also lavender, thyme, savory and wild mountain plants picked by hand. It takes an average of 500 kilos of conifer branches to produce one litre of essential oils after distillation. ➔



Creating a care product in the laboratory.



Joël Ruiz with some of his best-selling Abiessence products.

From cosmetics industry to preventing mastitis

Abiessence has a catalogue of more than 100 products that are sold in France and in neighbouring countries, such as the Benelux markets, Italy and Germany. The company's products are mainly sold through retailers and a lesser number are sold via the website and a shop located at the factory. Part of the essential oils production process is used by the cosmetics industry. In these circumstances, Abiessence steps in as a certified subcontractor. New opportunities are always emerging; some unexpected.

"Several years ago, cattle farmers started treating their cattle with essential oils to prevent mastitis. What's more, the large up-market restaurants use oils in their dishes,"

Looking after human resources with tractors

According to Joël manpower is Abiessence's main asset. To protect this human capital, Abiessence has invested in up-to-date and reliable equipment with the latest innovations in comfort:

"For me, comfort when working is important for all employees; that is why we have swapped our old tractors for new Valtra tractors."

Tractors have been used since

the beginning of Abiessence to harvest and transport the conifers. The first Valtra, a second-hand 6400, was purchased in 2003 and was successfully used with a forestry trailer for a number of years.

"Valtra was not well known among tractor drivers in the sector, but the image of forestry machines and Scandinavia played a part in our purchasing decision. The 6400 has a reverse-drive system with swivel seat, and we liked its versatility both in the forest and on the road."

New Ts increase productivity and comfort

When the time came to replace the 6400, the Abiessence team quickly opted to put their trust in Valtra. Abiessence now has two new Valtra T Series tractors, a T202 Direct and a T162 Versu. Both tractors are fitted with a reinforced industrial PTO to give maximum power to the rear implements.

"I wanted the Versu for transport and the Direct for chipping and working in the forest. Having both types of transmission seemed like a good option to me."

According to Joël Ruiz, the T202D increases chipping productivity by 10 % to 30 % because the driver does not have to adjust any-

thing; the tractor continually manages its own adjustments according to the log diameter.

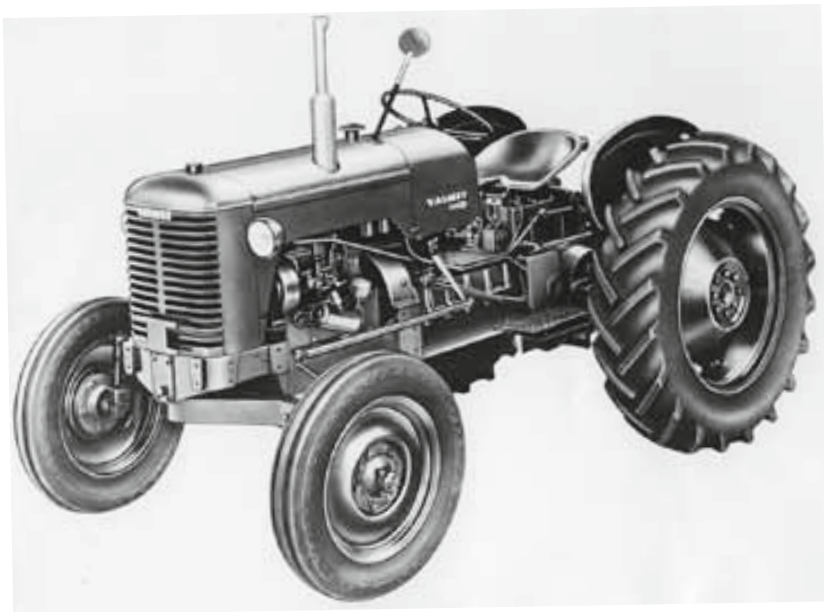
"In my opinion, Valtra tractors are very good in terms of comfort. Visibility is important when it comes to safety in wood chipping. They are versatile because they can be used in the reverse station position and for other functions, such as transport."

The reasonable fuel consumption finally convinced Joël; all the more so because the two Valtra tractors will do approximately 700 hours in 2011 and eventually 1000 hours per year. According to three different operators, who work with the tractors on a daily basis, visibility and comfort in the cab is excellent. Tractors are easy to handle with a good steering angle. The transmission on the road and the engine brake are also complimented.

Valtras will be part of Abiessence's future too

"Each tractor is renewed every three years; my next one will be grey because my father says that it is the most serious colour! The meeting has already been set for 2014 to take a look at the colour of the next Valtra tractors." •

www.abiessence.com



The Valmet 359D was an improved version of the Valmet 33D. The front frame was a single cast component and hydraulic oil was stored separately in a tank by the top of the steps.

