

Valtra Team

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EDITORIAL



Back in February we held the Discover AGCO event at the NEC, an exhibition of AGCO brands including, of course, Valtra. Product exhibits were augmented by supplier displays; from a lynch pin to S Series tractor. By the end of the event over 7,250 people had registered, mostly farmers and contractors. Valtra staff supported by dealers were able to provide customers with first class information, from technical specifications through to delivered prices. If you attended the event I hope you enjoyed and found it useful; let us know what you thought. If you didn't manage to attend you missed a cracking good event.

Despite terrible weather Valtra sales remain ahead of 2013, an encouraging situation considering conditions that must have made many, particularly those whose farms were under water, think twice about placing an order. Now, the signs are that drying ground is bringing a steadily increasing number of enquiries. We are also sure the Discover AGCO event will boost sales so, if you're thinking of investing in a new tractor don't leave it too late.

I finish on a sad note. Valmet Tractors first After Sales Manager Gordon Williamson passed away in February after a long battle with cancer. Gordon, well known in our industry and a friend of many joined Valmet in the UK at the beginning, in 1991 and was responsible in no small part for the initial success of the company. Gordon remained with the company until his retirement in 2003. Gordon, a very knowledgeable engineer always did his best to help where he could. A good man who will be missed.

Mark Broom
NATIONAL SALES MANAGER



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Articulated steering as option for N Series.



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TWO QUICK
COUPLING HOOKS

PIVOTING
ANGLE 35°

FRONT PTO AVAILABLE
AS AN OPTION

LIFTING CAPACITY
3.5 TONNES

Valtra LH Link and Agri

PIVOTING FRONT LINKAGE

The pivoting front linkage won Valtra the Silver Medal at the Agritechnica exhibition in 2007. The innovation revolutionised working with implements at the front, as it allows the front linkage to turn in relation to the tractor's front wheels, separately from the front wheels or more than the front wheels. This makes tasks such as mowing much faster and turns much tighter. For municipal tasks, the pivoting front linkage allows streets to be brushed or

ploughed safely right up to the curb.

Two versions of the pivoting front linkage are available: Agri and LH Link. The Agri version is controlled by the tractor's hydraulics, while the LH Link version pivots automatically in relation to the front wheels if the driver so chooses. The pivoting front linkage is available on N Series models N103 to N163. •

www.valtra.uk

News



Valtra presented biggest ever model line-up, which attracted a lot of visitors to Valtra stand.

Agritechnica attracts 450,000 visitors Valtra presents biggest ever model line-up: 50–400 horsepower

Almost half a million visitors to the annual Agritechnica exhibition in Hannover, Germany, had the chance to witness the biggest ever model line-up in Valtra's history. The smallest model in the newly expanded A Series has 50 horsepower, while the biggest model in the new S Series boasts 400 horsepower.

In addition to offering both bigger and smaller models, Valtra also introduced many other alternatives within the model range. The T Series now includes a fuel-efficient T163 Versu EcoPower model, while the N Series has been expanded to include the four-cylinder N103.4 model and smaller N123 Versu and Direct models.

Both the Unlimited Studio and Fuse precision farming technologies attracted enormous interest at the exhibition.

Valtra's Sigma Power innovation was also recognised as a "milestone of agricultural technology" by German agricultural publisher DLV.

Overall, the Valtra stand was widely praised. In a survey carried out among visitors, the Valtra stand was ranked highest among participating stands. The design of the stand allowed plenty of space for large numbers of visitors to inspect the tractors in comfort.

Agritechnica attracted a record 449,000 visitors last November, including 342,000 visitors from Germany and 107,000 from abroad. Many visitors came from nearby countries such as Denmark and the Netherlands, while Finland was represented by one in ten of the nation's farmers. •

FURTHER EXPANSION OF AGCO POWER ENGINE PLANT

The AGCO Power engine plant is being expanded again with an additional one thousand square metres that will house the remanufacturing workshop. The expansion will be carried out according to a very fast schedule and should be completed by summer 2014.

AGCO Power has a long history of remanufacturing engines. The expansion of the engine plant will increase the workshop's annual capacity to 1,400 engines.

MOSCOW AIRPORT ORDERS VALTRA TRACTORS

Valtra is delivering 19 tractors to Moscow Domodedovo Airport this March. The order includes 13 N92 HiTech tractors and 6 N121 HiTech tractors. All of the tractors are orange and are equipped with a front loader, front linkage and turbine clutch. Snow ploughing equipment is also being delivered together with the tractors.

