

VALTRA TEAM

VALTRA

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easier than ever**
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Valtra Unlimited and Noremat team up

AN UNBEATABLE COMBINATION FOR ROAD MAINTENANCE

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EDITORIAL



This is my first editorial piece since taking on the role of National Sales Manager for Valtra UK & IE and I'm looking forward to driving business forward with the brand and giving it the recognition it deserves in today's marketplace.

I would like to congratulate former NSM **Mark Broom** on his retirement after 22 years and wish former Area Sales Manager **Philip Connell** all the best for his retirement after 26 years.

We now have a full team here in the UK & IE. **Sarah Howarth** is A&SP Marketing Specialist and **Will Tooke** has been appointed as Trainee Product Specialist. **Andy Miller** has also assumed the role of Business Manager, Key Accounts & Ireland.

It's now 2 years since SmartTouch was introduced to the N4/T4 range with guidance and 82% of the tractors delivered to the UK market have guidance fitted. This autumn a new guidance upgrade called Valtra Guide is available on new production orders from 1st September. This upgrade is also available on all previous models with SmartTouch. Additional features will follow in November 2019.

Another feature that is gaining momentum is Valtra Connect which enables customers to monitor the functions of their tractors remotely. It's free and included as standard on every N&T series from 2019 production.

Valtra finished 2018 on a high by achieving a 4.8% market share in the UK and this has continued into 2019 where we are currently sitting at 5.4%.

Alan Sanderson
NATIONAL SALES MANAGER



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- The brand-new Valtra Guide replaces the Auto-Guide automated steering system
- No need to switch back and forth between screens anymore
- One tap replaces two taps and a swipe
- Many new features available in the future
- Same logic as before, but now even simpler



AUTO STEERING GETS UPDATED

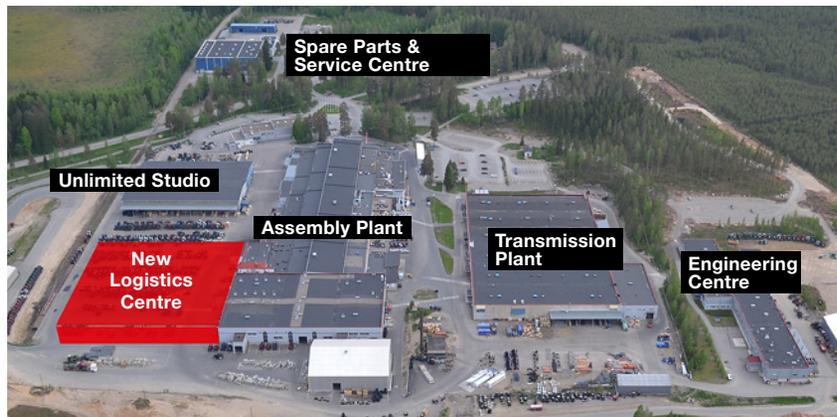
The Valtra Guide auto steering system has been fully updated this autumn. Whereas previously the operator had to switch between map screens and settings, now the settings appear in the map screen. The settings can be displayed using the icons on the sides of the screen or by tapping the screen once. This makes it possible to change or check all settings without having to exit the map screen. Selecting fields and creating waylines has also been made simpler. Waylines, obstructions and entries are retained in the memory for future tasks.

The new Valtra Guide is installed at authorised service dealers during regular maintenance as part of the SmartTouch software update on all tractors equipped with auto steering.

The update also enables many other new features in the future. For example, the ISOBUS AUX driver makes it possible to programme the functions of ISOBUS-compatible implements on individual buttons or switches, so the Valtra Guide map screen does not have to be exited even when controlling implements. •

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NEWS



The new 8000-square-metre logistics centre is being built in the area between the Assembly Plant and the Unlimited Studio.

NEW 8000-SQUARE-METRE LOGISTICS CENTRE IN SUOLAHTI

A new logistics centre is under construction at the Valtra factory in Suolahti, Finland. The 8000-square-metre building is being built in the area where new tractors are currently stored while awaiting transportation.

The new building will be used to receive and store parts and components required by the factory, as well as to collect and deliver them to the assembly line. The logistics centre will deliver parts to the assembly precisely as needed for each individual tractor according to the customer's order.

The new logistics centre is needed because the number of individual parts has increased with the

introduction of new products. In addition, it will make operations even more efficient by combining multiple smaller warehouses into a single building. The new logistics centre will improve the quality of tractors, as trucks delivering parts can be unloaded indoors.

The new logistics centre will be semi-automated. Driverless forklifts will load incoming parts onto 12-metre-high shelves, but collection of the parts will continue to be done manually. Transportation of parts from the logistics centre to the assembly line will be partly automated.