Valmet 359D – THE IMPROVED DIESEL MODEL

The 33D was the first diesel-powered Valmet tractor. Unveiled in 1956, it entered production in 1957. Altogether 1537 units were manufactured until its replacement, the 359D, was introduced in 1959. The new model featured a wide range of improvements. The 359D was still powered by the Valmet 309D engine, producing 37 horsepower from 2.7 litres. The engine was nevertheless reinforced, increasing the weight from 1700 to 1790 kilos. Whereas the heat and oil pressure gauges had been located under the engine cover on the 33D, on the new model they were moved to the dashboard. The large and easy-to-read gauges were manufactured by Valmet's instrument factory.

The hydraulics were also improved, with the pump placed directly at the front end of the crankshaft. In addition, separate oil containers

were introduced for the hydraulics, making it possible to use a more flexible grade of oil in wintertime. This feature has been preserved right up to the Valtra A2 Series.

The gear lever on both the Valmet 33D and 359D may have surprised some unsuspecting drivers. Instead of an H pattern, there were positions for forward, neutral and reverse. The gear knob was T-shaped, and first gear was engaged by rotating the lever to the left and pushing forward. Similarly, reverse was activated by pulling backwards. When in neutral, second gear was engaged by rotating the knob the other way and pushing forward or backwards for reverse. The range gear lever was alongside, giving a total of 6+2R speeds.

Valmet exports to China began in August 1958 and to Brazil the following year. The Brazilian Valmet was designated the 360D.

KEY STATS FOR THE VALMET 359D

ENGINE	Valmet 309D, 37 hp
TRANSMISSION	6+2R
FRONT TYRE SIZE	6,00-19
REAR TYRE SIZE	11-28
WEIGHT	1 790 kg

The Brazilian 360D was otherwise identical to the 359D, except the engine was an MWM 2.6-litre 3-cylinder pre-combustion chamber diesel producing 40 horsepower. The concept for this tractor was excellent. A 6+2R transmission that first entered production with the 359D is still manufactured in Brazil. This transmission is used today in the 685 ATS model, although now it is synchronised. •



Fuel Down

PRODUCTIVITY UP

The Warner's family farm, just off the M1 in Leicestershire is 400 acres, mostly grass but with a few acres of feed barley.

TEXT AND PHOTOS ROGER THOMAS

Run by **Robert** and **Richard Warner** with a help from their father **John** the farm supports a pedigree herd of 100 British Limousin cows plus stock bulls and progeny being reared for slaughter or sale as breeding stock. Interestingly there is a handful of pedigree English Longhorn but as Robert says, "they're just for fun."

The majority of the grassland is down to permanent pasture with 100 acres or so rotated as shorter leys with the feed barley. Robert and Richard undertake all the farm work themselves. "When father purchased the farm 40 years ago it was just a plot of land, no buildings and no house. A contractor erected the first sheds and since then we've done literally everything ourselves." As a family that came from a non-farming background the Warner family do some things slightly differently and this includes their attitude to machinery.

"We have one main tractor which I drive – the Valtra N111 Eco plus several other older machines which

we've acquired though a friend in the Longhorn Club," Robert explains.

"We decided to purchase a new tractor in early 2010 and looked at several makes. Valtra dealer Cooks Midlands Ltd is just down the road so it was natural for us to consider them, especially as neighbours gave Valtra excellent reports, particularly their reliability. We liked what we saw and purchased the Valtra in June 2010."

Over the past year Robert has been surprised by the tractor's fuel consumption – or rather lack of it! "Valtra quote a 10 % to 15 % lower consumption than similar powered machines from other manufacturers. From time to time I've recorded what our machine has used and I'm convinced it's a lot less than that."

In August 2010 Robert used the tractor for turning cut grass and baling up with round bales and averaged 7.41 litres/eng hour. In September he moved on to baling and carting wheat straw, a job that involved an undulating 4 mile journey and that averaged 8.64 litres/

eng hour. Harvest over, work moved on to ploughing, seeding and muck spreading; a combination of duties that averaged 6.11 litres/eng hour. In the spring of this year it was back to grassland work. In the first year the tractor clocked up 270 engine hours and averaged 6.82 litres per hour of use.

"A figure we think is good, we've undulating and heavy land and our machinery regime allows us to compare the Valtra with other brands even though they are older, well used machines – but they are in good mechanical order"

Why do the Warners have so many tractors? Robert explains. "Their value is not particularly high and during busy periods we hitch an implement to each so when the weather's right we don't waste time changing machinery, simply hop off one machine and onto another."

And the driving experience? "I can operate at 1,100 rpm when turning and fertilising and round baling at 1,500 rpm is not a problem. Infact its only high density square baling that requires that we switch to Power Mode. The N Series is very comfortable and quiet – so particularly in Eco Mode."

It seems that the Warner family are highly satisfied with their Valtra N111e – at least that's what they've told their neighbours. •

"Valtra quote a 10 % to 15 % lower consumption than similar powered machines from other manufacturers."

Robert Warner and some of the family's prize winning cattle.



↑ The Warner family undertake nearly all the field work themselves with the N111 handling most in Eco Mode. It's only baling straw with the square baler that requires Robert to resort to Power Mode.