VIRTUAL R&D

The Valtra Engineering Centre has begun using a new virtual reality room. The virtual reality screen allows engineers to examine CATIA design images in 3D. Special glasses have to be worn to view the images in 3D. Sensors attached to the glasses alter the viewing angle according to the movements of the user. The 3D system makes it easy, for example, to change the equipment on the tractor, add or remove parts or study the tractor in different environments.

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Valtra Team

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Valtra is a worldwide brand of AGCO



Newly qualified Charlie Hill works full time in the workshop.

HUMBLE BEGINNINGS

Independent dealer in South West England now averages sales of two tractors a month.

TEXT AND PHOTO ROGER THOMAS

Chris Cox comes from a farming family and has agriculture in his blood. As a young man he decided to focus his career on farm machinery, so after leaving school he began an apprenticeship with South West Farmers at Sturminster Newton. Apprenticeship over, Chris continued working for dealers for a few years before branching out on his own.

“I was a man with a toolbox and a rather old minivan,” he remembers with a wry smile.

The days may have been long and hard, but Chris learned a valuable lesson – that customers appreciate reliable service. After around five years, Chris found premises that suited his plans for the future, were in the right location and, importantly, were affordable. In 1984 Chris pur-

chased a garage on the side of the A352 at Bagber, a few miles west of Sturminster Newton and more or less in the centre of the Blackmoor Vale.

“The immediate area is mostly livestock farming - dairying with some beef,” Chris describes.

“Beyond the Vale, the farming becomes more arable with cereal crops.”

Twenty years with Valtra

The location provided Christ with a good mix of potential customers. He noted that if one section of the farming industry slumped, the other part might be up, spreading the risks of his new investment.

“Those first years were not easy; it’s a big step taking on premises with all that entails – business rates

and other bills,” Chris recalls.

Alongside repairs and servicing, Chris commenced selling new machinery, including tractors. When Valmet began developing sales in the area, he made an offer for the Valmet franchise. Since then C J Cox Ltd has been an important link in the Valmet/Valmet chain.

Over the past 20 years that C J Cox has been a Valmet and Valtra dealer, sales have increased steadily. Today this independent dealership averages almost two tractors a month – this in a changing industry where sales opportunities are reducing significantly.

Keeping customers happy

In the time that Chris Cox has been selling tractors, farms have contin-

Continues on page 13 ... ➔

Bohemian Rhapsody

VALTRAS AT WORK IN CZECH FOREST

The forests of Bohemia in the mountainous northern and western regions of the Czech Republic are alive with the sound of Valtra tractors hard at work. A Valtra 6300 with 24,000 hours on the clock is transporting branches from the logging site to the side of the road, where a new S Series produces woodchips for a nearby power plant.

TEXT AND PHOTO TOMMI PITENIUS

Their high ground clearance, spacious cabs and TwinTrac reverse-drive systems are important benefits in forest work.



The 200 employees of the Czech company Solitera work in state-owned and privately owned forests throughout Bohemia, the western region of the Czech Republic. Altogether 9 forest harvesters are used to cut down the trees while another 15 machines transport the wood out of the forest. Valtra tractors are used for transporting and chipping the branches.

The core of the chipping business is made up of two S Series tractors with Jenz chippers, 10 smaller Valtra tractors for collecting the logging residues from the forests, and six trucks to transport the woodchips away, usually directly to the power plant. The work is carried out carefully, and even the ground is raked clean at the chipping site. Solitera also plants new trees to replace what it has cut down.

“We began chipping in 2003, when we purchased our first Valtra tractors – a 6300 and a 6800. Both of these tractors are still in use. Valtra’s reputation for forest tractors was unsurpassed already back then. Their high ground clearance, spacious cabs and TwinTrac reverse-drive systems are important benefits in forest work. Our Valtra tractors have proven to be reliable, and our drivers also like them,” says **Roman Šantora**, who oversees Solitera’s chipping operations.

A T202 Direct mulches a bush beneath high-voltage power lines. Forestry workers clean up around the pylons and other places where the tractor cannot reach with their chainsaws. They also trim and cut down trees that are growing too close to the power lines.

”The tractor is strong and reliable,” confirms Milan Šindelář.

Fresh branches and tops for chipping

Whereas in the Nordic countries and many other places either small trees or big ones with irregular trunks are used for chipping, in the Czech Republic fresh branches and tops are preferred. The branches are still green, and the woodchips are extremely fine to suit the conveyors at the power plants. The woodchips are supplied to the power plants at Plzeň and Kladno, for example, where woodchips make up around 30 per cent of the fuel and brown coal the remaining 70 per cent.