Construction of the new building has already begun and will be completed in spring 2020. •

F SERIES VINEYARD AND ORCHARD TRACTORS FROM VALTRA

Valtra will unveil its new F Series vineyard and orchard tractors at Agritechnica. The F Series comprises four models ranging in output from 75 to 105 horsepower. The base model is approximately 1.5 metres wide and the narrow model just 1.3 metres wide. The wider model is also available with an open cab and rollover bar.

F Series tractors will be available with either 24+24R or 24+12R transmissions and either mechanical or hydraulic forward-reverse shuttles. A wide range of hydraulic options are also available, ranging in output from 68 to almost 100 l/min. The four-cylinder CR engine complies with Stage III B emissions regulations.

The new F Series will go on sale in selected markets in early 2020. •



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Valtra is a worldwide brand of AGCO

SPARC TRACTOR TOUR COMES TO AN END



Valtra helping to raise awareness of the fight against rural crime in Scotland.

MSPs joined SPARC (Scottish Partnership Against Rural Crime) members and **Hamilton Ross Group** staff at the Scottish Parliament with the tractor to celebrate the end of a successful tour.

The Valtra T174EA SPARC-branded tractor, supplied by the Hamilton Ross Group, has toured over 40 agricultural events during the summer to raise awareness and open discussion on the blight of rural crime.

SPARC is a multi-agency partnership involving 16 key organisations working together to tackle rural crime. Providing strategic focus, SPARC co-ordinates a committed and sustained approach including crime prevention advice to those living, working and enjoying Scotland's rural communities in order to ensure these



MPs, SPARC members and Hamilton Ross Group staff posing outside the Scottish Parliament building.

areas are safe places to live, work and visit.

Eric Gardiner, Managing Director of the Hamilton Ross Group, said: "We have been thrilled with the response to our partnership with SPARC. The project has been very

successful in raising awareness of rural crime prevention and the role that dealers like the Hamilton Ross Group can play in terms of supporting customers through fitting security and tracking devices to their machinery." •

Unbeatable combination

FRENCH ROAD DIRECTORATE SELECTS VALTRA AND NOREMAT

TEXT CHARLOTTE MOREL PHOTOS VALTRA ARCHIVE

The telescopic mower arm
is exclusive to Noremat.



Valtra Team travelled to Rouen, headquarters of France's North West Interdepartmental Road Directorate, to meet users of Valtra tractors and Noremat implements. DIR Nord-Ouest is one of 11 French road directorates and is responsible for maintaining over 1000 kilometres of roads and highways in Seine-Maritime, Somme, Eure, Orne, Oise, Indre-et-Loire, Eure-et-Loir, Loir-et-Cher, Manche and Calvados.

Its practical tasks include cutting grass, pruning roadside trees and essential maintenance mainly during the summer from May to October. During the winter months, it prevents slippery conditions by salting and clearing snow. The road directorate also has tasks that may seem unexpected, such as monitoring roads to help prevent accidents and maintain traffic safety.

DIR Nord-Ouest operates a fleet of 1000 vehicles, 750 of which are registered for highway use. **Marc Reze** is responsible for managing this fleet.

"We have an annual budget for systematically replacing the oldest machines, including one or ➔

"We need reliable, robust and comfortable tractors because we work constantly with heavy loads."



two tractors a year. We buy directly from UGAP, the French public purchasing body. The new tractors go to Noremat for assembly and then to the dealer to be prepared for use. The tractors are delivered directly to the operation centre to which they will be assigned, ready to use," Reze explains.

Since UGAP started working with Valtra, DIR Nord-Ouest reassessed what kind of tractors are optimal for their use. Altogether, it has a fleet of 40 tractors ranging in output from 90 to 200 horsepower. The oldest tractor in the fleet dates back to 2003 and has more than 9000 hours. Their Valtra fleet consists of 7 tractors, comprising six

N134 HiTech and one N174 HiTech. They are all equipped with a 2.3-metre Noremat mower at the front and a rear-mounted reach arm mower with a boom ranging from 5.50 to 8 metres.

"We need reliable, robust and comfortable tractors because we work constantly with heavy loads. They have to cope with up to five tonnes over the righthand wheels when the boom is extended," Reze says.

Many reasons to choose Valtra

New emissions, brake and weight standards have also influenced the choice of machinery, particularly

the gross weight rating for mower vehicles. The French Road Directorate chose Valtra in part because it offers the highest gross weight rating in this size of tractors, but also because of Valtra's unique features, such as TwinTrac reverse-drive system, reversible fan blades, polycarbonate glass and block-pattern tyres – all of which are factory fitted.

"The reversible fan blades are a perfect option when working in dusty conditions. Furthermore, they are



Marc Reze, Guillaume Oger and Sylvain Prouet are satisfied with their tailored Valtra tractors.

- ← The Noremat design provides excellent stability.
- The kinematics of the Noremat arm make it ideally adapted to different tasks.

delivered on the tractor, so we waste no time in setting up,” Reze adds.

