

Valtra Team

CUSTOMER MAGAZINE

1 | 2011



+ New A Series
Even more comfortable
page 14

+ New T Series
Even more economical
page 10-11

+ Valtra 60 years
Focus on the future
page 5



VALTRA

VALTRA ANTS

VISIONARY CONCEPT



EDITORIAL



We're off to a GOOD START

2 011 is Valtra's 60th anniversary and looks like being an exciting year. First the introduction of new models: First A Series HiTech with a shuttle transmission, makes this popular tractor even more suitable for loader operation. Remember, today shuttle transmissions and advanced tractor hydraulics make loader tractors a very competitive option. Loader tractors depreciate more slowly than handlers, can be more reliable and without a telehandler on the farm, insurance costs drop.

Valtra were the first to introduce SCR technology into agriculture and we have now introduced this technology into T Series. SCR is the injection of urea into exhaust gasses to reduce particulate and NOx emissions. SCR reduces cooling requirements and thus the time power sapping radiator fans operate. In S Series, lab tests confirm a 5% to 10% reduction in fuel consumption compared with non SCR engines. In practice reports suggest our engines are even more frugal – we'll let you know once we've collated verifiable figures.

Finally I am left to welcome James Cullimore to our team as Sales Support Specialist. The Valtra Team look forward to meeting you during our Valtra Test Drives. To book your test drive simply collect a form from your Valtra dealer, at our stand at various shows or from our internet site www.valtra.co.uk fill in your details and return it.

Mark Broom



06

ANTS responds to the challenges of the future while honouring Valtra's traditions.

IN THIS ISSUE:

- | | | | |
|-----------|--|-----------|---|
| 03 | ARM – Now with a colour display | 15 | A reliable and cost-effective workhorse |
| 04 | News | 16 | Young driver rates Valtra driving experience |
| 06 | Valtra ANTS – future concept tractor | 18 | A farming force in South West Scotland |
| 09 | 60 years of Valtra tractors from Finland | 19 | Valtra appoints Sales Support Specialist for UK and Ireland |
| 10 | New T Series models – now even more economical | 20 | A way back to work |
| 12 | Valtra helps protect the landscape | 22 | Valtra Collection |
| 14 | A Series enters the HiTech era | 23 | 4WD bullseyes |
| | | 24 | Valtra models |





NIGHT SETTING EASY ON THE EYES

BRIGHT DAYTIME SETTING

SUPERIOR SUPPORT OVER ROUGH TERRAIN

JOYSTICK CONTROLS FRONT AND REAR HYDRAULICS

ARM gets a colour **DISPLAY**

TSeries models with the new SCR engines now come with a colour display on the driver's armrest. The display has separate day and night settings. The daytime setting allows the information to be viewed even in bright sunlight, whereas at night the display is not too bright for the eyes.

Valtra's patented ARM armrest also has other new features. The joystick on the armrest can now be used to control the front or rear hydraulics, or both. The PTO and 4WD switches are now also on the armrest. In addition, it is now possible to make changes to programmes stored in the U-Pilot Headland Management System when the tractor is standing still. •

News

VALTRA

Individually Yours

New customer promise **reinforces Valtra's customer-based philosophy**

Valtra updated its customer promise and corporate identity in connection with its 60th anniversary in January.

According to the company vision, Valtra's aim is to be the most desirable partner for individual and reliable tractors and solutions. The new customer promise "Individually Yours" communicates the company's unique way of operating among its own employees, sales and service network, partners and above all customers.

The core philosophy of Valtra is to meet the individual needs of the customer. This philosophy is born from Valtra's unique customer-based service concept and customer order system, which was introduced in 1992. Valtra's sales representatives work in close partnership with their customers to determine the ideal tractor specifications for their requirements. The design of Valtra tractors is based on modules combined with additional options and unique features, allowing half a million different combinations. This extreme versatility allows Valtra to offer competitive solutions to customers involved in farming, forestry, municipal contracting and heavy contracting.

The ongoing development of business practices, new investments in production, and future development plans will continue to reinforce Valtra's individual and customer-based operations.

Together with the customer promise Valtra modernized its logo. The Valtra name has appeared in 3D on the sides of tractors. The new print and electronic logo will have the same 3D design approach reflecting power and quality of its products. •



CUSTOMER MAGAZINE CELEBRATES 40 YEARS

Valtra's customer magazine turns 40 this year. The Valtra tractor factory (then Valmet) launched its first customer magazine in Finland in 1960 under the name "Maa ja Metalli" ("Land and Metal"). The magazine appeared four times a year. Although it looked quite different than today's Valtra Team, the contents were very similar with articles about new tractor models, customer experiences, maintenance tips and production activities. Unlike today's customer magazine, it also advertised Valmet's other products – everything from wall clocks to shotguns and outboard motors to water pumps.

HITECH MODELS NOW AVAILABLE WITH 90 L/MIN HYDRAULIC PUMP

All T and N Series HiTech models with the exception of the N82 and N92 are now available with a 90 l/min hydraulic pump. In addition, one of the hydraulic blocks is equipped with a flow adjustment valve. The new hydraulics have been designed on the basis of customer wishes. Customers can still specify the 73 l/min hydraulic pump.

Internet: valtra.com

Valtra Team

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Valtra is a worldwide brand of AGCO

The European Tractor Pulling Championships

will be held in Alahärmä, Finland on 3-4 September 2011. The Valtra Shell Pulling Team will be defending its title in the Pro Stock category. pulling.valtra.com



The Agritechnica fair

will take place in Hannover, Germany on 13-19 November 2011. Agritechnica is the largest agricultural fair in the world, attracting around 350,000 visitors each year. agritechnica.com



The Valtra do Brasil celebrated its 50th anniversary

in Mogi das Cruzes in Brazil. The factory had a good year in 2010, producing 14,740 tractors. valtra.com.br

Read more: valtra60.com

News International

The revolutionary ANTS concept tractor was lowered from the ceiling, astonishing guests at the evening gala.



The new A and T Series were presented to 150 international journalists at the Suolahti factory.



