Valtra Team





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Editorial



Changes in farm machinery manufacturing and distribution continue: it's part of life, a part with which we have to contend. The most recent changes to affect the Valtra distribution and after sales support network have been the result of the purchase, by Claas, of the Renault tractor business. It has come as no surprise to hear that sales of the Class/Renault tractor are now to be added to the range of products sold by Claas dealers many of whom are, or were, Valtra dealers.

So what happens now?

Firstly the introduction of Claas tractors into the equation does not mean Valtra will sack all Claas dealers. Far from it. Provided sales of Valtra tractors continue to grow we will give dealers all the support we can. However, as you may be aware, we have already appointed several new dealers in various parts of the country, and there may well be more to come. This is because we feel we are not getting our share of the market and that dealers with a fresh outlook will help improve our market penetration and provide you, our customer, with improved levels of support.

Over the past few years the Valtra tractor has come of age in the UK. Farmers, contractors, foresters and many other users now appreciate the qualities of the Valtra machine and the company behind it. We are gratified that both established and up and coming dealers with technical ability, financial stability, good management and the desire to become Valtra dealers have been knocking at our door, asking if they can take on the Valtra franchise – a big difference from the early days of Valmet Tractors UK in 1992 and one of which we intend to take full advantage.

And the future?

None of us has any guarantees concerning the future. Ideally we would like to continue building the Valtra network in the UK and Ireland from our established dealer base: Appointing new dealers, training staff is an expensive undertaking that interrupts normal business and is not something we undertake lightly. Besides good sales and support networks operate best when there is a high level of continuity.

However two things are certain: The Valtra organisation and its products will continue to develop – Valtra has always been a market innovator and that will not change. You can also be confident that Valtra will continue to improve the levels of support that owners of our machines deserve.

Mark Broom

MD

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Product training brings dealer sales staff up to date with Valtra machines - and their competitors.

Valtra Dealer Network Development

Even reliable machines need attention from time to time and one thing is for sure; no matter how reliable they rarely – if ever – breakdown in the shed! Usually it's at the most inconvenient time imaginable Precisely the time that good, reliable, dealers are invaluable. This is the time that well trained technicians, backed by a comprehensive parts organisation, comes into their own. And this is precisely the organisation that Valtra are creating with their UK and Irish dealer networks.

There have been many changes in the British and Irish farm machinery dealer networks over recent months and, as manufacturer's develop their organisation it is fair to say there will probably be more changes to come

so, what makes a good tractor (and farm machinery) dealer?

A good dealer is one that not only strikes a fair deal but one that is then prepared to invest in their, and your, future. One where staff; sales, service, parts and others regularly undertake training courses. One that invests in the necessary specialist equipment. One that does not skimp on stock and parts inventories. One that is well managed and financially sound. And (and this may hurt a little) one that does not give away all the profit simply to get a deal; no profit equals no reinvestment. One that is prepared to turn out to keep your machinery operating under all circumstances.

So how do we at Valtra go about setting up a dealer network made up of these shining examples of good business acumen?

To be honest twelve years ago it was not easy. Most of the best dealers were aligned to other brands and Valmet, as we were then known, was an almost unknown quantity in the UK and Ireland. Who at the depth of a recession would hitch their wagon to an unknown star? Since that time several things have happened; the Valmet and now Valtra range has expanded and there is a tractor for every type of farming operation; something for everyone. Our tractors have proved rugged, reliable, efficient and cost effective. They have held their residual value well. Valtra is a desirable brand in the eyes of customers and dealers who are now lining up to represent Valtra.

There have, of course, been some other influences in play; Major manufacturers have amalgamated; companies have changed

Dealer staff, customers and their families are all welcome at the Valtra assembly plant.



Tony Hooker Explains the Valtra parts system to Stock Control Manager, Geoff Wadcock. Although we have a comprehensive parts holding in the UK deliveries from Finland can be made to the dealership in under 24hours if required.





John Battams and Colin Dean discuss the latest hydraulic developments by Bill Flynn.



The Valtra factory is located at Suolahti, Finland. The Visitor Centre is situated in the building in the foreground. The long central building is the recently extended main assembly hall. To the left is the transmission and hydraulic manufacturing and assembly area and to the right a workshop for fitting special equipment. Just out of shot at the bottom of the picture are the P&A stores and after sales support offices. The Sisu Diesel factory is located at Tampere and there is a second large assembly plant in São Paulo, Brazil.

ownership and, as a result, changed their marketing arrangements. On several occasions this has given Valtra the chance to recruit dealers of the correct calibre. On other occasions dealer management have approached Valtra with the aim of becoming a dealer. Whatever the reason our network of trained dealers has grown and can now rival many longer established networks.

So what do Valtra demand of a new dealer?

Firstly we must be certain the company will be fully committed to Valtra products and ethos.

After this comes training: All dealer staff must

be prepared to undergo regular training; sales, service, parts and administrative personnel need to fully understand the Valtra philosophy and product, how it works and how it is supported. This often includes visits to our two factories in Finland; Tampere where engines are developed and manufactured and Suolahti, home of the tractor manufacturing plant. These visits, while enjoyable, provide a real sense of what Valtra is all about; customer focused and approachable.

 At Valtra we like to meet and talk to the end users of our products unlike so many other companies that prefer to remain remote, at arms length, 'protected' by their dealers. A dealer agreement is very much a partnership; without good dealer support Valtra will not succeed while from the dealer's point of view without a good supplier they will have little business. Working together with the Valtra product we can both succeed.

So there you have it, the requirements for becoming a Valtra dealer; Commitment, ability, adaptability and financial stability. If a dealer has these attributes we will undertake the product training required to ensure sales and support staff become au fait with the Valtra tractor.

■ Roger Thomas

COOL accommodation



Far north in Norway, in Alta, Finnmark, you can check into one of Norway's most original hotels, the Alta Igloo Hotel, located in Alta Friluftspark. For the sixth year in a row you can stay at a hotel build only from snow and ice, where the furniture, rooms and even the glasses in the bar are made of ice.