← Filling the N111 with fuel – an operation that happens less often than Robert thought it would!

COLOUR OPTIONS MAY VARY

The tsunami that hit Japan last spring had a surprising impact on Valtra, threatening the availability of the special anniversary colour. Metallic brown was launched in January, and the earthquake and subsequent tsunami hit Japan in March.

TEXT TOMMI PITENIUS PHOTO VALTRA ARCHIVE

“The natural disaster destroyed the factory that manufactures the Xirallic pigment used for the paint. The factory was the only one of its kind in the world. Several car manufacturers were forced to stop or limit the production of colours containing the Xirallic pigment. Fortunately, we managed to secure enough Xirallic to last through the summer until production of the pigment was back on track,” says **Kimmo Wihinen**, head of industrial design at Valtra.

Xirallic consists of aluminium oxide crystals that refract light very strongly. Compared to traditional metallic pigments, Xirallic is much more reflective, allowing the contours of the design to be emphasised.

Colours matter

Tractor colours are not always just a matter of taste. In some countries, tractors that are used for road maintenance are required by law to be either yellow or orange. Usually, yellow tractors are used for road main-

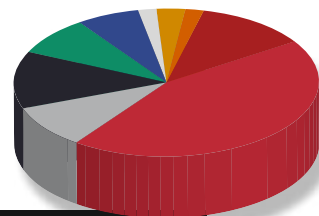
tenance in Scandinavia and orange ones in Central Europe. Green tractors in turn have long been favoured by forest contractors. Black and white are usually selected on the grounds of style alone. Colours also have significantly different meanings in different cultures around the world. For example, in Chinese culture the colour white is connected with funerals, whereas red indicates joy and happiness.

“The metallic brown selected to mark our anniversary is related to our history, but it is also in tune with the times. Many car manufacturers, including BMW and Lexus, introduced new models in metallic brown at the same time,” Wihinen reports.

A lot of thought is currently being given to changes in the colours offered by Valtra. In the first phase, silver would be replaced by titanium grey and today’s orange would be replaced by a bright Brazilian yellow. The difference between metallic red and traditional red could be further emphasised by replacing the former

with metallic burgundy.

Valtra has offered customers the chance to select the colour of their new tractor for over 20 years already. This originally bold move by Valtra reflected the fact that the unique designs already differentiated Valtra tractors from the competition without the need for an identifying colour. •



DIVISION OF COLOURS 2010

White metallic	2 %
Red metallic	12 %
Red	44 %
Silver metallic	10 %
Black metallic	12 %
Green metallic	8 %
Blue metallic	7 %
Orange metallic	2 %
Yellow	3 %

CONTACT YOUR LOCAL VALTRA DEALER

Comfortable leisure clothing for the entire family

Valtra Collection



Winter jacket

Water and wind resistant material. Reflective strips on sleeves. Detachable hood. Multiple pockets. Hem and sleeves can be tightened. Also available in women's model. Material: polyester.



Leather jacket

Split leather. Ribbing on collar, hem and cuffs. Thin 20 g cotton insulator. Quilted satin lining.



Children's jacket

Elastic cuffs, hem, and the upper edge of hood. Tractor print with reflective details on back. Material: nylon.

Children's hat

Tractor print on front. 70 % acrylic, 30 % wool. Cotton lining.



Soft toy tractor



Mug



Gingerbread cookie cutter

Stainless steel.



S Series pedal tractor

Length 119 cm, width 57 cm, height 75 cm. Weight 12.5 kg. Recommended for ages 3+.



Toy tractor

T191 in metallic white. Metal and plastic parts. Length 16 cm. Recommended for ages 3+. Made by Siku.



Valmet 33 Diesel scale model

Collector's edition. Scale 1:16.



Valmet 705 scale model

Collector's edition. Scale 1:32.

Collection
SILVER

See us online: valtra.co.uk

Valtra Models



A SERIES

MODEL	MAX. HP/NM
A72 Classic	74/296
A83 HiTech	88/325
A93 HiTech	101/370



S SERIES

MODEL	MAX. HP/NM
S233	270/1195
S263	295/1310
S293	320/1455
S323	350/1540
S353	370/1540



T SERIES

MODEL	MAX. HP/NM
T151e HiTech	163/620
T153 Versu	155/640
T153 Direct	155/640
T163e Versu	166/740
T163e Direct	166/740
T171 HiTech	184/670
T191 HiTech	189/680
T183 Versu	187/770
T182 Direct	186/750
T183 Direct	187/770
T202 Versu	200/800
T202 Direct	200/800
T203 Direct	204/800
T213 Versu	215/850



N SERIES

MODEL	MAX. HP/NM
N82 HiTech	88/360
N92 HiTech	101/450
N101 HiTech	116/460
N111e HiTech	128/570
N121 HiTech	137/540
N141 HiTech	154/580
N122 Versu	137/560
N142 Versu	154/600
N122 Direct	137/560
N142 Direct	154/600

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