“We have to supply the woodchips on a regular basis. Solitera has its own warehouse, as do the power plants, but they are quite small and fresh woodchips cannot be stored for long, otherwise they begin to heat up. The reliability of our machinery and the entire chipping chain is extremely important to us, as our power plant customers are not interested in empty promises,” says Šantora.

Special thanks go to the local dealer Agroobchod and importer Topagri. For example, when the door window on one of the S Series tractors was smashed, the importer supplied a new door from its warehouse within a few hours. When this door was damaged just a few days later, Topagri removed the window from one of its demo tractors and installed it on the customer’s tractor without delay. The work was not interrupted, and the power plants were kept supplied with woodchips.

“Our S Series tractors consume 27 litres of fuel an hour, which includes transporting and chipping. One driver for the tractor and one assistant work in pairs in 12-hour shifts. We can produce around 1,000 to 1,200 cubic metres per day. Chipping locations are usually tens of kilometres apart from each other,” Šantora describes. •



T202 Direct and forestry workers clean up a hectare a day beneath the power lines

A Valtra T202 Direct reverses slowly but surely towards a bush beneath high-voltage power lines. A mulcher behind the tractor shreds the two-metre bush into fine dust. Three forestry workers work together with the tractor, cutting down bushes around the base of the pylons and other places where the tractor cannot reach. The workers also cut down and trim big trees that are growing too close to the power lines.

“The width of the corridor varies according to the capacity of the high-voltage power lines. Here, for example, we are making a 15-metre-wide corridor. This is completely different than logging. You have to be really careful when cutting down or trimming trees next to the power lines,” says **Milan Šindelář**, a forestry contractor.

Šindelář has three Valtra tractors total, T202 Direct and T191 Advance work with Ahwi mulchers and N111eH is used for chipping with Junkkari chipper. Šindelář also cooperates with his subcontractors. The T202 Direct racks up around a thousand hours a year, as the work is carried out only from October to March when the trees are in their winter state. The company that owns the power lines pays per square metre, and the competition among the contractors is intense.

“This Valtra has the TwinTrac reverse-drive system, a metal fuel tank, Nokian forest tyres, the stepless Direct transmission, polycarbonate glass and front axle suspension. The belly is armoured, the cab is protected, and we have a winch at the front to pull the trees. The tractor is strong and reliable,” confirms Milan Šindelář.


The T202 Direct is usually driven by Milan’s brother **Radek Šindelář**. The company has eight employees, four of whom prepare worksites, send out offers and handle practical arrangements, such as agreeing to the use of private roads and fields with their owners. The workers can clear around a hectare of land a day beneath the high-voltage power lines. •

The S Series tractors clock up around 3000 hours a year on 12-hour shifts, including Saturdays. The chipper can handle logs up to 60 centimetres thick, but usually it is used for chipping branches and tops that have been left over as logging residue.



The owners and employees of the company Šindelář are proud of their work: Milan Šindelář, Radek Šindelář, Jaroslav Macák (father), Vladimír Tichý, Jaroslav Macák (son) and Jan Martínek.

A Valtra 6300 with 24,000 hours on the clock is used to transport branches from the logging area to the side of the forest road. The branches are then chipped using a Valtra S Series, after which the woodchips are transported away and used as fuel at CHP plants.



Rob Brownbridge's T163 works a long way from his base, so it has to be reliable. It is also much more comfortable than previous machines from other manufacturers.

HOME AWAY FROM HOME

Working far afield is easy when you run Valtras, says contractor in Northern England.

TEXT AND PHOTO ROGER THOMAS

For several years **Rob Brownbridge** worked as a tractor driver for a North Yorkshire farmer. Then around ten years ago he decided to branch out on his own as a contractor. He purchased his own tractor and worked hard to establish himself. From those simple beginnings Rob today runs four tractors, employs two full-time drivers – **Jim (James) Leighton** and **Mark Kirkby** – and regularly takes on a casual driver for the fourth.

“I did not own a Valtra in those days and suffered from unreliability problems. Finally I decided to change, and Wilfred Scruton Ltd brought along a Valtra for me to try out – and I bought one!” Rob remem-

bers. The older tractor, an 8150, has well over 10,000 hours on the clock, while the remaining T Series tractors are newer machines.

Rob usually drives the T163 which, in late winter and early spring, spends most of its time connected to a carrot harvester. In March this was operating to the west of the Pennines on the Lancashire Moss Lands.

“We get told in the afternoon how many carrots are required by the supermarket the following day. Operating at this distance from our base, reliability is paramount. A breakdown in the field can have a knock-on effect through the packing shed all the way to the supermarket shelf – and supermarkets won’t stand for that!” Rob recognises.