This can seem as a cold experience, but **Svanhild Simensen**, sales- and marketing manager, ensures us that you will not freeze in the hotel.

Indoors the temperature is constantly between -4 and -7 degrees Celsius, but compared to an outdoor temperature at -20 it is actually quite comfortable and cozy.

Even if the beds, as everything else, are made of snow, you will sleep comfortably on reindeer-skin and in high quality sleeping bags.

 Most of our guests are astounded by the beauty. For us it is important to emphasize the artistic and aesthetic atmosphere of the hotel, says Simensen. The 1 600 square metre hotel is therefore

Svanhild Simensen and Ulrik Wisløff are looking after that the guests enjoy their stay in the hotel.





The beauty of the ice chapel has fascinated the visitors. The approval of the bishop has made it possible to arrange weddings in the chapel.

built in a certain theme, changing every year. The theme in 2004 was Norse mythology, and in 2005 there will be the Norwegian folk tales that make its mark on the decorations. Decorations made by ice-artists from Japan.

Weddings and other unique experiences

When entering the hotel you can't aviod noticing the silence inside. This experience combined with the pure air, snow and the aesthetic decorations, makes a visit to Alta Igloo Hotel a fascinating experience. The beauty, according to Simensen, stuns even Norwegians, who are used to snow and cold weather. Besides Norwegians, the hotel is visited by guests from all over Europe. Even the corporate market sees the value of giving their employees a special experience, and Alta Friluftspark is therefore an active participant in this market. They offer their visitors a different experience, which includes activities like, snow scooter safari, rid-

ing a dog sledge and visiting the Sami people. In addition to providing 50 beds, the hotel also contains a bar and a chapel. The chapel has only existed one year and is the only ice-chapel that is approved by the bishop. This approval has made it possible to arrange weddings. Three, so far, according to Simensen.

The whole beauty completed in one month

The construction is made by using big air balloons, and blowing snow over them. When the

construction is able to stand by itself, the balloons are removed.

Central during the construction is the hotel's Valtra 6750 with TwinTrac, and rotary snow cutter. The hotel could not be built without this equipment the chairman of the company, **Tor Kjetil Wislaff**, tells us. The tractor is used approximately 300–400 hours in a year building the hotel. Together with the tractor there are six men building the hotel and the same number of artists working on the decorations. After one month with 20 hour long working days the hotel is complete. Then 4 500 cubic of snow and 130 ton of ice have been formed into a unique hotel.

After five years management the future looks positive.

 There is a growth in the number of guests. And there are not only the European guests who appreciate the hotel. The local people are proud of the attraction, and in a short time it has become popular amongst tourists, Wisløff tells us.

Even though Alta is situated in the north of Norway, the season is relatively short. Only open four months, from January to April. Despite the location, the mild winters have been a big challenge the last years. To ensure the coming years they have therefore invested in snow cannons and refrigerating system, so Alta Friluftspark should now be ready for another season running Alta Igloo Hotel.

■ Christian Børresen

The Norse mythology features the decoration of the hotel in 2004.





With 16 huge tanks 75 metres in diameter and 23 metres deep, each holding 500 000 barrels of crude oil – that's 80 000 tonnes – Sullom Voe oil terminal on the Shetland Isles is the largest in Europe. It is also the most isolated. In the event of a fire there is the potential for a very real disaster, as there is no possibility of help from outside. The emergency response team has to be totally self-contained and totally in control at all times.

While safety at an installation like Sullom Voe comes almost without price, specialist equipment has become increasingly expensive, and there was good reason to reappraise the operation. The Emergency Response Team decided to do a little lateral thinking.

The question was: Is there equipment out there within other industries that would do the work required at the terminal efficiently and reliably? Operating within the confined area of the tank farm an ability to travel at high speed is not necessary. Somehow tractors and tankers entered into discussions and it was considered adapted slurry tankers would be ideal for carrying the foam-producing chemicals, rather than expensive high speed specialist vehicles. This led to considering the prime mover: a tractor. But a tractor is just that Đ a prime mover, to which a wide range of equipment can be fitted. Along side the tankers a hose recovery reel on the lift linkage was just one other option. However, the lack of visibility with front mounted linkage made that option unacceptable as was, for safety reasons: the driver continually oper-



With an emergency or drill over the Valtra T190 is used in TwinTrac mode to recover hoses.

ating in reverse while facing forward. A reverse drive tractor would be ideal and Valtra fitted the specification perfectly. A further consideration was the harsh conditions experienced at Sullom Voe. Interestingly this is at the same level of latitude as southern Finland and Valtra's Finnish pedigree made the tractor ideal for such conditions. After discussions on specification it was decided to purchase a 209hp T190. This has sufficient power to get a 16 000 litre tanker of foam chemical up to a sensible safe operating speed along roads around the tank farm without being too big and cumbersome.

During an emergency the foam chemical tanks, essentially modified slurry tankers, are towed out to the required position and connected, via a manifold through which the chemical is injected, to a pair of monitors supplied from the high pressure sea water mains grid. At full power each monitor can produce 22½ thousand litres of 3% foam every minute.



Water from the high pressure mains may be piped through the monitor on the rear of the tanker or the foam chemical can be piped to free standing monitors as here.

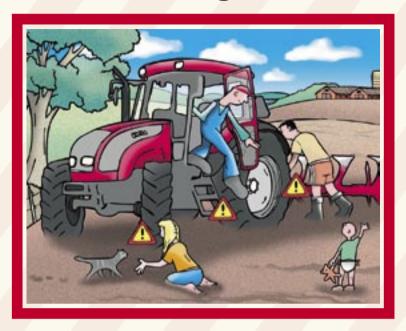
It takes only 14 minutes to consume 16 000 litres of chemical and as one tanker empties the water supply is connected to another while the empty tank is taken away for refilling which, thanks to the tanker's vacuum pump, is a very speedy process.