“It is life changing how much more comfortable it is than my old tractor. It isn’t too big, it is very stable and manoeuvrability is better. It’s easy to get used to, even if it has only been a month since it was delivered. The cab is very spacious and has a lot of room. I can also programme my forward and reverse speeds before working,” says **Guillaume Oger**, one of the drivers of the N174 HiTech.

“If I could have had this tractor when I was a driver, it would have been a luxury,” adds **Sylvain Prouet**, the team leader in Rouen.

All service and maintenance are performed by local Valtra dealers.

“We get along well with the dealers, which is important because all our machines are maintained by them,” confirms Marc Reze.

The Valtra-Noremat combo is very much appreciated by DIR Nord-Ouest. Ordering directly from the public purchasing body UGAP facilitates decision-making, ordering and deliveries, as the tractors and implements are delivered directly to the centres where they will be in operation. Together, Valtra and Noremat form the perfect partnership for maintaining the green spaces on the roadsides in the north west of France. •

Noremat and Valtra Unlimited team up Noremat has a passion to innovate for professionals



Founded in 1981 in the suburbs of Nancy, Noremat now has 280 employees.

Noremat is a French company that is committed to serving contractors involved in the maintenance of roadside verges and landscapes. Its range of implements and services is referred to in the name of the company: to provide professionals with a NOuvelle REntabilité du MATériel – new efficiency of materials.

Noremat boom mowers have several details that improve driving comfort, ease of maintenance, productivity and durability. By working directly with users – adding up to 25,000 contacts per year – Noremat has innovated and developed a range of 21 side-arm mower models with a lateral range of 4.20 to 8.30 metres. Noremat has 31 French and international patents, and 5.5% of its revenue is invested in R&D, reflecting how Noremat makes innovation a central pillar of its business development.

Founded in 1981 in the suburbs of Nancy, France, Noremat now employs 280 employees and has annual revenues of 62 million euros. The company’s continual growth for almost 40 years can also be attributed to its premium quality service.

During the high season, it carries a stock of spare parts corresponding to 2.5 months of use, and 96% of the parts are delivered within 24 hours. The after-sales organisation comprises 52 technical specialists who oversee the start-up of the equipment, provide training to drivers and mechanics, and assist clients on site or by telephone.

Internationally, Noremat relies on a network of partners carefully selected for their professionalism and dedication to providing quality service. Noremat boom mowers are available in thirty countries in Europe, Australia, Brazil and Africa. Noremat implements are now available for Valtra customers via the Valtra Unlimited studio. •



Field work is comfortable and economical with the Direct transmission.



THIRD TIME LUCKY

TEXT AND PHOTOS GEOFF ASHCROFT

Boddington Estates near Cheltenham, Gloucestershire, is a recent convert to the Valtra brand.

The 600ha farm produces 500ha of autumn-sown combinable crops, including 220ha of milling quality wheat, 85ha of winter barley, 100ha of oilseed rape and 95ha of winter beans.

A further 20ha of temporary leys, 40ha of permanent pasture and woodland, also supports a herd of 80 stabiliser beef cattle.

When looking to replace an older 160hp tractor, **Andrew Walters**, the farm and estate manager, went against obvious tractor choices, in favour of a T234 Direct.

“As our cultivation and drilling choices have evolved, we looked at

increasing power,” he says. “And extra capacity and flexibility gives us options to expand the business with contract farming agreements.”

“We wanted a tractor that was light and manoeuvrable for greater versatility, but also one that could

pack a punch to support our 280hp frontline tractor.”

“I have good experience of other AGCO brands through my dealer **Lister Wilder**, and while their German brand was the obvious choice, it wasn’t the only option.”



SmartTouch terminal and armrest is favoured for its simplicity, comfort and clarity.



Andrew Walters says the T234 is the most comfortable tractor he's ever driven.



The devil is in the detail for Boddington Estates, with tractors being sign-written.



Link ball storage is a home-made addition for added convenience.

"I was given the opportunity by Lister's Valtra specialist **Dan Sharood** to try a T4 and I must admit, I didn't take it seriously," he says. "But the second time I was asked, we had a Direct model on-farm, for a week."

"Its performance was impressive," he says. "Colleagues said it pulled really well, was comfortable and quiet. Then a Versu powershift turned up some time afterwards, and it confirmed that a CVT was the only transmission choice for us, for fieldwork."



When the tractor re-appeared for the third time, Mr Walters took the opportunity to spend time in the cab, to gain a better understanding of the finer workings of the T234.

"I looked into its features and controls, and how it could handle our kit," he says. "While the CVT is different to what we've been used to, it was every bit as good with field work."

"Stepping away from something you know is never an easy choice, and I questioned whether or not we should take the gamble," he says. "But so far, I'm glad we did. A five-year, 5,000-hour warranty

Storage is given a big thumbs-up – pto stub shaft lives behind the yellow cap.

with a service package has given me with fixed costs, and it's me who spends most of the time in the cab so I opted for a few extras through the Unlimited Studio."