Comfort and reliability

This spring the other tractors were also working long hours playing catch up as land dried out following an extended wet period. A T182 and the 8150 were working flat out de-stoning, while a new T183 (a recent replacement for a high hour T161) was hard at work planting peas.

“I’ve noticed several things about the Valtra machines,” comments Rob. “First of all, they’re comfortable to drive. With the carrot harvester and much of the other equipment, I spend much of my time half turned in the seat, keeping an eye on front and rear mounted equipment all at the same time. With other tractor makes, that used to give me a bad back, but no longer. I’m much more comfortable.”



The Duck pushes on with the job.



Teddy keeps an eye on operations.



Mark Kirkby's T182 keeps on top of de-stoning – literally. With Valtra's excellent ground clearance fuel is not wasted bulldozing soil across the field.



The latest addition to the fleet is a T183 Direct with front axle suspension.

In addition to lower fuel consumption, reliability has also been impressive. None of Rob's Valtras have needed a spanner on them other than for servicing. "And that's a really simple job we do ourselves. We've also changed belts," Rob notes.

Valtra also recommends inspecting the brakes after 10,000 hours. "Our dealer Wilfred Scruton Ltd of York opened up the axles – and then closed them again. Perfect, even after so many hours including quite a bit of trailer work."

Rob also likes the Valtra's excellent ground clearance. "From de-stoning through to harvesting this is important, and not bulldozing our way across a field saves fuel and prevents crop and tractor damage."

Finally there is resale value. "Valtras seem to hold their own, especially when they're looked after. Scruton's gave us a really good deal when we changed the T161 for a T183, and that's after 8,000 hours in five years – 2,000 hours a year. We don't use Scruton's workshops for much, but they do look after us."

Smart customisation

Operating over a wide area, all Rob's tractors include front axle suspension and Direct transmissions. "It's

not only carrots and peas; we're also involved with potatoes and other vegetables, parsnips for instance. The variability and ease of operation of Valtra's Direct transmission is a important in this situation."

Other features on Rob's tractors include front linkage and PTO, both of which are "very necessary for many vegetable operations."

With so much of Rob's work connected to supplying supermarkets and their customers, life can be a little erratic. A change in weather can mean a change in buying habits, and this quickly knocks on into the field.

"So long as the drivers look after their machines and they look smart, I don't mind how they customise them," Rob says.

Visually Mark's is arguably the most obvious with a rather aggressive duck on the bonnet. Jim's machine has rather more subtle personalisation – although there's nothing subtle about the pair of air horns mounted on the roof! Other features include a Valtra monogrammed cab mat, a bewildering array of electronics and a cutlery holder.

As Jim says, "This is our second home – sometimes our first. Got to make it comfortable!" •



Rob's 8150 puts in a full day's work after 10,000 trouble-free hours.



The Valtra T183 can be Jim's home for long days, so he likes to make it comfortable.

Tech

EGR Exhaust gas recirculation



Valtra S Series

BLACK ONLY ON THE OUTSIDE

TEKSTI TOMMI PITENIUS

Competitors

EGR: 40 percent.*



Valtra S Series

EGR: 0–15 percent.



* Illustrative picture of carbon deposit buildup.

Exhaust gas recirculation (EGR) is a technique by which some of the exhaust gases are cooled and recirculated back to the engine. EGR has proven to be a good solution for complying with emissions regulations. Based on the power, intended use, purchase pri-

ce and running costs of the tractor, Valtra uses EGR, selective catalytic reduction (SCR) or a combination of both.

Not all EGR systems are the same. On the Valtra S Series, only 0 to 15 percent of the exhaust gases are recirculated. This is sufficient to keep exhaust emissions down without

putting excessive load on the engine.

Among competing tractor manufacturers, around 40 percent of the exhaust gases are typically recirculated. However, excessive recirculation can cause deposits in the valves and cylinders, contaminate the lubrication oil and affect service intervals and engine life. •



Chris and Val Cox (centre) with some of their staff of 11 outside the company's latest development: new retail stores and offices.

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ued to grow. Many have doubled in size as owners retire and their land is absorbed by neighbours, often with no increase in staff or tractor numbers. Similarly, the power of tractors has also doubled in many cases. They have become more reliable, requiring less maintenance. As a result, farmers are changing their tractors less often, a situation that conspires to make life difficult for dealers.

“There has been one small change to our advantage,” Chris notes. “Contractor numbers in our area are on the rise.”

Despite a difficult market, the business has continued to grow, and today C J Cox Ltd provides employment for 11 staff. **Martin** handles sales, Nevil splits his time between sales and the workshop, where he joins eight others. A storeman handles workshop requirements and a well-stocked retail shop, while Chris’s partner **Val** handles office and financial matters.