With the emergency over, the hose recovery reel is fitted to the tractor's linkage and, with the driver operating in the reverse drive position, the hose is safely recovered for drying and storage. The tractor's versatility also means that it can be used for other operations; snow ploughing and sweeping site roads are just two under consideration.

It is difficult to quantify exactly how much cash has been saved by moving to a Valtra tractor based system, but the concept has earned the Sullom Voe team BP's Great Operator Award for 2004.

■ Roger Thomas

Around one-third of tractor-related accidents occur while climbing out of the cabin



Working with modern tractors is one of the safest jobs on farms these days. Only around five percent of accidents on farms are connected with tractors. By comparison, taking care of livestock, forest work and slippery conditions are considerably more dangerous.

Juha Suutarinen, PhD in Agriculture and Forestry, wrote his doctoral thesis on farm accidents.

 Driving modern tractors is extremely safe, Suutarinen confirms. The most dangerous aspect of working with tractors is climbing into and especially climbing out of the cabin. Around one-third of tractor accidents is connected with this simple activity, while one-third is connected with attaching and using implements. Various other accidents occur while servicing tractors and other operations.

Accidents often occur when the operator of the tractor is in a hurry and slips on the muddy steps of the tractor or jumps straight down from the cabin. Over half of all these accidents result in leg or foot injuries, such as a sprained ankle. Back injuries occur in around 15 percent of cases and injuries to the arm or hand in around 5 percent of cases.

Valtra has paid special attention to the safety aspects of getting in and out of the tractor. For example, new T and M Series tractors have redesigned mudguards that help keep the

steps clean. Nevertheless, all steps should be cleaned regularly and special attention paid to them by the driver. The safest way of climbing out of the cabin is back first using both hands to grab the handles.

More planning, less hurry

Work-related accidents can be prevented by using various kinds of protective equipment and by knowing the right work procedures.

– One expert in work-related accidents used the analogy that it is not worth killing each mosquito separately; rather, it is better to dry the swamp where they come from. Careful planning of your work, time and processes provides the basis for safety, says Suutarinen.

Being in a hurry, doing too many jobs, and not maintaining equipment are all leading factors associated with accidents.

Farms can be great places to raise children, but they can also be dangerous. While few factory workers would take their family to work with them, children often play around the farm, even though it is a much more dangerous environment than a factory.

Valtra has promoted child safety, for example by ensuring that tractors cannot be started unless a person weighing at least 30 kilos is seated in the tractor. It is also hard for children to make Valtra tractors roll down hills, as the parking brake is always on when the engine is turned off.

Valtra has been a pioneer in work safety and ergonomics for decades. Valtra's predecessors Valmet and Volvo were the first tractor manufacturers to introduce a cabin designed especially to be comfortable and safe.

Modern safety features include situating the controls for the lifting mechanism in the rear mudguard and an emergency cut-off switch for the PTO. In addition, the PTO cannot be activated if the implement is jammed. The Autocontrol lifting mechanism and other automated controls must be activated again each time after the engine is turned off. This prevents any surprises, for example when another driver takes over. When starting the engine, the clutch pedal must also be depressed to ensure that it cannot be started by accident without a driver in the cabin and that the tractor is not in gear.

The first step for improving safety on the farm would be to take the time to analyse your own farm and work habits from a perspective of safety. Small improvements and repairs can be made immediately, while bigger changes should also be taken seriously.

One of the best ways to invest your money is to invest it in work safety. A few pennies saved on a cheap hydraulic hose, for example, can cost many thousands more if it results in a bad injury and production cuts.

■ Tommi Pitenius

Three-day eventing

- the Formula 1 of equestrian sport



We are sitting in the drawing-room of the fine manor house at Segersjö Herrgård, discussing three-day eventing with **Ann** and **Robert Montgomery Cederhielm**. The reason is that Segersjö is a venue for three-day eventing, the most recent of the various equestrian sports and perhaps the most physically demanding.

Segersjö is beautifully situated on the southern shore of Lake Hjälmaren, in surroundings that are unequalled for three-day eventing. An international three-day event was organized here this year, attracting competitors from as far away as Brazil and Jamaica. Next year will see the European Young Riders' Championships, for which the age limit is twenty-three years. Competitors from all over Europe are expected to attend, and it can be claimed without exaggeration that Segersjö has earned a place on the European map.

A manor with a long history

Segersjö has a long history and traditions. The property has been in the family's ownership since 1754, and Robert is the ninth generation to run the estate. The family with the surname Montgomery originates in Scotland and arrived in 1722 in Finland, which at the time belonged to Sweden, from where the family eventually moved to Segersjö. Ann and Robert are the custodians of a long history and traditions. Indeed, Robert has actually been known to wear the kilt on more festive occasions!

Ann and Robert have been running the estate for nine years. The agricultural operation is leased out and is managed today entirely without animals, apart from the two horses that Ann keeps in the stables. Construction of the three-day eventing course began in 1998.

Three-day eventing

- a physically demanding sport

Three-day eventing as a sport is growing in popularity. Increasing numbers of young

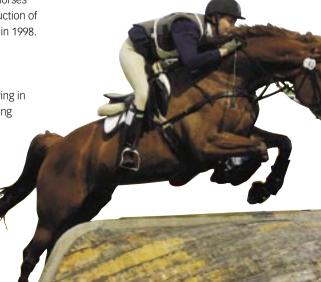
A typical obstacle in three-day eventing. The obstacles are often created from a natural object, a large log, a hedge, an upside-down boat, or in combination with a water hazard, just like those that you come across in the countryside.

people are starting to take up this challenging sport for both horse and rider.

You need horses with staying power that are very well-trained, yet highly obedient at the same time, says Ann, who herself was an active and successful competitor.
 The horses must be fast, but they must also respond to a tight rein. Quite simply, these are elite horses.