Valtra's Unlimited Studio added the final detailing and metallic silver painted wheels. So how has the tractor performed?

Since arriving on-farm in Spring 2018, the T234 has covered 1,000 hours, and has won over Boddington Estates.

"It's very economical on diesel, the cab is spacious and quiet, and I can honestly say it's the most comfortable tractor I've ever driven."

"Since the tractor arrived, it has drawn a lot of interest locally, and led to two other farming friends buying Valtra. I'd certainly consider another." •

Development work began in 2008

SmartTouch USER INTERFACE CREATED BY LISTENING TO CUSTOMERS

Development work on the SmartTouch user interface began already in 2008 with the aim of making it the best in the world. The development team began by looking into what competitors had done and came to the conclusion that they did not want anything like that. They then looked into phones and cars, but their intended uses were too different. Eventually, the best ideas came from customers. The SmartTouch user interface was tested among customers countless times in all phases of development.

TEXT TOMMI PITENIUS PHOTOS VALTRA ARCHIVE

“I was a designer with the cab team at the Valtra Engineering Centre when the iPhone was unveiled in the summer of 2007. It made me think about what kind of a user interface tractors should have. In autumn 2008 I made a demo on a Nokia E61 mobile phone that had the same kind of rotating tractor that is now on the SmartTouch home screen,” remembers **Tuomas Nevaranta**, Director, Product Management.

The rotating tractor image was a key insight for keeping the structure of the directory as simple as possible. Competitors were using up to 11 layers in their own directory structures. Nevaranta and his team believed that the tractor operator should be able to access anything with just two taps. This was made possible by positioning the icons on the home screen on top of the rotating tractor in their corresponding places.

One step less – design principle

“Both we and our competitors have great features on our tractors that many customers have not learnt to use. When working with tractors, operators have lots more to do than browse through menus and wonder about symbols. We wanted to make using tractors so easy that all the great features would actually get used.”

The icons were added to the user interface in 2010, the four quadrants in 2012, the profiles in 2013 and the drive lever in 2014. At times the team got carried away and added too many features, which were subsequently eliminated. The project was officially established only in 2012, before which the user interface was

SmartTouch was tested countless times throughout the various project phases by 200 customers who had signed non-disclosure agreements. Listening to customers helped create the best user interface in the industry.



“Two years before the launch, we found out that the armrest had to be made thinner and lower by five centimetres, so we stuck it in a band saw.”

developed by a team of five or six employees on their own initiative.

“The project demonstrated the power of teamwork. We all shared the same goal of creating the world’s best user interface, so our software developers, designers, engineers and everyone else genuinely worked for the good of the customer. The finest moment in my career and for the entire team was when SmartTouch was unveiled in Holland in 2017. By that time, it had become the joint project of the entire organisation.”

Eye tracking cameras and customer tasks

Developing the world’s best user interface for tractors demanded a huge amount of customer testing. Altogether 200 customers signed non-disclosure agreements in order to test every detail of the user interface and the system as a whole countless times throughout the various project phases.

“None of us had any experience in designing the user interface of a touchscreen. It was probably lucky, because it made us all so humble in front of customer feedback. Even if a certain function seemed so obvious to its designer, if customers didn’t know how to use it during testing, it was rejected immediately.”

In a typical test situation, customers were given a general task, such as, “Adjust the tractor as if you were about to start ploughing.” Customers were never given any help if they got into trouble. The customers were videoed and their eye movements tracked using special cameras. Afterwards, they were asked for their opinions.

“There were situations, for example, in which all the customers had spent a lot of time staring at a certain icon without ever “finding” the

actual function. In other words, the icon was unclear.”

The customers comprised a wide range of farmers. One had never in his life used a touchscreen, so his experiences were obviously very instructive for the team. There were customers with small farms who drove Ford tractors from the 1970s, as well as customers with large farms who had all the latest equipment by different brands.

“When designing a user interface, the most important thing is the basic idea and the logic of use. It can then be expanded for different applications and functions. Impressive graphics simply support the logic of use.”

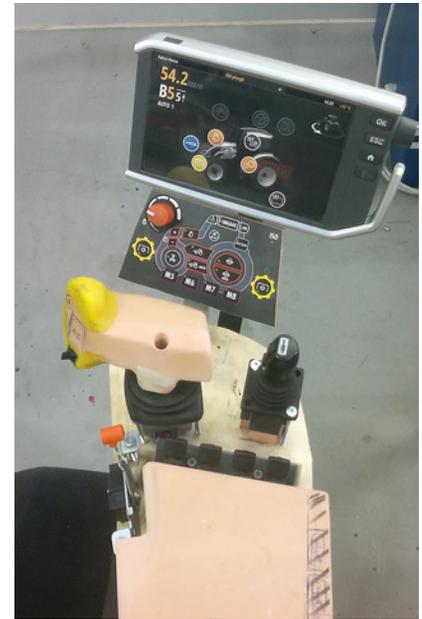
Redesigning with a band saw

Not everything went smoothly.