To cope with this steady increase in business, there has been a considerable investment in buildings. “The original garage was small, so we purchased adjoining land and extended at the back,” Chris explains.

Since then the facilities have continued to grow with a much larger workshop and the addition of stores and a retail shop. Today C J Cox Ltd sell and service Valtra tractors and a wide range of machinery. Chris is still keen to impress on staff the value of service that he learned all those years ago.

“Today’s tractors may be very reliable, but the way farming has developed, there is little room for time lost through breakdowns. Customers feel comfortable knowing there is a dealer close by who will turn out and help in the unlikely event things do go wrong.” •



Paul Tite (standing) was Chris’s first Valmet customer and put 6000 hours on his 6300 before changing it for a newer model. Mark doubled the hours before a second clutch was required, but other than servicing the tractor has not had a spanner on it.

Chris Cox sold his first tractor – a 90-horsepower Valmet 6300 – to neighbours **Paul** and **Liz Tite**. Paul put 6000 hours of very mixed work on the tractor before swapping it for a newer model. The Valmet 6300 was then sold on to beef farmer **Mark Needham**, who raises 180 suckler cows and followers on 350 acres.

The 6300, now with 11,000 hours on the clock, is still used daily, with loader operations being a very large proportion of the schedule. Neither Paul Tite nor Mark Needham had occasion to call on the services of a mechanic other than to fit a clutch, the first when Paul sold the tractor at 6000 hours.

The 6300 clutch may or may not have required renewal, but Chris considered it an investment that made the used machine more saleable. Just recently, at over 10,000 hours and with considerably more loader work behind it, a second clutch was fitted.



The 6300, the first new Valmet sold by Chris Cox, is still in busy daily use, feeding and bedding during the winter and with a variety of field work during the summer months.



It pays to have your

VALTRA SERVICED AT AN AUTHORISED DEALER

TEXT TOMMI PITENIUS PHOTO VALTRA ARCHIVE

Having your tractor serviced at an authorised Valtra dealer is a worthwhile investment in many ways. It ensures that your tractor keeps running without interruptions, and it also helps retain the tractor's resale value. For these reasons alone, having your tractor serviced at the dealer can easily pay for itself. In addition, you get peace of mind, and often you can get more out of your old tractor through dealer upgrades.

Valtra technicians are regularly trained by Valtra. Courses are also

held for importer service managers to teach them the secrets of new models, and they can then teach the service technicians at dealers in their own countries. Service training combines classroom theory with practical experience in the training workshop. The service training department in Suolahti, Finland, also prepares the teaching materials for use by importers. Valtra has thousands of service technicians throughout Europe who are trained before new products and features are introduced to the market. •





Authorised technicians have the best skills to service and repair Valtra tractors. Pirate parts and mistakes made by non-authorised technicians can cause severe damage to your tractor.

Six reasons to have Valtra service your tractor:

- 1) Expertise** – Authorised technicians know how to service Valtra tractors better than anyone else. They also have all the special tools and equipment they need, such as for upgrading electronic systems. This expertise can be seen in the speed and quality of their work.
- 2) Original spare parts** – Authorised technicians use only original Valtra spare parts that are designed especially for Valtra tractors. Valtra spare parts come with a one-year warranty.
- 3) Improved reliability** – Predictive maintenance can prevent problems from occurring when you need your tractor most. The cost of an engine failure during the peak season, for example, can be considerable in terms of lost production. If possible, service should be carried out during the winter season when there is more time available.
- 4) Higher resale value** – A full service history from an authorised dealer can increase the resale value of your tractor by thousands of pounds.
- 5) Remanufactured parts** – You can have the engine or transmission in your tractor replaced by a remanufactured one straight from the factory. Remanufactured parts are as good as new but 20–40 percent less expensive.
- 6) Latest upgrades** – Get the latest software upgrades, as well as other campaign upgrades that can further improve the performance of your tractor.





New feature available from the Unlimited Studio

ARTICULATED STEERING FOR THE N SERIES

An articulated steering option is currently being developed for N Series Direct models and will be available from the Unlimited Studio. The solution combines articulated steering with turning front wheels, making the tractor extremely agile.

TEXT TOMMI PITENIUS PHOTO VALTRA ARCHIVE

It can even be driven sideways to an extent, thus eliminating soil compaction on fields and allowing streets to be ploughed or swept safely along the sides. The articulated steering and rotating front axle are automated, so the

amount of articulated steering reduces as the speed increases. At high speeds the tractor is steered normally through the front wheels. The driver can also adjust the ratio of articulated steering to front axle steering according to the situation.