Valtra celebrates 60 years
A peak into the future

Valtra celebrated its 60th birthday on 26 January 2011 at the Jyväskylä Paviljonki International Congress and Trade Fair Centre. The focus of the celebrations was very much on the future. Although classic tractors were on display, the main topic was Valtra's 120th birthday in 2071.

The event began with the Future Seminar, in which futurologists **David Smith, Sirkka Heinonen** and **Ray Hammond** and Valtra's own **Kimmo Wihinen, Pekka Ingalsuo** and **Luis Teles** presented their views on life and agriculture in the coming decades. All of the speakers were of the same opinion that the demand for agricultur-

al products would increase significantly due to the growing population and quality of life, as well as the use of fields for energy production.

At the 450-person evening gala, **Martin Richenhagen** recalled his cooperation with Valtra before he became CEO of AGCO. He also set tough growth targets for Valtra: through investments Valtra should grow to become AGCO's biggest tractor brand.

The evening was crowned by a presentation of the revolutionary ANTS concept tractor. You can read more about ANTS elsewhere in this issue. On the following day, members of the press were treated to a tour of the Suolahti



factory, including presentations of the new T3 and A3 HiTech models.

Valtra's 60th anniversary celebrations culminated the next day with a special staff party, which was attended by 1350 employees and their partners. •

Valtra ANTS

FUTURE CONCEPT TRACTOR

The farmers and contractors of the future will need versatile, lightweight and powerful machines that allow them to work more diversely and efficiently than with traditional tractors. ANTS meets the challenges of the future while at the same time respecting Valtra's traditions. It is dynamic, friendly, customisable, smart and agile, and it has an excellent power to weight ratio.

The name ANTS is a play on words. It refers to Valtra's current model series - A, N, T and S - but also to the insect. Ants are considered to be extremely strong and social insects, and the ANTS concept reflects the hardworking characteristics of real ants.





The user interface for the driver has been designed to be as simple as possible and can react to voice commands and different kind of gestures. The remaining functions are controlled from the intelligent armrest, so there are no normal screens to block visibility. Instead, the information is displayed on the glass surfaces of the cab in the form of a head's-up display (HUD). ANTS can communicate with other machines, farm computers, weather forecasts, navigation systems and the internet. The cab is also extremely quiet thanks to the electronic transmission.

Intelligent wheels ensure maximum grip in all conditions. The wheels can be widened to up to twice their standard width. The tyre pattern can also be adjusted for a shallow or deep tread. The width, softness and patterns of the tyres can be adjusted by the driver or automatically.

The ANTS loader combines features of traditional front loaders, tele-handlers and forest machines. The loader consists of dual beams that are attached to the same pivot point at the cab. This way the loader can turn together with the cab allowing for full visibility and control. Both loader beams can be controlled individually. For further reach the ANTS front loader is equipped with an inbuilt telescopic boom. When not in use the loader can be folded to the back of the cab.



Valtra ANTS consists of two modules: a soldier unit with an output of 100 kW and a worker unit with an output of 200 kW. If required the modules can be combined, creating an ANTS queen with three axles, eight wheels and an output of 200, 300 or 400 kW. While ANTS can perform routine field jobs independently, a driver is still needed for more complex tasks such as front-loading work. This is why both ANTS units can be also equipped with a cab.

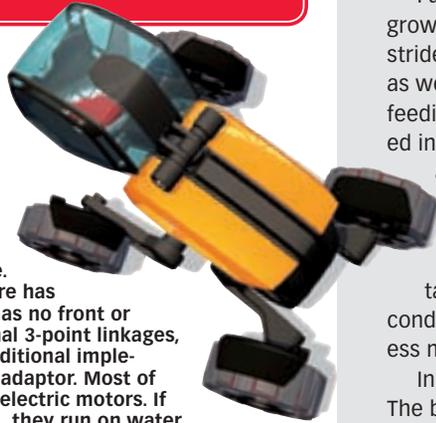


CONCEPT // Valtra ANT

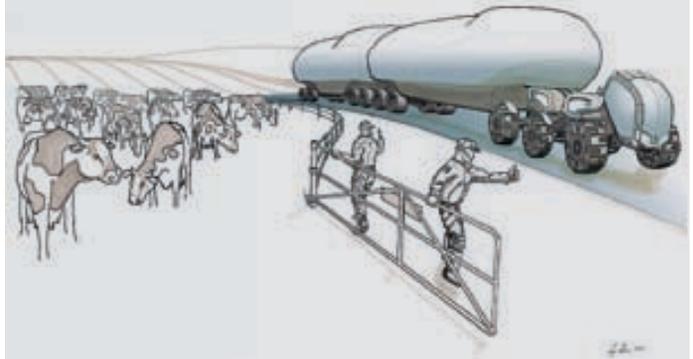


Each of the ANTS wheels is connected to the chassis via a suspension beam. The stiffness and position of the beams can be individually adjusted. The tractor stays level on all terrains. The height of the tractor can be adjusted to different work environments. When expanded to maximum height ANTS can easily avoid obstacles, such as when harvesting forage, planting root vegetables or working in the forest. During transport at high speeds the body of the tractor can be lowered to increase stability and aerodynamics. In tight buildings, gateways and doorways the tractor can kneel down to pass under the obstruction.

Each ANTS module has a spinal core along which the cab and implements can be attached. The rail-like spine runs across the whole module so that implements can be attached on either end of the tractor or in the middle. Valtra's traditional TwinTrac feature has been taken to the limit, as ANTS has no front or rear. There is no need for traditional 3-point linkages, but it is still possible to attach traditional implements to the spinal core using an adaptor. Most of the implements are controlled by electric motors. If traditional hydraulics are required, they run on water.



An electric motor is located in each of the wheels. The power sources can be changed according to availability. These include high-capacity batteries, fuel cells or internal combustion engines fuelled from the farm's own biogas, biodiesel or ethanol. Additional operating capacity, for example in cold climates, is possible by adding external battery bags to the ANTS modules.