A three-day eventer must be a fast horse and in good condition. Yet at the same time it must be highly obedient. The international rules stipulate dressage riding on the first day. The second day is taken up with cross-country riding or, as it is also known, the endurance test, and the showjumping competition is held on the final day.

International celebrities who have participated in this exciting sport include HRH Princess Anne, who has ridden for the British Olympic team. Her daughter, Zara Phillips, has also discovered the excitement of the sport and now rides for the British junior team. Other famous English riders are William Fox-Pitt and Pippa Furnell, who have gained a worldwide reputation. Swedish riders who have excelled in competition include Paula Törnqvist and Linda Algotsson. Another rider who is beginning





Segersjö Herrgård manor, in its beautiful, thickly wooded situation on the southern shore of lake Hjälmaren. The small artificial lake in the foreground is a more recent addition and is included in the three-day eventing course, parts of which pass through the beautiful park.

Husband and wife Ann and Robert Montgomery Cederhielm, full of expectation ahead of next year's major international event, the European Young Riders' Championships.



to be seen at international events is Finnish girl Piia Pantsu.

2005 European Young Riders' Championships

Segersjö will host the European Young Riders' Championships next year. Over three days, from 26 to 28 August, young people from all over Europe will compete for the championship titles in this beautiful setting. A number of mobile horseboxes will be set up in the courtyard before the competition, transforming it into a mobile stable. A mobile hotel will also be provided next year when the riders from all over Europe arrive.

 We believed that the competitors would want to stay in good hotels, so we inquired about hotel capacity in nearby towns. But the competitors do not want to stay in hotels. They want to be near their horses, says Ann.

Attention to detail

Ann and Robert are kept busy throughout the year with planning and preparations for the competitions. The three-day eventing course, which is 5.5 km in length, needs to be maintained. The same is true of the dressage ring and showjumping arena. Everything is prepared and planned down to the smallest detail.

Large numbers of stewards are needed, and the organizers are under a considerable responsibility to ensure not least that the safety regulations are followed to the letter. Threeday eventing is a sport involving high speeds and with very live weight in motion. All of the

obstacles are solid, and an incident can result in severe damage to both people and animals. A veterinary ambulance with emergency slaughtering facilities and ordinary ambulances must be in attendance at all times, therefore. Doctors and psychologists are also present for the duration of the event.

- Imagine if someone were to take a fall during the competition, says Robert.
- An emergency team must always be in attendance, and this applies to all forms of competition in which horses are involved.

Open house

 The best part is all the delightful people who help us with the competition and all the

Piia Pantsu, Finland's great hope in three-day eventing, with her horse Trip Up. Piia is young and ambitious and is at present fully committed to three-day eventing. According to Piia, three-day eventing is a wonderful sport for both horse and rider. — It really is great fun, says Piia.



outstanding competitors who come here, says Robert. The entire estate blossoms out, and the manor is filled with people.

For this year's international competition, with 70 competitors from 10 different countries, we had both Finnish and Danish judges. The senior judge was from Italy, and much of the competition took place under the Italian national colours in order to make it quite clear that this was an international event.

- The Italian senior judge was highly impressed when he visited us to inspect the course and looked over all the obstacles. He really liked the place, says Robert with a contented smile.
- We do not make money hand over fist from the eventing, but we think it is fun, the farm comes alive, and we have a living estate. We are also working for the long term. Next year will see the European Young Riders' Championships. Our next target is to host European Championships for the higher classes. And just imagine the satisfaction to be gained from organizing a World Championship here in our beautiful surroundings, says Robert.
- In addition to the competitions and the horses, you can see our beautiful countryside, a display of tractors and cars and a range of other public events such as a dog show, parachute jumping, etc. All are warmly welcome to Segersjö, is the greeting from the Montgomery Cederhielms.

■ Eric Andersson

A family resemblance for

While the Valtra model line-up is continuously being developed, the new generation of tractor design was introduced with the S Series already at the beginning of the new millennium. The stylish and contemporary design elements naturally came to be expected on other Valtra models.

Accordingly, the T Series was introduced in 2002. The four-cylinder M Series and articulated XM Series were introduced in summer 2003. The four-cylinder C Series, designed especially

for front-loader work, was introduced at the Agritechnica trade fair in Germany at the end of 2003. The updated A Series that is now being launched completes the new generation of Valtra tractors, which are available with 74 to 280 horsepower.

The advantages of the new designs are more than just aesthetic. The swooping nose, rounded at the front, significantly improves visibility. In addition, the engine cover is now a single piece that opens up completely on gas struts. This makes regular maintenance convenient and safe.

The material used for the engine cover is Telene, that is extremely light, durable and rustproof. Visibility is further improved on all models except the XM Series by a pillar exhaust located behind the right front corner of the cab. Comfort levels on the S, T and M Series are taken to a new level by combining separate cab suspension with an Aires air-suspended front axle.

As customers have come to expect from Valtra, a wide variety of colour options is available for 2005 models, alongside numerous more equipment and specification options. Customers can customise their new Valtra with the salesperson when making their order, so the tractor that is delivered is exactly as specified. Valtra continues to lead the way among tractor manufacturers in offering customers exactly what they need.



The New A Series

Valtra's A Series is now better than ever. Valtra has kept these models as straightforward and easy-to-use as possible without sacrificing productivity and reliability.

The A Series has been given the same modern look as other successful Valtra tractors. Beyond appearance, other improvements have also been introduced in areas of usability and safety.

The A Series was originally launched with a fully synchronised transmission with 12 forward and reverse gears. The straightforward design made this transmission exceptionally

efficient. The powertrain has now been further improved, so that the clutch for the four-wheeldrive operates the same way as in larger Valtra tractors. It is a multi-plate clutch that is disengaged by low-pressure hydraulics and engaged with a spring-operated mechanism. This allows automatic four-wheel braking in all driving situations.