The articulated N Series combines articulated steering with turning front wheels, making the tractor extremely agile. It can even be driven sideways.

Articulated steering is available as an option on N123, N143 and N163 Direct models. N163 Direct models feature a stepless transmission, powerful 160 l/min hydraulics, front axle stiffening, 171 horsepower with power boost and a top speed of 50 km/h.



Articulated tractors are ideal for farming, municipal contracting and forestry tasks. They can perform a wide range of tasks, making them especially suitable for farmers who do contracting on the side.

Sauli Takkula, Contractor: “Snowploughing takes two hours less with his articulated tractors”

Sauli Takkula is a Finnish contractor who has used articulated Valtra tractors for around 15,000 hours since the early 2000s. His tractors have included an X100, X120 and two XM150s. He has also tested the new articulated N163 Direct.

“We plough over 60 kilometres of roads in Turku and one four-hectare yard. We operate two articulated tractors; one to plough the middle of the road and the other to clean up bus stops and intersections. With standard tractors the job takes over 14 hours, but with articulated tractors it can be done in just 12 hours. In addition, it is safer to work on the road with an articulated tractor,” Takkula says.

Takkula has specified all his tractors with an auxiliary hydraulic pump, as many hydraulic blocks as possible and a solid beam loader.

“The solid beam loader can lift over three tonnes and is very fast to use. I haven’t had any problems with the durability of the loader, articulated joint or tractor as a whole. Only once I drove off the road and into the forest to avoid an ambulance, but that’s another story!” •



Sauli Takkula is a contractor and farmer who has driven his articulated Valtra tractors for around 15,000 hours. He has also tested the articulated N163 Direct on his farm for ploughing and front loader tasks.

The tractors can be fitted with standard Valtra front loaders or solid beam loaders. With the articulated steering option, the N163 Direct is 300 kilos heavier than standard models. The weight distribution is 45 percent over the front axle and 55 percent over the rear axle. The same options are available with the articulated steering as with other Valtra tractors, including a steel fuel tank for forestry tasks and an SVC cab with enhanced side visibility for municipal tasks. The turning radius promises to be around 15 percent smaller than that of even the most agile competitors.

Previous studies have shown that articulated tractors can perform front loader tasks 35–40 percent faster than standard tractors. Speed is increased both by the enhanced agility and the fact that the front and rear of the tractor can be driven sideways without having to drive the tractor forwards and backwards. This makes it extremely easy to attach implements to the rear and use the front loader, for example.

The articulated N163 Direct will undergo testing in the winter and spring of 2014. Series production will be phased in at the Valtra Unlimited Studio at the end of 2014. •



Articulated tractors

SINCE THE 1960S

In the early 1960s, the forest industry in the Nordic countries was seeking solutions for mechanical harvesting.

TEXT HANNU NISKANEN PHOTO VALTRA ARCHIVE

Valmet decided to develop an articulated all-terrain tractor using the components from an agricultural tractor. The R&D work took place at the Tourula tractor plant in Jyväskylä, Finland.

The Valmet 363 D all-terrain tractor was based on the Valmet 361 D model. It was powered by a 46-horsepower engine, the tyre size was 14-24 and it weighed around 4000 kilos. Production of the Valmet 865 series production model was transferred to the Valmet factory in Tampere, Finland. At the same time the engine was switched for a four-cylinder Valmet 411A engine producing 80 horsepower. This led to the development of Valmet's forest machine series that took over from Volvo BM's forest machines in the early 1980s and created a world-class company. Following the

restructuring of the company, the forest machine business was acquired by Komatsu in 2004.

Valmet tractors have always been used for forestry and contracting tasks. Entering the 1990s, the company decided to use its four-cylinder Mezzo 6600 model as the basis for a new articulated tractor. The steel fuel tank between the engine and transmission was replaced by a heavy-duty articulated joint.

The Valtra brand name was introduced with the articulated models in 1996. Two models were offered: the Valtra City with a front loader and 95 to 115 horsepower, and the Valtra Forest with high-power hydraulics and 115 horsepower. The articulated models offered numerous benefits. The rear wheels follow in the same tracks as the front wheels, and the powerful steering cylinder

makes it possible to wriggle out of tricky places in tough terrain.

In the new millennium the articulated models were based on the four-cylinder M Series, and power increased up to 150 horsepower on the XM150. This model remained in production until 2006.

The articulated Valtra tractors attracted a loyal customer base, especially among municipal contractors. Enquiries began to pour in asking when a new articulated model would be offered, as their existing ones were racking up enormous numbers of hours. Valtra listened closely to its customers. Using the parts from its N Series, including the 171-horsepower engine, Direct transmission, 160-litre per minute hydraulics and TwinTrac reverse-drive system, and calling on the expertise of its Unlimited Studio, Valtra is now able to offer a new articulated model.