Farms in the future will be at the heart of society

In the year 2050 the world will be inhabited by 9 billion people, and up to 80 percent of all people will live in built-up areas and cities. The amount of arable farm land will be diminishing due to continued urbanisation, desertification and pollution. Our diets will remain much the same, but more meat will be consumed in the developing countries, which will put further pressure on arable farm land. The farmer of the future will be tasked with saving the world from famine, while also producing energy and managing waste.

Farmers will need advanced technology to feed the growing population. Automation will have made great strides both in arable farming and animal production, as well as in such areas as crop planning, irrigation, feeding, positioning and logistics. Farms will be divided into highly efficient and large-scale corporate farms and smaller family farms producing luxurious local food. Breeding, genetic engineering and plant protection have enabled increased production volumes and yields, while risks have been maintained at current levels despite more severe climate conditions. Especially local and organic farms will process more food themselves.

In addition to food, farms will provide energy. The biomass required for energy production can be obtained from the forest, fields or bogs. The biomass can be processed into wood chips, biogas, biodiesel, ethanol, straw, peat or other fuels. The end-products include electricity, district heating and fuel for vehicles. Farms will sell either fuel raw materials, processed fuels or finished products. In addition, wastelands will be used for wind and solar energy production.

Some of the farms will also serve as recycling centres. They will receive municipal biowaste that is then composted into compost or biogas. Combustible waste can be burned for energy together with the biomass produced by the farms.

The farmer of the future will be a highly trained and respected professional who manages his or her own production plant. Demand for agricultural products will continue to exceed supply, and the real price of food will be several times what it is today. •



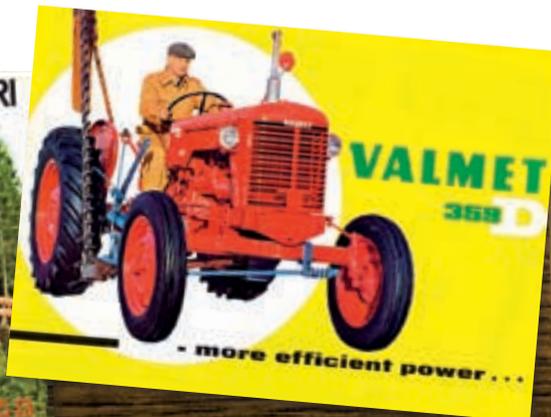
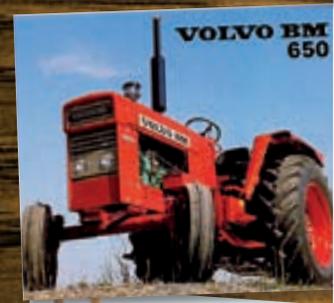
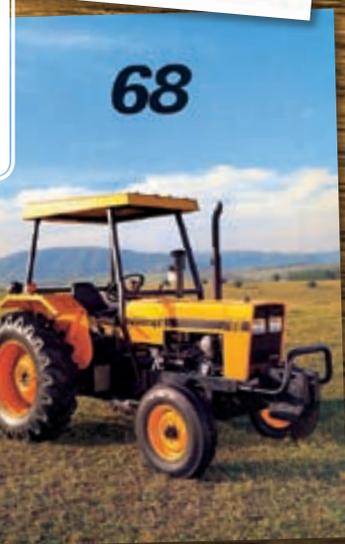
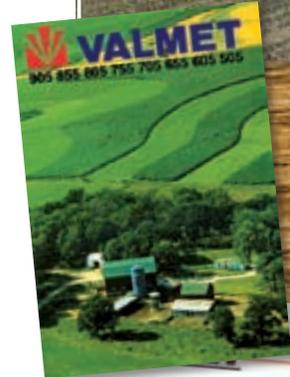
60 years of VALTRA TRACTORS FROM FINLAND

Valtra's predecessor Valmet began tractor production in Finland after the conclusion of the Second World War. Having manufactured rifles, artillery pieces and aircraft engines, the company's factories began producing agricultural tractors. The first Valmet 15 tractors were manufactured in 1951.

In 1960 Valmet established a tractor plant in Mogi das Cruzes, Brazil. This bold and risky decision to open a factory on the other side of the world has since proven to be right: Valtra do Brasil is today the second leg upon which the Valtra brand stands.

In 1979 Valmet acquired the tractor operations of Swedish company Volvo BM. Together with its own predecessors Bolinder and Munktell, Volvo BM had deep roots in the industrial history of Sweden. Theofron Munktell opened his first workshop in Eskilstuna in 1832. The co-designed Volvo BM Valmet 05 Series was launched in 1982.

The AGCO Sisu Power engine plant in Linnavuori, Finland is an integral part of Valtra's history. The Valtra tractors manufactured in Suolahti have all been powered by engines from AGCO Sisu Power or its predecessors Sisu Diesel and Valmet. •



Tech

T Series

SCR-engine

TEXT TOMMI PITENIUS PHOTOS VALTRA

New T Series models

NOW EVEN MORE ECONOMICAL

The largest models in the T Series have been updated in accordance with the latest emissions regulations. The introduction of new engine technology has also been accompanied by numerous other improvements.

At the heart of the new T183 and T203 Direct models and the T183 and T213 models is AGCO Sisu Power's 7.4-litre SCR engine. Fuel consumption is 5 to 10 percent lower than similar engines without SCR technology. In addition, the SCR system reduces both cooling needs and emissions while keeping the lubrication oil cleaner. In other words, SCR technology saves both fuel and the environment.

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. The additive AdBlue has been used to reduce emissions in road transport for even longer. 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 in the same way as the fuel tank or the windshield washer fluid reservoir. The amount of AdBlue consumption is 3 to 5 percent that of fuel consumption in engines that comply with Stage 3B emissions norms, i.e. slight-



The biggest T Series models now feature SCR technology, which reduces emissions and fuel consumption. AdBlue, a urea-water solution, is sprayed into the exhaust gases before the catalytic converter, which is located in the exhaust pipe. The AdBlue reacts with the nitrogen oxide in the catalytic converter, producing harmless compounds in the process. What comes out of the exhaust pipe is primarily nitrogen gas and water. As the SCR system takes care of emissions, the engine can be tuned optimally without compromises.