Easy to use power train

The power train on the A Series has always been extremely easy to use, and now it is better than ever. For example, the differential lock

> hv r/min

74

2270

2270

98 2270



Valtra 2005 model series



can be engaged and disengaged simply and easily using an electronic rocker switch. The A Series is also available with Valtra's HiShift button-controlled clutch, which reduces stress on the legs. The same feature also applies to the PTO, which can be engaged and disengaged electronically. The speed that the gear or PTO is engaged is fully adjustable. A mechanical lever can also be used when necessary for exceptional circumstances.

Comfortable and spacious cab

All A Series cabs are highly functional and stylish. Large doors and sturdy handles make it easy to access the lighted cab. The driver's seat can be easily adjusted and rotates 180 degrees.

All the main controls in the cab are ergonomically located within easy reach, and the analogue dials are clear and easy to read.

The new-look engine cover is made of a two component injection-moulded plastic that is extremely light and durable. The engine-cover is hinged at the back and opens up completely on gas struts. The exhaust has also





The output of the hydraulics is 55 litres per minute. In addition to a mechanical-hydraulic rear linkage and an electronic Autocontrol system is also available. Other options include a front-loading mechanism capable of lifting 2.5 tonnes and PTO.

been repositioned to the front right corner of the cab to further improve visibility.

Regular maintenance is also easier than ever, as all servicing points are now situated on the left side of the tractor. In addition, the air-conditioning cell can be conveniently removed by hand for cleaning. The oil-change intervals for the engine are 500 hours.

The fuel-filler pipe has also been extended to ease refuelling and now comes with a lockable fuel-filler cap.

There are three cab options available: the standard cab, a 155-millimeter lower cab, and a forest cab with additional space inside for turning and an accelerator pedal also in the rear of the cab.

The range of options on the whole has been expanded. For example, all A Series models are available with rear-wheel-drive. Special tyre sizes are also available for row crop farming.

Cab susp

Valtra has offered cab suspension as standard equipment on S Series tractors since 2001. Cab suspension is now also being offered as an option on T and M Series tractors. The suspended cab is attached to the frame at the front using vibration insulation, as before. The rear corners of the cab are attached to the frame via two shock absorbers and coils. A Panhard rod located on the right side of the cab prevents lateral movements. Stoppers prevent excess movement of the cab in dangerous situations.

With cab suspension the release of the pickup hitch release occurs hydraulically. The

Creditable history

Valtra's A Series tractor is the direct descendent of the Diesel-Valmet introduced in 1956. This is the tractor that helped establish Valmet/Valtra as a global brand despite stiff competition. The basic philosophy remains the same: reliable and straightforward solutions are combined with strong performance to create working efficiency.

The Valmet 565 introduced new features, most notably the fully synchronised transmission. The next step was taken by the 502, whose ergonomics revolutionised the way we think of tractors in this segment.

Engine power was increased with the 602 model. Four-wheel-drive was introduced in 1980, followed two years later by the 04 Series. This model was one size smaller than the Volvo BM 05 Series and

replaced the Volvo BM Series in the Nordic markets.

In 1985 a totally new and modern 8+4R fully synchronised, easy-to-use transmission was introduced alongside a new four-wheel-drive system.

In 1992, the Series was expanded to include the four-cylinder 80-hp 665 model, which was a huge success. The cab was redesigned with the 100 Series introduced in 1997. Production of the 100 Series also began in Brazil in 1998.

The development of the A Series and its predecessors has continued non-stop over the years, maintaining proven solutions while improving other areas.

An estimated 300 000 of the half million tractors produced by Valtra have belonged to this product family, which continues to be in high demand around the world.

Powerful new



ension and M Series

driver sits on a special low-resolution seat that works together excellently with the cab suspension. In terms of practical driving comfort, it is indeed essential that the seat and cab suspensions are compatible.

Cab suspension effectively prevents vibrations from reaching the driver in all situations. In normal fieldwork the suspension reduces vertical seat movements by around a third and in extreme situations, such as when harrowing ploughed fields, by up to 80 percent. On normal gravel tracks, the impact of small bumps is reduced by around 15 percent.

A suspended cab is comfortable and reduces stress on the driver's back, especially in rough operating conditions. Suspended



cabs allow drivers to use their tractors for more hours during the day and to drive faster in many situations. These benefits soon pay back the cost of the cab suspension itself. Valtra's cab suspension (optional) significantly dampens vertical shocks and swaying movements. The cab suspension allows for faster working speeds without sacrificing comfort.

City XM articulated tractor



Many works, for example, front-loader work in tight spaces is approximately 50 percent faster with an articulated tractor.

The Valtra XM articulated tractor is now available with the same City specifications that are also available on other X Series tractors. The City XM models are available with either 130 or 150 horsepower.

City front loaders feature a plate construction and the frame is attached directly to the body, just as on wheel loaders. This allows for significantly heavier loads. Lifting power in the lower position is 3 400 kilos, which is almost twice as much as normal tractor front loaders.

City models have a 70-litre oil tank and additional load-sensing pump located in the nose of the tractor. The tractor's own hydraulics work seamlessly with the front pump. The calculated combined output is as much as 190 litres per minute. In practice the output is over 160 litres per minute, depending on the implement being used. The combined hydraulics allow for the simultaneous use of several implements, even at low rpm's.

City models come with a heavy-duty industrial front axle. The stiffness of the front axle helps prevent lateral movements, which in turn facilitates front-loader work. The stiffness of the front axle can be adjusted by the driver.

Customers can choose from four available attachment plates. The quick couplings on the loader can be connected directly to an implement equipped with two hydraulic cylinders. Hydraulic bucket/implement locking comes as standard equipment. The loader can also be specified with a motor hydraulic valve and zero pressure return oil pipe.

Studies prove that articulated tractors are more efficient than fixed chassis tractors. For example, front-loader work in tight spaces is approximately 50 percent faster with an articulated tractor.