An advantage of the new solution compared to previous designs is its intelligent steering capabilities, whereby the chassis and front wheels can be turned according to need. •



A Portuguese FAP 361 D. The technical specifications for the tractor were similar to those of the original Finnish model but with the addition of front and rear wheel weights due to the hard soil in Portugal. The three-cylinder engine produced 46 horsepower, and there were six forward and two reverse gears.

FAP-Valmet

THE ORIGINAL PORTUGUESE PROJECT

Once Valmet had successfully established Valmet do Brasil in the early 1960s, similar projects were tried elsewhere. An unsuccessful attempt in Mexico led to an opportunity in Portugal, where an agreement was signed between Valmet Oy and Fabrica de Automóveis Portugueses S.A:n (FAP) in February 1963.

According to the agreement, Valmet undertook to provide technical assistance in establishing a tractor factory and supplying components to the factory in the initial phase. The project was led by PhD **Gaspar Fernandes Reguengo de Queiroz**, and work began on building a factory in Aveiro close to Porto in the north of the country.

Valmet had begun exporting to Spain back in 1957, and a total of 220 tractors were delivered before exports ended in 1962. The Portuguese project was thus welcomed. The product selected for the project was the Valmet 361 D. Valmet sent its experts to Portugal to assist: **Lars Normén** for production consultation and **Matti Vainio** to help with

the commercial side of the business. Valmet's legendary test driver and engineer **Matti Vehniäinen** helped adapt the tractor to local conditions and working methods.

Five tractors were initially sent for testing in 1963 followed by 147 tractors the next year. The factory building was still not finished, so the number of Portuguese components was minimal. In 1965 a total of 451 tractors were exported. A separate company, Autofina S.A., had been founded to handle sales and marketing, but it was unable to establish a competitive sales network.

According to Valmet's deputy director **Nils Björklund**, Dr. Queiroz was an idealist who lacked economic expertise, and the financial basis fell through when state aid for the factory failed to materialise.

A further 131 Valmet tractors were exported to Portugal in 1966, but the financial difficulties at FAP increased until Valmet ended deliveries in 1968. License manufacturing ended in spring 1969.


In total, 734 FAP-Valmet 361 D tractors were delivered to Portugal



The factory was built in the town of Aveiro near Porto. Over 700 tractors were assembled at the factory for the Portuguese market.

and partly assembled there. The tractors themselves survived longer than the factory; I met a satisfied FAP-Valmet owner on a visit to the country in 1993.

Valmet suffered only small credit losses as a result of the project, but Dr. Queiroz was forced to end his factory ambitions. Valmet Oy established a factory in Portugal again in the early 1990s, but that's another story. •



Examples of the Unlimited technicians work were popular.

Discover AGCO

DISCOVER VALTRA

Exhibition at the NEC attracts thousands of participants.

TEXT AND PHOTO ROGER THOMAS

At the end of February the National Exhibition Centre in Birmingham, England, hosted the Discover AGCO event, an exhibition of leading AGCO brands – including Valtra – and augmented by suppliers. Everything from an S Series tractor to lynchpins, magazines and specialist equipment were on display. The event was an important one for farmers and contractors looking to replace equipment over the coming months or simply wanting to keep up with latest developments.

By lunchtime on the first day some 4,000 people had registered for the event, and by the end of the event the figure had reached 7250, mostly farmers and contractors. Valtra representatives and dealers were kept busy on the stand providing first-class information, technical specifications, practical explanations and delivered prices.

Valtra exhibited its complete model line-up, including the new smaller A Series models, the N and T Series, and the latest S Series tractors with up to 400 horsepower. Also included

was an early Valmet 20 model with mid-mounted mower and Ice Bear, **Gareth Jones's** and **Andy Miller's** Valtra-based pulling tractor.

To help customers understand the intricacies of modern transmissions, there was a cut-away version for all to see. At the other end of the Valtra stand was a T Series tractor kitted up with crane and logging trailer. Between the N and T Series machines, every possible combination was represented among transmissions (Direct, Versu, HiTech 5 and HiTech 3), colours, TwinTrac



With Valtra's pedigree, the forestry exhibit created considerable interest amongst some. This model included TwinTrac.

and standard controls, and loaders.

Two Valtra Unlimited tractors were also on display. The customisation studio attached to the factory can fit accessories and equipment not normally available on the production line during the normal manufacturing process. Valtra Unlimited technicians are qualified experts, and they ensure accessories and equipment fitted by the Valtra Unlimited studio are correctly installed and covered by the factory warranty. Valtra will also supply all the servicing and spare parts for these components.