In addition to new engine technology, the 3rd generation T3 Series comes with many other new features.



SCR technology has been used for years in S Series tractors and heavy vehicles. The onboard electronics operate the system, and all the driver has to do is fill the AdBlue tank in the same way as the fuel tank or windshield wiper fluid reservoir. SCR technology reduces fuel consumption by 5 to 10 percent and prolongs engine life.

ly higher than in engines that comply with earlier standards.

The new engines offer slightly more power and significantly more torque than before, and the nominal engine speed has been reduced to 2100 rpm. Sigma Power and Transport Boost have also been increased. The most powerful T Series model is now the T213, which produces 15 more horsepower than previous models. The torque and power curves of both Versu and Direct models have been revised, and the engine now works even better with the powertrain. With the new software, both the stepless and powershift models provide optimal performance in all conditions.

In addition to new engine technology, the 3rd generation T3 Series comes with many other new features. The patented Valtra ARM driver's armrest now has a colour display with separate daytime and night settings. The joystick on the armrest can now be used to control the front or rear hydraulics, or both. The PTO and 4WD switches are now also on the armrest. In addition, it is now possible to make changes to programmes stored in the U-Pilot Headland Management System when the tractor is standing still.

The new T Series is available with a new factory-fitted Auto-Steering readiness or the complete System 150 Auto-Steering package, which can steer the tractor with an accuracy of just a few centimetres. The factory-fitted AGCOMMAND satellite navigation system is also available, allowing the location, current task, productivity and servicing requirements of the tractor to be monitored over the internet. •

T Series **TECHNICAL SPECIFICATIONS**

	STANDARD MAX KW/HP/NM	BOOST MAX KW/HP/NM
DIRECT		
T183	138/188/770	148/202/820
T203	150/204/800	158/215/850
VERSU		
T183	138/188/770	148/202/820
T213	158/215/850	166/225/900

Valtra helps protect

THE LANDSCAPE

Changes in land use and management on Bodmin Moor including a reduction in grazing animals coupled to increases in ambient temperatures has, in certain areas, lead to what can almost be described as a monoculture of gorse.

Not the native Western Heath Gorse but a strain resulting from hybridisation with European strains making it increasingly invasive and less acceptable as part of the moor's ecosystem. Exacerbating the problem, as gorse areas expand so other plant species, wildlife habitat, and grazing are lost and, although moorland grazing is not highly productive it is a useful resource.

So, how to control the gorse? Traditional methods were mostly based around burning; an unacceptable method today as it directly releases CO₂ into the atmosphere and destroys natural peat deposits. This is something of a double whammy as peat locks up carbon at around 80 tonnes per hectare per year. Should the peat be inadvertently burnt along with gorse it will release around 120 tonnes of carbon per hectare. These factors were part of the problem taxing **Rupert Hanbury-Tenison**, a farmer on Bod-

min Moor and partner in Moor Heat LLP, a company that undertakes tree, moorland and river maintenance.

"An alternative method of gorse control was clearly required but it has to be ecologically and economically acceptable," points out Rupert Hanbury-Tenison. "Many of the moor's farmers are in HLS and UELS stewardship schemes so some cash is available but from my point of view we needed to find something that went that little bit further, something that made good management of the Moor's environment acceptable without being a drain on resources."

One solution would be a system that allowed the cut gorse to be utilised elsewhere. There are some machines that cut gorse and similar materials and others that will bale, bundle really, woodland brush and similar material such as gorse; both systems require high powered machines consuming expensive fuel. Then Rupert came across the Bio-

baler. "It looked just the machine we required," he recalls. Manufactured in Canada the Biobaler can best be described as a heavy duty forest mulching machine connected to the front of a round baler on steroids; a machine that has the capacity to cut and bale a variety of woody materials up to five inches in diameter.

Rupert and business partner **Robert Stirling** formed Moor-Heat Ltd to purchase and operate the Biobaler. "The Biobaler requires 200 hp at the PTO and operates in pretty demanding conditions. We needed a tractor that would be reliable, stand up to the harsh operating conditions, provide a comfortable working environment and deliver the right amount of power at the PTO – economically."

Rupert had, for some time, been operating Valtra tractors; an 8150 for trailer haulage, winching and chipping and a smaller 705 with loader for a host of other operations. Both machines had proved reliable and easy to operate. Importantly, Valtra, and before them Valmet, machines are specifically designed to operate in demanding forestry conditions. "Many Scandinavian farms include areas of commercial forestry. Farm-

Systems require high powered machines consuming expensive fuel.



Bales of gorse weigh in at around 500 kg and are easily handled with a front loader.



With a bar on the front linkage to push over tall plants the baler is capable of clearing material up to 5 feet.

ers work in the fields during the summer and the woods during the winter; as a result the underside of Valtra tractors – the popular brand – is devoid of components that are easily damaged. It is also easy to fit forestry guarding to a Valtra.” Rupert explains. Moor-Heat purchased a used Valtra 8950 from Cornish dealer B&B Agricultural Sales of Doublebois near Liskeard. “We’d found they offered a first class service to match the tractor and our requirements.”

While looking into the gorse problems other possible uses of the equipment had come to light. “The disease *Phytophthora Ramorum*, or Sudden Oak Death, is an increasing problem causing the potential decimation of thousands of hectares of commercial forestry and native woodland,” explains Rupert. The main host for this pathogen is the invasive *Rhododendron Ponticum* found throughout the forestry sector and across large estates in Cornwall and elsewhere. A large effort is being made to clear both infected and uninfected plants to prevent further spread of *Phytophthora*. Even though

present rules that say *rhododendron* must not be moved but burnt on site, could infected and uninfected *rhododendron* be used as a biomass? Whatever the outcome of this challenge, the Valtra tractor and Biobaler combination is clearly an effective way of clearing *Rhododendron* from amongst standing timber with the Valmet 705 easily capable of moving the baled material to a safe area for burning.