Mother nature knows best

Our philosophy springs from here, from the appreciation of the wholesome and simple, from living in contact with nature. This is the motto of Locanda San Martino.

Situated in the Dolomites in Italy, Cavizzana is a tiny mountain village at an altitude of nearly one thousand metres, where the seasons are still marked by farming routines. In ancient times, the village featured iron forges for the production of agricultural implements and, as in most villages, a calcar for the working of limestone.

It is here that **Lina** and **Fabrizio France-schi** run the Locanda San Martino, a farm and residence featuring four rooms and an apartment, all brightly sunlit and airy, and a room for dinners and banquets.

Having travelled the world as a chef for many years, Fabrizio, at a certain point tired of the nomadic life and eager to establish his roots, decided to turn to the farming life. After having renovated an old farmhouse, he took to farming and after a few years opened the

residence, exploiting his experience in the hospitality sector.

Fabrizio and Lina themselves, preferring mixed farming to intensive fruit farming, rear the Saanen dairy goats, handpick the Rendena cows, and send the colts out to pasture while the chickens and pigs scratch around in the farmyard.

All dishes on the farm are made with home or locally grown ingredients. The house menu include home made entrées with vegetables, home cured meats, mortandéla from the Non valley, and farmhouse cheeses, vegetable lasagne and game meat ravioli with a juniper sauce.

The main course features foal meat fillet, rabbit "alla Contadina", and beans with Cotechino sausage. The typical Trentine dish, a speciality of the house, is made from farm bred veal, while the fresh cream cheese "casolét" is also a feature.

In winter, pork is king, with roasts and spare ribs served with sauerkraut. For dessert the

house serves cream and nut biscuits, panna cotta (cream pudding), berry ice cream and apple strudel.

The four rooms and the apartment perpetually host tourists from Italy, Austria, France, Germany and USA. Apart from its culinary delights, The Locanda San Martino offers its guests hiking, excursions, horse riding, rafting and mountain biking. In the winter, famous ski resorts can be found only twenty minutes away from the Locanda.

The Locanda San Martino keeps two tractors, including a Valtra M120 with front end loader.

The M120 was a case of "love at first sight". Being in need of a powerful vehicle of nonetheless compact dimensions, the M Series was the perfect solution for the farm. Fabrizio is highly satisfied with the Valtra's performance on steep slopes and delighted with its TwinTrac reverse drive, which he uses in combination with a mower.

■ Paola Oberto



There are three letting rooms in the farming house. All the rooms have outstanding views across the countryside.

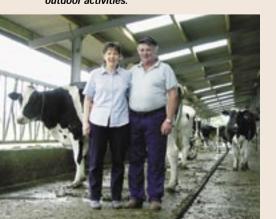


A Warm Welsh Welcome

The town of Abergavenny at the foot of the Black Mountains has seen more than its share of troubles. Typical of these was in 1175 when invading Normans invited Welsh lords to Abergavenny castle for a banquet and, instead of a good meal, slaughtered them. The Welsh retaliated a few years later and, for many years, this became the pattern of life in this area of outstanding beauty.

Nine hundred years later the welcome at Hardwick Farm just south of Abergavenny is much more convivial. **Carol** and **Cyril Jones** diversified into Bed and Breakfast in 1998; at that time they were milking just 70 cows and the milk price was in free-fall. — We needed a second form of income and B&B seemed the right option, recalls Carol. Five

The farm of Carol and Cyril is located at the foot of Black Mountains. The place is ideal both for farming and outdoor activities.



years on, having survived a bad attack of TB and the ravages of Foot and Mouth the 260 acre farm now carries 120 pedigree Holstein Friesians plus followers while the B&B enterprise has expanded into a year round business: — With the exception of Christmas, reports Carol. — That's when the family come to stay.

The large traditional farmhouse has three letting rooms, two with en-suite facilities, and the third with its own private bathroom across the landing. All have TV, tea and coffee facilities and, for winter guests heating, plus of course views across the surrounding countryside. Breakfast is a moveable feast. If you want it early before spending the day walking in the Black Mountains or the Brecon Beacons National Park, both areas of outstanding beauty, then it will probably be Cyril who is on kitchen duty. For those starting the day at a more leisurely pace Carol will be in the kitchen while Cyril checks on the cows; guests are

Dave does much of the farm work with two new Valtras T120 and T160. He is also planning to expand his contracting enterprise in the future.



not the only ones to be treated to first class accommodation. Cyril and Carol have recently invested in new cow housing and a pair of Lely Astronaut robotic milking units. - We have more time to spend looking after the cows and our selves without the rigours of a milking regime, says Carol who is as heavily involved with running the farm as the B&B. She also does a late turn, checking on the cows before bed. It is son Dave who does much of the field work with one of the farm's two Valtras; A T160 and a T120 purchased from local dealers Ash Plant. Chosen because the farm's previous machines needed replacing and reports on updated models showed them expensive to operate. Dave is also expanding his contracting enterprise and this year will cut over 1 500 acres of first cut silage all within a ten mile radius.

Carol and Cyril's guests come from all over. Londoners comment on the quiet and if there's no moon, the darkness. The Dutch simply enjoy the hills. Americans think the area 'quaint'. If you want to try some of Carol and Cyril's hospitality – rated three star by the Welsh Tourist Board and four diamonds by the AA – and see first hand the inner workings of a modern Welsh dairy farm they can be contacted on 01873 853513 or on carol.hardwickf arm@virgin.net – you'll enjoy the experience.

■ Roger Thomas

continues on page 24.



As far as we know, there is only one tractor in service in the vast frozen expanses of the Antarctic: a 1988 model-year Volvo BM Valmet 505 that was brought to the Antarctic by the Finnish Finnarp expedition. It goes without saying that the operating environment in the Antarctic can be rather harsh. A blizzard, for example, once blew away the tractor's front loader, and another time the oil sump broke during heavy use.