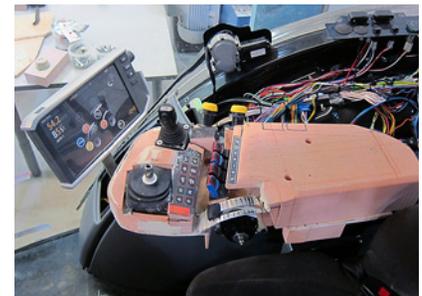
“Around two years before launch, my supervisor asked how the project was going. I told him that everything seemed to be going well. A couple of hours later, we realised that the armrest was five centimetres too wide and high, so it wouldn’t fit inside the cab. We then had to take a band saw to our design mock-up and redesign it like that. We told ourselves to keep going, that we were still going to design the world’s best user interface on schedule.”

At that stage, the armrest was already a working prototype, and the idea was to simply work on the details. The designers and subcontractors were rather quiet when they saw how the mock-up had been cut by the band saw, Nevaranta remembers.

When selecting all the components and materials, the terminal and armrest were again subjected to various tests. For example, the terminal was tested in the cold lab at the Valtra Research Department in Suolahti at minus 35 degrees Celsius, and it still worked fine. •



Starting in April 2012, over 50 different versions of the SmartTouch interface were developed.



CAD modelling facilitates the design process, but physical models are also needed.



The eye movements of testers were tracked while using SmartTouch using special cameras, allowing developers to see whether users found the functions they were looking for and understood the icons.

TRACTOR MAINTENANCE IS A QUESTION OF ATTITUDE

We all know about the daily inspections that are listed in the owner's manual, but how many of us actually carry out these inspections? Not many hands go up. Regular service and maintenance nevertheless are hugely important in terms of your tractor's reliability and resale value. Here are some top tips by our technical professionals for looking after your tractor.

TEXT TOMMI PITENIUS PHOTOS VALTRA ARCHIVE

Check oil and fluid levels regularly. Doing so is especially easy on new tractors thanks to the handy inspection windows.

Adjust the tyre pressures for all intended tasks, not just sowing. Tyre pressures affect fuel economy, pulling power and soil compaction.

If the windscreens inside the cab begin to mist up, change the fresh air/recirculation filter, which usually solves the issue.

Modern tractors have a lot of electrical equipment and electronics, so check the battery charge and the condition of the terminals and cables regularly.

Always use low-sulphur fuels in new tractors that comply with the latest emissions norms. Excessive sulphur in the fuel can cause malfunctions in the exhaust aftertreatment system and clog the catalytic converter.

Pneumatic systems are becoming increasingly common on tractors in response to EU brake regulations. Make the most of these systems and clean the radiator regularly with compressed air. A clean radiator will improve your tractor's performance and reduce the risk of fire.

Grease all the grease fittings on both your tractor and front loader regularly. On newer tractors, greasing instructions can be found either in the battery box or on the back wall of the cab, depending on the model.

Remember to change the fuel filter and switch to the right type of winter fuel before the cold weather sets in. Neglecting this simple task causes dozens of customers here in the North to have to contact their authorised service dealer each autumn.

EXTRA POWER BRINGS MORE EFFICIENCY

TEXT AND PHOTOS GEOFF ASHCROFT



T174 equipped with G6 loader, is a jack of all trades, and master too, for Peter Edmondson.

With 1,800 Herdwick ewes and lambs roaming 1012ha in the heart of the Lake District national park, **Peter Edmondson** is kept constantly busy.

“I’m always looking for time,” says Peter, located at Seathwaite Farm near Keswick, Cumbria.

With a further 40ha of land 18-miles away to produce high-quality hay and silage for his sheep and suckler cows, he says journey times are now quicker with his latest Valtra – a T174e.

Supplied by local dealer **Johnston Tractors**, it is his third consecutive Valtra, and brings more power and better fuel efficiency to his daily workload.

“The T174e is a fair jump up from my T143, but it is one that has really improved efficiency. I tow a 28ft Bailey livestock transporter and also a twin-axle low-loader,” he says.

“And the low loader lets me take several machines at once, in just one road trip.”

“Extra power has saved 10 minutes per trip, and that’s important making



Armrest with loader joystick control is a huge improvement over his previous model.

several journeys each day to move livestock,” he says. “A longer 40-mile run to Carlisle livestock market is now 30 minutes shorter. The T174 has plenty of power to hold its speed on the uphill sections of the route, and this makes a huge difference to my working days.”

“Eco mode has made a big difference when you don’t need full power,” he says. “It’s a noticeable fuel saving over my previous T143.” •



Peter Edmondson is surrounded by Fells and Pikes in the stunning Lake District.