And what of other materials? Rupert has already used the Valtra tractor and baler to harvest stands of blackthorn and willow. “Operating in conveniently worked areas a single driver should be able to clear around 1ha of gorse or *rhododendron* in a day depending on ground conditions. Working in stands of willow or other specifically grown biomass crops such as *miscanthus* even greater output can be expected.”

What next? Thanks to the natural spring of the material within the bale it is less dense than a grass bale, a 4 ft x 4 ft bale weighs in at around 500 kg and even very sappy material does not heat up. Left under cover baled *rhododendron* dries quickly;

from 60 percent moisture to 30 percent in a couple of months although the exact length of time is dictated by the season in which the material was cut and baled. Dried, one bale of gorse contains energy potentially equivalent to a third of a barrel of crude oil or put another way it is capable of producing one megawatt hour of energy so Moor-Heat have a number of options. They can use bales to fuel a furnace, currently the business uses the heat to dry cut timber for sawing, logs or kindling. Alternatively, the baled material may be chipped for use in combined heat and power boilers or pressed into briquette, a much hotter heat source than natural logs.

“With the ability to run the Valtra 8950 entirely on biofuel (Valtra were the first tractor manufacturer to use engines with this capability) the carbon footprint of Moor-Heat’s operation is potentially carbon neutral which has to be the best way of returning the Moor to a more diverse natural state with a range of flora, fauna and commercial use,” concludes Rupert Hanbury-Tenison. •



A Series enters the HITECH ERA

The new electronic HiTech forward-reverse shuttle that is now available on the A Series is closely related to Valtra's traditional shuttle feature, which is widely considered the best on the market. The smooth and precise shuttle is a big advantage when performing front-loader tasks. The system also features an integrated hand-brake, further enhancing convenience and safety.

Together with the electronic shuttle the A Series gets a dual-speed PTO controlled by a hydraulic multidisc clutch. The PTO is operated by simple switches, and the hydraulics offer smooth engagement. Control switches can also be optionally specified in the rear mudguard.

The new A Series tractors are powered by AGCO Sisu Power 3.3-litre common rail engines. A viscous fan and common rail fuel injection reduce both noise and fuel consumption. With the introduction of electronic engine management, the A Series is now also available with cruise control.

Other new electronic features are available for operating the front linkage and transmission. Valtra's electronic Autocontrol front linkage is extremely precise, and switches for raising and lowering the linkage can

be found in both rear mudguards. Valtra's unique Autotraction feature and automated 4WD system are ideal for tasks that require repeated stopping and starting. The options list also includes electronic Proline dials that provide a wide range of information.

Driver comfort has been taken to a new level. Noise levels in the cab have been further reduced, and the cab itself has been comprehensively updated. The suspended pedals, including electronic clutch and gas pedals, are easy to operate even with heavy boots. Entering the cab is now easier thanks to wider access. The adjustability of the steering wheel and driver's seat has also been improved. Customers no longer need to specify a forest cab, as the redesigned cab offers a more even floor. For forest tasks the cab can be specified with a gas pedal in the rear and a rear window designed for a loader valve. •

A Series tractors equipped with the forward-reverse shuttle are available as HiTech models. The traditional A Series tractors are also available as A72, A82 and A92 Classic models.



A Series HITECH	
	MAX KW/HP/NM
A83	65/88/325
A93	75/101/370

The Valtra A Series has traditionally been the most popular tractor in Scandinavia. Valtra has further improved the forest features that are so important in this region.



Farmer and contractor Henry Tomlinson is happy with his T150 HiTech. Torque of the Sisu engine and wide speed change range of 3-speed power shift transmission is more than enough.

A reliable and cost-effective **WORKHORSE**

When Henry Tomlinson's tractor let him down back in 2003 he turned to his local Valtra dealer, David Eaton Tractors Ltd. of Fradswell, Staffordshire. David let him borrow his 8050 demonstration tractor and the rest, as they say is history.

Henry Tomlinson farms just over 180 acres just to the north of Lichfield. The crop rotation is simple: one year rape followed by two of wheat. Alongside his farming activities Henry offers a contracting service: ploughing and cultivating, silage hauling – he has his own 14 tonne trailer – and round baling of hay, silage and straw – Henry produces over 3600 straw bales every year.

“In the cab of that 8050 I was really happy, for its day it was a really nice drive.” In the four years the 8050 was on the farm Henry learned Valtra have many important advantages. “The engine has bags of torque, they pull their hearts out for you and don't use much fuel doing it. It gave absolute-ly no trouble. I also found baling

after big combines was much easier – ground clearance is excellent and there's nothing underneath for straw to get hung up on – even the drive shaft to the front axle is well guarded.”

In July 2007 Henry decided it was time for a change and returned to David Eaton Tractors to catch up on latest developments from Valtra. “They had a T150 HiTech demonstration tractor at the time. I gave it a try and finished up buying it – and I got more for the 8050 than I paid for it – though it had a new set of tyres. I suppose folk were cottoning on to how good Valtras are and the price of used machines went up.”

The new T150 proved as delightful to drive as its predecessor. One early job was hauling silage, working along side other tractor makes. “At the end of a 12 to 14 hour day when we all refuelled the T150 regularly needed 25 or so litres less to top up the tank. That's £15 or more a day saving straight away and at 14 tonnes mine was the largest trailer.” Henry also likes several of

the other features.

“Ploughing last autumn I tackled a 15½ acre (6.2 ha) field – 9” (23 cm) deep mind, not tickling the top – with my six furrow plough. That worked out at 24½ field miles (39.4 km) and the fuel consumption was just 1.27 gallons per acre (14.2 l / ha) – which I don't think is bad given the heavy soil.”

So when the time comes to change the T150 HiTech will Henry be looking for a more sophisticated machine? The emphatic answer is ‘no’. “A 3-speed power shift is ample – you don't need any more with the torque that comes from the Sisu engine and as I do all my own maintenance I like to steer clear of electronics if they're not necessary. I also like to ‘feel’ what's going on when I operate spool valves – the electronic system may suit others but it's not for me. Being able to specify the build of my tractor will certainly help when it comes to buying my next Valtra.” •



Young driver rates

VALTRA DRIVING EXPERIENCE

Long hours spent behind the wheel of a Valtra T140 tractor place Chelsea Mason in the box seat when commenting on the increasingly popular Finnish-made brand.