– We have used the tractor around the research station mainly for snow work and moving supplies. The front loader is particularly useful for the daily task of moving fuel containers. The tractor was also a huge help when the research station was renovated and expanded, says **Henrik Sandler**, who leads the Finnarp expedition.

The Antarctic station is manned during the summer season only. Summer in the Antarctic means temperature of around minus-five centigrade, and the sun shines around the clock. In the winter the temperature can easily drop to minus-fifty degrees.

 Conditions in the summer are quite comfortable here, compared to the centre of the continent, where temperatures can be as low as minus-70 or 80 degrees. There is absolutely no moisture or humidity here because of the freezing temperatures, so the machinery does not rust, says Sandler.

The Finnish research station sits atop a rock shelf that measures around five kilometres by two kilometres in size. A Swedish research station is situated nearby. The distance to the coast is around 180 kilometres during the summer, and there is an airstrip near the station for transportation by air. The Valmet tractor is only used around the research station, as further away there is the risk of cracks in the ice, sudden storms and soft snow.

Stormy environment

Antarctic storms are particularly dangerous. Strong winds can pick up in just a few hours and last for an entire week. In the midst of one of these blizzards visibility can be less than one metre. There are stories of explorers who have perished in these storms when they have become lost crawling from one tent to another just a few metres away.

 There is plenty of snowploughing to be done around the research station after one of these blizzards. The snow here is very hard,



Physician Arttu Lahdenperä and geologist Saku Vuori changed the oil sump of the Volvo BM Valmet 505 with basic tools and without any training.

almost like a cross between snow and ice. Our tractor really has its work cut out for itself moving the snowdrifts, says Sandler.

The Antarctic winds are so strong that they once carried away the tractor's front loader, which ended up badly bent on the rocks hundreds of metres away. The expedition members were fortunately able to salvage this vital implement and bang it back into shape.

Engine overhauled with basic tools

The research station's Valmet tractor was in heavy use when new, causing the oil sump to break under heavy stress when pulling a heavy load in the early 1990s. As there was no trained mechanic at the station, it took a long time before the tractor was repaired.

 In 1999 the expedition's physician Arttu Lahdenperä began repairing the tractor at the end of his assignment to the Antarctic.
 I was also leaving, so after packing my gear I went to help out, remembers geologist Saku Vuori.

The work was done inside away from the wind. The tractor's front end was lifted up using jacks, winches, logs and anything else that could be found around the station.

 Neither of us had any training or real experience in this kind of work. Arttu had once upon a time changed the transmission in a Saab 96, and I had fixed the odd moped as a kid! says **Saku Vuori**.

Changing the oil sump was a relatively easy operation. The biggest challenge was reconnecting the drive shaft to the conductor barrel that had accidentally come off the front axle. In the end they managed to do this by heating the conductor barrel with hot air until it expanded to the right size.

Once the last nuts and bolts had been tightened they refilled the tank with fuel, recharged the battery and primed the cylinders with a bit of oil. To their disappointment the starter motor showed no signs of life, so the men had to find new spare parts and try again. This time the engine turned over, and then started up.

– We were overjoyed. We smiled so hard that we could have eaten crisp bread sideways! The other expedition members gasped in astonishment as we drove around the station with cigars in our mouths honking the horn! remembers Vuori.

■ Tommi Pitenius

Valtra MultiTool

- The new way to service electronics



Customers increasingly expect peace of mind when it comes to their tractor. In addition to reliability from their tractor, they demand that servicing be carried out fast and efficiently. The growing amount of electronics on modern tractors is creating its own challenges for affiliated service personnel. The solution? Valtra's new MultiTool electronics servicing equipment.

MultiTool consists of a computer and software designed for both workshops and fieldwork. The equipment is customised for servicing and repairing the electronic management systems on Valtra tractors.

Simple to use

Laptop computers have long been used for servicing tractors. The problem with these has been the growing number of operating systems and hardware options. Therefore, Valtra decided to develop its own ready-to-use electronics servicing equipment.

The beauty of MultiTool is that it ensures the compatibility of the hardware and software. Another aim when designing MultiTool was to ensure that it could efficiently handle a variety of different tasks without needing additional equipment. Service personnel can download the latest programs from the internet or use ready-to-use memory cards. The memory card is inserted into the MultiTool computer, and the latest programs are uploaded to the tractor via a service connection.

With MultiTool it is possible for service personnel to update all the systems on a Valtra

T Series or HiTech tractor in approximately halfan-hour. Furthermore, the work can be done just as well outside in the field than in the workshop. In addition to mechanical maintenance, in other words, service personnel are responsible these days also for maintaining electronic systems using MultiTool.

MultiTool is already being introduced throughout Valtra's international servicing network. Countries that have gone over completely to MultiTool include Norway and Denmark, where MultiTool is already in use at every service outlet.

■ Markku Peltonen

One tool - many uses

- Tractor programs: updates existing programs and installs optional drivers
 (HiTech, HiTech 2.0, HiTech EEM, Mezzo& Mega EEM, C Series, M Series, T Series)
- · Basic tractor settings
- · Basic settings for electronic engine management
- · Installation of optional equipment
- Testing of control units and their connections, sensors and accessories (input/output testing)
- Inspection of CAN data flows (CAN testing)
- Inspection and fine-tuning of electronic engine management
- Downloading servicing codes from control units (error reports)



An old joke tells us that Ireland's beauty is the result of a daily washing. Truth or not the prevailing westerly winds coming in off the Atlantic Ocean provide high levels of rainfall right across the island, where the year round temperatures remain relatively warm thanks to the influence of the Gulf Stream. As a result grass grows well; ideal for cattle for which Irish farmers rightly have an excellent reputation.

While weather patterns have been

more or less consistent for generations the face of Irish farming is changing. As is the case throughout much of Europe smaler farms are being assimilated by larger units and contractors are being used for much of the field work.