A pilot project took place at Ivalo Airport in March 2019 to see if the runway could be ploughed without drivers using Valtra T254 Versu tractors. The results were very promising. Tractors equipped with automated steering can operate autonomously or by remote control.



Runway Snowbot

VALTRA PLOUGHS A RUNWAY WITHOUT A DRIVER

Ivalo Airport is the northernmost commercial airport in the EU. The conditions in wintertime are extremely challenging, with temperatures down to minus 40 Celsius, lots of snow and around a month without any sun at all. This made Ivalo exactly the right place for Valtra to experiment with automated ploughing.

TEXT TOMMI PITENIUS PHOTOS VALTRA ARCHIVE

Finnish snow-how is a recognised concept at airports around the world. Heavy snow hardly affects flights at all at Helsinki Airport, for example. In other countries, where snow is less common and conse-

quently less well prepared for, it can cause flight cancellations and delays lasting for days.

“We brought together Finnish companies with expertise in this field – Nokian Tyres, snow removal equipment manufacturer Vammass (Fort-

brand), energy company Neste and airport operator Finavia – to experiment with automated ploughing at Ivalo Airport in March,” says **Matti Tiitinen**, who oversaw the project at Valtra.

Valtra was well prepared, as Valtra tractors are widely used for ploughing



Valtra Guide automated steering is a big help when ploughing runways, also with a driver. The system identifies the edges and centre of the runway, even if it is completely covered in snow. GPS-based section control can further make sure that just the correct amount of de-icing chemicals are applied, which reduces impact on the environment as well as on running costs.

when spreading expensive de-icing agents. Trucks do not offer these features, or automated steering either,” Hannukainen says.

Tractors are less expensive and more versatile for airport maintenance than specialised machinery. The two Valtra T254 Versu tractors used in Ivalo were fitted with Arctic Machine snowploughs at the front and a Vammass sweeper blower at the rear, the hydraulics, electricity and brakes for which were easily available from the tractor. The tractors were also fitted with Nokian Hakkapeliitta TRI tyres, the world’s first tractor tyres designed especially for winter use. The tractors were prepared at Valtra’s Unlimited Studio. It is also possible to fill up the tractors with renewable fuel automatically by robot.

Tractors ideal for airport maintenance

The range of ways in which tractors can be used has expanded in recent decades from fields to forests, streets and municipal tasks. More recently, the use of tractors seems to be spreading also to harbours, mines, defence forces and other applications. Automated steering is

easier to use in contained environments rather than in traffic or forests, for example. Automated tractors are ideally suited for areas, such as harbours and airports, where other operations are also automated and remote controlled.

“Tractors are an interesting alternative for airports where a working width of 4.5 metres is sufficient. The overall costs of tractors are significantly less than those of trucks, and tractors are also more versatile as they can be used for many other tasks, such as snow throwing or lawn maintenance in summertime,” says **Tero Santamanner**, equipment specialist at Finnish airport operator Finavia. •



Automated steering, headland management systems, section control and variable rate control are all examples of agricultural technology that can also be utilised in non-agricultural tasks.

runways and other airport areas. Valtra Guide automated steering, ISOBUS implement control and SmartTouch features such as U-Pilot provided an excellent starting point for the experiment. The previous year, Valtra had already tried automated snowploughing along a stretch of road at speeds up to 73 km/h together with Nokian Tyres.

Proof of concept

Petri Hannukainen, who oversees Valtra’s research projects, points out that this was just an initial research project and not a ready product. Nevertheless, the pilot proved that automated ploughing is possible and deserves further research together with Finavia.

“Airport maintenance can benefit from the same technology that was originally developed for agriculture. For example, Section Control and Variable Rate Control can be a big help



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FOR FORESTRY



FOR FARMING



FOR MUNICIPAL WORK



Moving to Suolahti in 1969 enabled tractor production to expand to current levels.

0.6 hectares of new factory space was built. The new hall was used to manufacture transmission parts and assemble transmissions. Engines have always been built at the Linnavuori plant in Tampere, where production began in 1943.

Over the years, the factory area has been expanded to meet changing needs. The latest addition came in 2006, when a new building was completed for the Engineering Centre. Overall, the Suolahti factory now comprises around 5 hectares of indoor facilities, making it 3.5 times bigger than originally. In previous years, some of the employees also lived alongside the factory area, but these days there are over 2 hectares of parking spaces instead, as most employees commute by car from Suolahti and Jyväskylä. Even though most of the land area has already been built on, approximately one-third is still covered by forest, maintaining the countryside appearance of the factory grounds.

These days, all functions are located in the same area, as originally intended when planning the move in 1969. It may have taken almost 40 years to complete the move, but as the old saying goes: a good thing is worth waiting for! •

50 YEARS SINCE TRACTOR PLANT MOVED FROM THE CITY TO THE COUNTRYSIDE

Production of Valmet tractors began at a former rifle factory in the Finnish city of Jyväskylä in 1951. The original factory's capacity was sufficient for the assembly of tractors all the way until the late 1960s, when the first model series was launched: the 100 Series. The new tractors had cabs that required a taller assembly hall, and the former rifle factory was too small.