Australian tractor operator Chelsea Mason was introduced with the brand new T Series Versu during a recent photo shoot.

“To be honest, I’ve spent a lot of time in tractors and at the end of the day, I consider it to be one of the best on the market.”

In hindsight, it would be safe to say the former university student, who has now entered the work force, retains great affinity for the machine which saw her put it through its paces at a Mount Cameron property located in Victoria, Australia.

The Fawcett Partnership enterprise spans some 1400 hectares with the bulk of the operation centred on cropping, although it also runs a herd of Angus cattle.

Describing the country as “hard wearing” with heavy black soil interspersed with rocky outcrops; **Chelsea Mason** says “It is not easy country on any piece of machinery.”

As a general hand, Chelsea spent much of her time with the Valtra T140 working-up paddocks, as well as carrying out sowing duties, in addition to performing a range of tasks around the property’s farm buildings. Purchased new, the tractor stacked up in a number of respects.

“To be honest, I’ve spent a lot of time in tractors and at the end of the day, I consider it to be one of the best on the market,” Chelsea said. “They are not ‘tinny’ and nothing seems to break, quite apart from them being comfortable to drive and generally robust.”

“As well, they’re equipped with

a great Powershift transmission,” she added.

Chelsea knows what she is talking about having spent anything between 12 to 14 hours a day when driving the 108 kW (145 hp) T140 during busy times of the year. The work station, or cab, was also deemed to be “very good on the ears” which is an increasingly important factor when buying a modern-day farm workhorse. All-round vision from the driving seat was described as “not an issue and ‘yes,’ is good,” according to Chelsea.

The useful provisions of storage areas, for anything that need to be stowed away like notebooks, underscore the Finnish designer’s attention to detail.

“There were useful areas also to put things in and I also liked the visor when working towards the setting sun,” Chelsea said.

Turning to the servicing aspect of the T140, this was carried out according to plan and with the minimum of fuss.

“We always go through the (service) book and make sure the necessary oil changes, greasings and general checks were carried out,” Chelsea said.

T140 EcoPower saves fuel

Another operational upside of the six-cylinder T140 EcoPower proved

to be its miser-like fuel consumption.

“Its high torque at low revs came into its own when pulling a plough when the engine was only at 1350 rpm,” Chelsea said. “So this made for pretty good fuel efficiency, plus, as I mentioned before, there was a heap of torque behind you whenever needed,” she added.

Adding to the Valtra T140’s reliability was its reliability during the drought. It performed in extremely dusty conditions, only requiring the occasional “blow-out” of the radiator. Interestingly, the “good radial tyres” have worn well as the tractor cruised through 2500 hours with no serious downtime.

When it comes to hydraulic power, Chelsea recalled this being a strong feature of the T140 with both high and low flow levels more than adequate for the jobs in hand.

This was especially important when operating ploughs, discs, air and disc seeder, also scarify and harrow duties when the tractor had to earn its keep without mishap.

“It also had a front end loader so any jobs that needed to be done around the farm, like lifting pallets, it was nimble enough to do that too,” Chelsea said.

With more Valtra brand tractors starting to appear in the district, Chelsea says she stands by the T140 being a “good, solid tractor,” and is happy to talk up its credentials to anyone who asks. •



Many of Shire Agri-Hires customers replace their Valtras with a new one – these three are for one customer.

A farming force in **SOUTH WEST SCOTLAND**

Founded in December 1972, the company of Reid McKie Ltd, based at Glenluce near Stranraer in Scotland's South West, was an amalgamation of McKie Brothers of Newton Stewart and Reid (Glenluce) Ltd. By the early 1980s the McKie family headed by **Ken** had taken control of the company and were looking for a quality tractor marque to run alongside their range of budget tractors. Ken remembers, "We looked at a number of franchises but after a lot of deliberation settled on what was then the Volvo BM Valmet tractor." **Reid McKie** became their first dealer in Scotland and Ken readily admits it was the Volvo connection that was important in the decision. "Many farmers ran Volvo cars, stock were moved and feed delivered on Volvo trucks; they had a reputation for excellence. We thought the connection would help tractor sales, even though the companies were quite separate."

True to say that during the

1980s and early 90s the Valmet range was not as comprehensive as today. Designed and built mainly for its native Finland and other Scandinavian countries, it was highly suitable for smaller livestock orientated farms very similar to those in the Wigtownshire region. Ken was correct in his assumptions and, while sales did not come easily they grew steadily and in a short time the Valmet tractor, as it later became, earned a reputation for toughness and reliability in this area of Scotland. Various UK importing organisations came and went until, in 1992, Valmet Tractors UK was set up with sales and support coming directly under Valmet's head office influence. Nationally Valmet tractor sales increased as did the power range making them more widely acceptable on all types of farm. Business at Reid McKie progressed rapidly from then on.

However, in 1994 Ken McKie and family decided to take stock. Reid

McKie was a family run company: did the family wish to carry the business on? The outcome of these deliberations was the sale of the farm machinery business leaving the family to concentrate on road haulage and plant and agricultural machinery hire – using Valtra tractors of course; an altogether smaller operation. Meanwhile, at Reid McKie, now under new management Valmet sales continued to develop until, in September 1997, disaster struck; fire completely destroyed the Glenluce premises. To continue operating the company moved to Stranraer with the McKie family buying back the now vacant Glenluce site. For various reasons Valmet agents in South West Scotland changed several times until, in 2009 the McKie family realised Valtra had no local dealer. It was in 2010 Shire Agri-Hires, now headed by Ken's son **Tom** brought the franchise, now Valtra, back to Glenluce. "Valtra has been represented by several dealers during the years between our involvement. To be fair this was often

Shire Agri-Hires is run by the McKie family, left to right Ken, Jean, Claire & Tom.