At the centre of the Valtra stand, a large screen regularly presented films depicting the Valtra trac-

tor range and company facilities.

At one end of the stand a catwalk show demonstrated the wide range of work clothes and leisurewear available from the Valtra Collection and on sale at an adjacent shop and through dealers. The Valtra Collection also features a broad range of other items, including models and toys.

If you attended the show, I hope you enjoyed your day and found it useful; please let us know what you thought. If you were unable to attend, you missed a cracking good event. Keep your eyes open for a similar show in the future - Valtra at Discover AGCO should not be missed! •



A wide range of tractors with a broad selection of specifications.



Several tractors, large and small were shown with loaders.



The Valmet 20, common in the 1950s provided a contrast with today's popular Valtras.





European farms growing

SLOWLY BUT SURELY

TEXT TOMMI PITENIUS PHOTO ADVERTISING AGENCY ILME OY

There are around 14 million farmers in the European Union, and the average size of farms is just 14 hectares. By comparison, the USA has just 2 million farmers, yet the average size of farms is 180 hectares. Just under 50 percent of the EU's surface area is covered by fields, 30 percent by forests and 20 percent by something other, such as cities. Family farms are traditional in Europe, but there are also many corporate and organic farms, for example.

The average size of farms in Europe is growing slowly but surely. Between 2003 and 2010 the average size increased from

12 to 14 hectares. At the same time the number of farms decreased by 20 percent.

The largest farms can be found in the Czech Republic, where the average size is 89 hectares. In Great Britain the average size is 54 hectares, in Denmark 60 hectares, in Germany 46 hectares, in France 52 hectares and in Finland 34 hectares. The smallest farms are in Malta (1 hectare) followed by Cyprus and Romania (3 hectares).

The following table lists the average size of European farms in 2007 in hectares, and the total area of arable land in thousands of hectares. •

EUROPEAN FARMS

	average size in hectares	total area of arable land in thousands of hectares
Czech Republic	89	3518
Denmark	60	2663
Luxembourg	57	131
Great Britain	54	16130
France	52	27477
Germany	46	16932
Sweden	43	3118
Finland	34	2292
Ireland	32	4139
Belgium	29	1374
Slovakia	28	1937
Netherlands	25	1914
Spain	24	24893
Norway	21	1032
Austria	19	3189
Switzerland	17	1057
Portugal	13	3473
Italy	8	12744
Hungary	7	4229
Bulgaria	6	3051
Poland	6	15477
Romania	3	13753

You can order items from the Valtra Collection simply by visiting our online store at www.valtrashop.com and have your purchases delivered straight to your home. The Valtra Collection is also available at Valtra dealers (product assortment may vary).

See all Valtra products: www.valtrashop.com

Valtra Collection

PULLING COLLECTION



24h

OPEN 24/7!

Check out our revamped online store at www.valtrashop.com



Softshell jacket for men. Size: XS-XXXL.

69€



Cap, army model, cotton.

9€



Polo shirt for men. Size: S-XXXL.

32€



Polo shirt for ladies. Size: S-XXL.

32€



Polo shirt for children. Size: 80/86-128/134.

29€



Shorts for men. Size: S-XXXL.

45€

See us online: valtra.co.uk

Valtra Models



A SERIES

MODEL	MAX. HP/NM
A53	50/196
A63	68/285
A73	78/310
A83 HiTech	88/325
A93 HiTech	101/370



N SERIES

MODEL	MAX. HP/NM
N93 HiTech	99/430
N103 HiTech	111/465
N103.4 HiTech	121/490
N113 HiTech	130/530
N123 HiTech	143/560
N143 HiTech	160/600
N93 HiTech 5	99/430
N103 HiTech 5	111/465
N103.4 HiTech 5	121/490
N113 HiTech 5	130/530
N123 HiTech 5	143/560
N123 Versu	143/560
N143 Versu	160/600
N163 Versu	171/700
N123 Direct	143/560
N143 Direct	160/600
N163 Direct	171/700

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T SERIES

MODEL	MAX. HP/NM
T133 HiTech	158/630
T153 HiTech	170/680
T173 HiTech	190/730
T193 HiTech	210/800
T153 Versu	170/680
T163e Versu	185/810
T183 Versu	201/820
T213 Versu	225/900
T153 Direct	170/680
T163e Direct	185/810
T183 Direct	201/820
T203 Direct	215/850



S SERIES

MODEL	MAX. HP/NM
S274	300/1300
S294	325/1390
S324	350/1500
S354	380/1590
S374	400/1600

ISO 14396