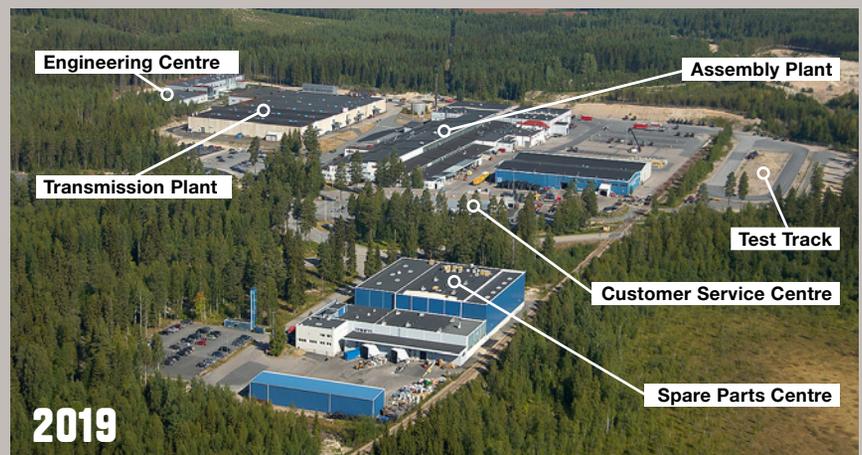
Around the same time, a 1.5-hectare factory became vacant in the small community of Suolahti, approximately 40 kilometres to the north of Jyväskylä. Even though Valmet had already reserved a plot of land in Jyväskylä for a new factory, construction of which had already begun, the decision was taken to move to Suolahti in 1969. After converting the existing facilities, the new factory was inaugurated in September. At the same time, the factory area gained a railway, along which trains to this day continue to transport tractors to the harbour and onwards to global markets.

Originally, only the assembly of tractors moved to the countryside and not all functions. The engineer-

ing and machining departments continued to work in Jyväskylä. Service technicians were also trained in new facilities in the former assembly plant. The year in question was also significant in terms of new tractor models, as the company's first four-wheel-drive models and four-cylinder turbocharged engines were introduced on Valmet 1100 and 900 models, which also featured a fixed safety cab.

Move took 40 years

The next steps in moving to the countryside took rather a long time. The next big leap was in 1975, when



Tom Dirom's Valtra fleet is supplied and serviced by Brian Robinson Machinery.



PUNCHING ABOVE THEIR WEIGHT

TEXT AND PHOTOS GEOFF ASHCROFT

When **Tom Dirom** went in search of a 400hp tractor to provide bed forming and ridging services for a carrot-producing customer, he saw established tractor choices as far from ideal.

"The usual suspects just seemed to be big and numb," says the West Yorkshire based contractor.

"I wanted a 400hp tractor that could be used on trailers in addition to heavy draft work."

It was a mindset that saw the arrival of a Valtra S394 on demonstration from **Brian Robinson Machinery (BRM)**.

"Everything about the S394 looked right," he recalls.

"And I just fell in love with the tractor. The cab, the controls, ride comfort, adjustability – everything exceeded my expectations, and the deal was done."

"It had performance and capability that I needed for my business," he says.

"It has to do more than just handle heavy work – this tractor must also turn its hand to odd-job-

bing and lighter duties, without incurring high operating costs."

That was in 2016, and since then, the contracting business has added two more Valtra's to his eight-tractor fleet. A T214 Direct arrived in 2017,



Tom Dirom (right) with son Liam, who represents the next generation of family eager to take the business forward.



A fleet of 14-tonne Bailey trailers can also be equipped with silage sides to increase load volume.



S394 is as useful on trailers as it is with frontline cultivations and drilling equipment.



Good ground clearance on the T214 makes it easy to straddle swaths when loading grain.



Opting to use the Valtra Unlimited studio, Tom Dirom's N and T-series have received metallic blue paint and black wheel rims. The N also gets a metallic blue loader.

and a N174 Direct arrived earlier this summer – both finished in striking metallic blue livery, and both went through the Valtra Unlimited studio.

"I'm not the only one who gets to enjoy a high-specification – my team needs it too," he says.

"And we all take the trouble to keep our tractors and machinery in tip-top condition."

Front linkage and front pto is a must-have, as-is Valtra's Direct con-

tinuously variable transmission. RTK steering guidance has also become part of the package, as the firm continues to seek-out efficiency for the benefit of its customers.

But the machinery investment hasn't stopped with the N174 and T214 models. Remember the S394 that started Tom Dirom's Finnish adventure? The three-year old, 6,000-hour machine was swapped earlier this year for an identical replacement.

"I also chose TwinTrac reverse drive on the S394," he says.