The day Reid McKie Ltd signed up to Volvo BM Valmet. Left to right Richard Page of Nordic Tractors, Ken McKie, Barry Elliot and Roy McKie.

outside the control of Valtra or the local dealer but the outcome is a healthy population of Valtra and Valmet tractors in South West Scotland, a population that continues to grow.

The area around Stranraer is washed by the Gulf Stream and farming is almost totally livestock based including several large dairy farms. One contractor who services farms in the area is R G Contracting run by Russell Gaw. RG has the ability to undertake just about everything from basic cultivations through to silage. "We do everything, ploughing, cultivating, grassland operations from fertilising to silage making – we mill barley and undertake full farm contracts." Comments Russell. Besides silage, one operation that is important to RG Contracting is slurry spreading. "We have two types of injection systems – deep and shallow using umbilical pipes, although this area is a bit stony for deep injection and we have to be careful where we use the system. We also have tankers

with dribble bars and splash plates." Interestingly, with the price of oil and therefore fertiliser constantly rising farmers are increasingly using slurry as fertiliser rather than spreading it simply to get rid of a problem and this is mirrored in the type of artificial fertiliser spread at other times of the year. Commenting on his tractor fleet Russell remembers, "I purchased my first Valtra back in 2001, a couple of 8450s and 8150s. We worked them hard and they performed well but I did replace them with another brand in 2003 and 2004. That was a mistake; it seemed we had to run more tractors than was necessary because one always appeared to be in the workshop." Today RG Contracting run 9 tractors, 7 of which are Valtras, mostly T Series but there is an N Series on the fleet and drivers say all are totally reliable. "We operate a one man, one tractor system," reports Russell, "as a result our machines performing well and look good as well." •

Valtra appoints Sales Support Specialist

FOR UK AND IRELAND

We're pleased to announce we've appointed **James Cullimore** Sales Support Specialist for the UK and Ireland. James is from a farming family and worked in agricultural contracting before spending three years at Reading University studying agricultural business management. University was followed with some world travel including time working for agricultural contractors in Australia, an great opportunity to gather a wealth of experience. Back here in the UK James has worked on the family farm and spent a period as a freelance journalist before moving to demonstrating the products of another manufacturer for a couple of years, leaving to join Valtra.

James' responsibilities include demonstrating tractors to customers and supporting the sales team throughout the UK and Ireland in various including dealer training. •



James Cullimore joins Valtra as Sales Support Specialist.



With timber cut to manageable sizes John can load and unload on his own from the swivel seat.

Forestry

A WAY BACK TO WORK

On leaving school John McLeod started work with an agricultural and forestry contractor near his home in the Hexham area of Northumberland. John was enjoying life until the day, twenty years ago, when he was knocked over by a drunk driver, an incident that was to leave him paralysed from the chest down.

During his stay in the spinal unit at Hexham hospital **John McLeod** had plenty of time to think, plenty of time to become bitter and twisted but that was not his style. John used the time to plan how he was going to return to work, how he could carry on driving a tractor and continue what he enjoyed – working in the forest.

Discharged from hospital, John's brother **James** modified a Kawasaki Mule by fitting hand controls. Then followed the modification of the first tractor by fitting hand controls from a car; both projects in themselves being quite simple – the problem for John was how to get himself in and out of the tractor cab unaided. At about this time John also decided to return to Houghall College where he attained formal qualifications in forestry operations. On completion of the course John set up his own business producing timber products and selling logs; Elm Tree Products. One of his first purchases was a log processor from Jas P Wilson and, while at the company's Dalbeattie premises, he got talking to **Billy Wilson**, explaining that he needed to get into a tractor cab unaided. Billy's answer was quite simply, "We'll give it a go."

John had decided on an 8 tonne Botex forwarding trailer with crane powered by a Valtra 8000. "Valtra have excellent ground clearance and a clean underbelly – nothing to get snagged on stumps in the forest and are designed to work equally well both in the forest and in the field," points out John. It soon became clear that the Valtra provided several other advantages: a wide door and, with HiTech, the ability to be driven safely without the use of the clutch pedal.

"The smaller tractor is very manoeuvrable, ideal for thinning work."

After some thought the decision was made to use a simple crane mounted just inside the cab door alongside the A pillar; John would wear a harness, park his wheelchair next to the steps, reach up for the control, lower the wire, clip on and up he would go. Simple in theory, and with the crane with its swivel built, simple in practice. "We used a 12 volt winch that would normally be found on a quad bike," comments Billy Wilson. Once installed in the driving seat John only needs a bit of reverse and a lot of left hand down to clear the wheelchair which could be left for his return. Billy Wilson admits the controls took a little more planning. "Valtra's HiTech system was key; we already had a pedal-less clutching system with which to work." The decision was made to install a new hand throttle on the main gear lever. "John can now go up and down the gear box without letting go of the gear lever or the steering wheel; an important safety factor." A simple lever has been mounted on the foot brake for hand operation and, importantly, none of the standard controls have been removed so the tractor may also be driven quite normally. The Valtra seat swivels quite simply so operating the crane presented no problems. It has also transpired that John is able to undertake some of the regular maintenance requirements from his wheel chair. "I can check oil levels, even change the filter," comments John in a matter of fact way.

The firewood business grew as did John's confidence and he started undertaking more varied work, often bringing in chainsaw gangs. For this he required a second tractor, this time choosing a four cylinder Valtra 6350. The 6350 now with similar control modifications is also fitted with an Igländ winch with which, and with a little help from the ground, John is able to skid out felled timber. A front mounted Botex skidding grapple is then used to stack logs neatly for ready for transport. "The smaller



↑↑↑ With a simple swivelling electric crane mounted just inside the cab door John McLeod is able to winch himself into the seat.

↑↑ Some help is required with chains when skidding timber.

↑ With the front grab fitted to the 6300 John is able to sort cut timber.

tractor is very manoeuvrable, ideal for thinning work amongst standing timber but the grapple does restrict these capabilities a little. On the plus side I can do more work on my own – without relying on help."

Is John pleased with his tractors? The answer and unequivocal "yes!" Is the system fool proof? Not quite. As any of John's friends will willingly tell you he does, occasionally, get stuck. Not a problem for able bodied operators but for John it means phoning for help and suffering a certain amount of good natured mickey taking as a result. One thing is clear though – mickey taking or not – John McLeod has the respect of those who work with him. •

CONTACT YOUR LOCAL VALTRA DEALER

Comfortable leisure clothing for the entire family

Valtra Collection



Children's tractor sweatshirt with grey trim. Kangaroo pocket, button neckline makes it easy to put on. Soft lining. (11534)



Children's college pants with grey trim. Side pockets, back pocket with tractor. Soft lining. (11525)



Men's soft shell windbreaker. Rain and wind resistant, flexible soft shell material. Soft fleece lining. Also available for women. (11580)



Sports bag. Lots of room for weekend trips. (11651)



Children's tractor backpack. Cushioned straps, reflective trim on front. Size approx. 34x25 cm. (11545)



Children's tractor t-shirt. Also available with grey trim. Comfortable and flexible cotton/elastane perfect for playing. (11534)



Ladies' polo shirt. Breathable material. Also available in black for men. (11559)



Men's polo shirt. Comfortable cotton. (11568)



The Valmet 702S-4 was a really handy tractor with excellent traction. The tractor weighed 4040 kilos and its wheel-base was relatively long at 245 centimetres. The belly was smooth and the ground clearance higher than today's tractors in the same power class.

4WD BULLSEYES

Four-wheel-drive began to catch on in the second half of the 1970s. Driving axle technology had improved substantially with the introduction of planetary reduction gears in the wheel hubs, which decreased loads on the CV joints while increasing the turning angle. Utilising the new technology, Valmet successfully launched its 702-4 and 702S-4 four-wheel-drive models in early spring 1978.

In 1975 Valmet had presented a model equipped with a heavy duty industrial front axle, the 1102-4. Its NAF axle was heavy and the differential shaft was located on the left. When planning a four-wheel-drive model for the 75–90 horsepower category, Valmet wanted to use a shaft that would be ideal for both agriculture and forestry.

Such an axle was available from the Italian supplier Carraro, which also supplied Renault. The AE3 model was very slim, the differential housing was in the middle of the shaft, and the shaft could be centrally equipped with bearings in relationship to the cardan shaft. Actually, in this case the term “cardan shaft” should not be used, as power was transmitted along a straight shaft from the gear box to the front axle without cardan joints.

This was the first model to feature the structure that thereafter became typical of Valmet and Valtra tractors, i.e. the power is transmitted inside a fully protected structure to the front axle. The Valmet 02 Series did not feature low-pressure hydraulics, so the four-wheel-drive was engaged using a mechanical dog clutch. The speed difference between the front and rear wheels was designed to be small, with the front wheels rotating only 1–2 percent faster than the rear wheels.

Since the maximum turning angle of the axle was 40 degrees, the front wheels were as large as possible – from 13.6/28 when the rear tyres were 18.4/34. As a result, the ground clearance was almost half a metre at its lowest, and the belly was smooth. The downside of the large wheels was that the turning circle was about 12 metres, but the limiting factor was precisely the turning angle of the axle.

The 4WD Valmet offered tremendous traction thanks to its big wheels. Its cross-country abilities were commendable, and in Norway the Valmet 702-4 was named the best forest tractor. At the time front axle differential locks were not common. The lack of locking differentials was made up for by a front axle

with the greatest possible roll angle, which was 11 degrees in each direction. The front axle's track rod was on the front axle beam, so a sturdy bumper was designed to protect it.

Two 4WD models were offered: the 702-4 with a non-supercharged 75-horsepower (DIN) Valmet 411 B engine and the 702S-4 with a supercharged 91-horsepower 411 BS engine. Just before the change of colours in 1979, the cylinder dimensions of the 4.2-litre 411 B/BS engines were changed to those of the six-cylinder 611 C/CS engines, meaning that the engine capacity of the 411C/CS engines increased to 4.4 litres.

The “Student Models” were introduced in 1979, with a brighter yellow colour and a more chocolate hue to the brown body colour. The wheels and roof were painted white, and it was the latter that recalled the hats worn by graduating students. These models were also available with an additional HiTrac gear, which doubled the number of 8+2R speeds.

The value in use of the 702-4 and 702S models is still very high. These models allowed Valmet to switch to four-wheel-drive at a fast pace, and by the time the Volvo BM Valmet Series was introduced in 1982 four-wheel drive was designed almost as a standard feature. •

See us online: valtra.com/products

Valtra Models



A-SERIES

MODEL	MAX. HP/NM
A72 Classic	74/296
A82 Classic	88/324
A92 Classic	101/360
A83 HiTech	88/325
A93 HiTech	101/370



T-SERIES

MODEL	MAX. HP/NM
T131 Classic	154/580
T161 Classic	174/660
T121 HiTech	139/550
T131 HiTech	154/580
T151e HiTech	163/620
T161 HiTech	174/660
T171 HiTech	184/670
T191 HiTech	189/680
T132 Versu	141/580
T152 Versu	150/630
T162e Versu	167/790
T172 Versu	177/715
T182 Versu	186/750
T202 Versu	200/800
T183 Versu	188/770
T213 Versu	215/850
T132 Direct	141/580
T152 Direct	156/630
T162 Direct	167/675
T172 Direct	177/715
T182 Direct	186/750
T202 Direct	200/800
T183 Direct	188/770
T203 Direct	204/800



S-SERIES

MODEL	MAX. HP/NM
S233	270/1185
S263	295/1295
S293	320/1400
S323	350/1492
S353	370/1540



Valtra 60 years

In honour of our 60th birthday, Valtra is offering a wider range of models than ever before – including over half a million possible combinations of specifications!



N-SERIES

MODEL	MAX. HP/NM
N82 HiTech	88/360
N92 HiTech	101/450
N101 Classic	116/460
N101 HiTech	116/460
N111e HiTech	128/570
N121 HiTech	137/540
N141 HiTech	154/580
N122 Versu	137/560
N142 Versu	152/600
N122 Direct	137/560
N142 Direct	152/600