"Being able to turn the seat around meant we could make use of this capability on a silage clamp, with a 14ft push-off fork."

But business growth – silage making is now across 2830ha – meant clamping is now the domain of a wheeled loader.

"It lets the S394 operate with a 10.5m, triple mo-co, dropping a large acreage in a short time, to make the most of wilting."

While the replacement S394 now has over 1,200 hours under its belt, the older T214 has covered 4,300 hours.

"I've been very impressed with Valtra, and the backup," he says.

"AGCO's warranty and Brian Robinson Machinery's ability to back-up the product has been second-to-none."

"Running Valtra tractors has been a far better ownership experience than any of the other tractor makes I have previously run," he says.

"The Finnish tractor range is seriously under-rated." •

The Valmet 505 clearing snow at the Finnish Antarctic research station Aboa. The Plogen mountain in the background is 40 kilometres away.

Valmet 505 and generators

RELIABLE MACHINERY IN ANTARCTICA

A Valmet 505 tractor and a pair of generators from 1988 have been in use at the Finnish Antarctic research station Aboa for the past 40 years already, and they continue to support scientific research there to this day.

TEXT AND PHOTOS NIKO NURMINEN

Antarctica is the coldest and windiest place on our planet. The frozen continent is unsuitable for human habitation, which is one of the reasons why it is of interest to climate researchers: the air is still mostly unaffected by human industrial activity, making the continent a giant laboratory for research. The accelerating pace of climate change has further increased interest among scientists in the Antarctic.

The Finnish research station is situated in complete isolation in Queen Maud Land. At the heart of its infrastructure are three Valmet diesel engines: one powers a Valmet 505 tractor and two power generators that produce heat and electricity. The reliability of this machinery is absolutely vital for the researchers based at the station.

“This tractor has served us well. I believe even its battery is original,

even though the tractor sits out here on the ice. It certainly is a reliable machine,” says the research station’s mechanic **Esa Vimpari**.

The tractor has started right up at the turn of the key each time after being stored outside for 10 months. As with the two generators, the tractor is used only during the two Antarctic summer months when the research station is manned.

Generators produce heat and electricity

The two generators have been used in shifts for around 12,000 hours each, which according to Esa Vimpari is still not much. The heat they generate does not go to waste, as it is used to help heat the research station. Condensation heat is used to heat glycol, which circulates through the radiators inside the station.

During the last research period, Vimperi removed the tractor engine to carry out a thorough service and repair an oil sump that had been damaged by a rock. After the maintenance, the tractor returned to normal snowploughing and earthmoving duties. The power of the old Valmet tractor is also called on whenever the tracked all-terrain transport vehicle needs a pull.

“Now, for example, we wanted to move a container. Whenever we need a lot of power, the tractor always does the job. It has often come to the rescue in many challenging situations,” says **Mika Kalakoski**, who is in charge of logistics for the Finnish Antarctic research station. •



This generator has been used for just 40 years.

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Valtra Collection

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Valtra Models



MACHINE OF THE YEAR 2019

A SERIES

MODEL	MAX. HP*
A74	75
A84	85
A94	95
A104	100
A114	110
A124	120
A134	130
A104 HiTech 4	100
A114 HiTech 4	110



N SERIES

MODEL	MAX. HP*	
	STANDARD	BOOST
N104 HiTech	105	115
N114 Eco HiTech	115	125
N124 HiTech	125	135
N134 HiTech	135	145
N154 Eco HiTech	155	165
N174 HiTech	165	201
N134 Active	135	145
N154 Eco Active	155	165
N174 Active	165	201
N134 Versu	135	145
N154 Eco Versu	155	165
N174 Versu	165	201
N134 Direct	135	145
N154 Eco Direct	155	165
N174 Direct	165	201



T SERIES

MODEL	MAX. HP*	
	STANDARD	BOOST
T144 HiTech	155	170
T154 HiTech	165	180
T174 Eco HiTech	175	190
T194 HiTech	195	210
T214 HiTech	215	230
T234 HiTech	235	250
T254 HiTech	235	271
T144 Active	155	170
T154 Active	165	180
T174 Eco Active	175	190
T194 Active	195	210
T214 Active	215	230
T234 Active	235	250
T254 Active	235	271
T144 Versu	155	170
T154 Versu	165	180
T174 Eco Versu	175	190
T194 Versu	195	210
T214 Versu	215	230
T234 Versu	235	250
T254 Versu	235	271
T144 Direct	155	170
T154 Direct	165	180
T174 Eco Direct	175	190
T194 Direct	195	210
T214 Direct	215	230
T234 Direct	220	250



S SERIES

MODEL	MAX. HP*	
	STANDARD	BOOST
S274	270	300
S294	295	325
S324	320	350
S354	350	380
S374	370	400
S394	400	405



F SERIES

MODEL	MAX. HP*
F75	75
F85	85
F95	95
F105	105

*ISO 14396