Dependable contract

Full day contracting

In the east of Ireland R & G Clarke are one such contractor taking advantage of the expansion in contracting services. Father **Gerry**, his sons **Ronan** and **Gavin** assisted by a couple of full time and some part time help specialise in wrapped round bale silage producing something over 35 000 bales annually from 3 500 acres.

For them the silage season commences around mid May and ends in September or perhaps October if the weather has been kind. To achieve this output the Clarkes use five Valtra tractors, 3 mower conditioners, two trailed and one mounted, together with a pair of combination baler wrappers and a baler with separate wrapper. Perhaps a little unusually, the whole operation is charged on a 'per bale' basis.

This covers everything from mowing to final wrapping.

- Doing it this way avoids silly arguments about field size and if the crop is not very heavy the whole operation is that much quicker, says Gerry. This method also avoids the need to charge a different price for mowing first and later cuts.
- Most farmers like the bales wrapped in the fields and this work is undertaken with the two new T Series and baler wrappers, others like the bales hauled to the storage area before wrapping and for this the baler is used.

Good experiences from Valtra tractors

Valtra is a relative newcomer in the Irish market. How did the Clarkes' fleet of five tractors evolve in a country where there is considerable brand loyalty, particularly since they have been contracting for 30 or so years?

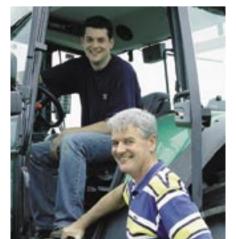


Ronan Clarke with father Gerry appreciate the low running costs of Valtra tractors and the ease with which they can be programmed to handle hydraulic operations thus making the drivers job far less arduous.

– We've purchased equipment from Gerard Clerke Farm Machinery Ltd for many years – it is a first class professional dealership. When Gerard changed his tractor franchise to Valmet ten years ago we thought it only fair to try the tractors – and we've had no regrets. Our first machine, an 8050 was purchased in 1997 and we had no trouble with it, the second was an 900 which while small was a lovely machine, and the third tractor was an 8150.

Today the fleet consists of Valtra T160, T140, T120, 8350 and 6550. Both Clarke brothers stud-

Good traction, high torque and the ability to master a heavy baler/wrapper are essential to the Clarkes business



ied engineering in Dublin, Ronan graduating in 1999 while Gavin just graduated this summer. With such a technical background what do the brothers think of the machines in which they spend much of their time – well over 1 000 tractor hours annually? Both agree the cab is comfortable with the controls all in the right place. Ronan has a special mention for the T Series load sensitive 'Power Beyond' hydraulic system.

 Load sensitive hydraulics effectively mean that the tractor need only pump oil when the baler requests it thus conserving horsepower and reducing wear in the hydraulic systems.

Then there is the engine torque; there's plenty of power to haul the heavy balers – with two bales onboard it's getting on for eight tonnes – up the steep banks that are a feature of much of the area's farmland.

When the silage season over there's plenty of slurry to spread, ploughing, re-seeding worn out pasture, hedge trimming and fertiliser spreading ready for next year.

Will they buy further Valtras for the fleet?

 $-\,$ Probably, is the unanimous answer, but not for some time ${\rm D}$ they're reliable and last so well!



Ireland, with high rainfall and generally warm weather is ideal grass and cattle country.

ors depend on Valtra

Doing silage is easy with good machines

The **Shanahan Brothers Tim**, **Martin** and **Tony** use a fleet of 10 Valtra tractors. The mainstay of their contracting business in this largely cattle farming area is silage, this time mainly hauled into clamps although a wrapped bale service is available for customers preferring this method of silage making.

The first Valmet machine the company purchased was as a result of a demonstration by a dealer from the South East of Ireland.

At that time we did not have a local Valmet dealer, Tim recalls. We heard that Valmet were good machines, and decided to try one.
 It took a bit of persuading to get the dealer to bring a demonstration machine right across the

The Shanahan brothers' tractors are expected to work hard and will clock up well over 1 000 hour annually



country but, once we had tried it we didn't let him take it home again.

That was in 1995 and that 8400 is still in the fleet with around 13 000 hours on the clock.

It's never had a spanner on it except for routine maintenance – park it up and you'll not see it drip a spot of oil on the ground, even after all this time.

Also on the fleet is a second 8400 purchased in '95 with 8 500 hours on the clock. There are also three 8450s, a couple of 8050s, an 8150 and a new T160.

Reliability is the key for success

Alongside the tractors the brothers operate a pair of self propelled forage harvesters and a self propelled mower. Once brother Tony has cut the grass either Tim or Martin move in with the forage harvesters supported by a team of trailers. Once tipped grass is loaded into the clamp by an industrial loader.

One of the keys to the Shanahan's success is reliability.

 We tell the farmer when we will do the job and then turn up to do it at the appointed time. To do that we need reliable equipment.

Tim also confirms that in this area of Ireland farming is also changing.

At 71 David Shanahan still puts in a full day's work as the 7 000 hours on his 8550 testify. Treated as his personal vehicle occasionally grandson David is allowed at the controls.





Purchased in 1995 the 8400 has close on 13 000 hours on the clock, is still in regular use and still completely reliable

 It used to be a way of life, and there are still a few farms around like that, but increasingly farming is becoming more business like
 and the farms are getting bigger.

When not making silage, the team move onto other jobs related to livestock farming. These include slurry spreading. Ploughing and re-seeding are also important revenue earners.

Today the tractors are supplied and serviced by Denis O'Connor Tractor Sales Ltd.

 We get good service from Denis. Not that he'll get fat on what we buy – the tractors just don't break down, comments Tim.

The brothers have noted the way in which Valtra machines have increased in popularity. At one time, when there were a number of different brands in the fleet, when it became necessary for a driver to use another tractor the choice would be a matter of what was nearest. Then, gradually, the Valtras became increasingly popular eventually to the point that drivers would go off looking for one rather than drive something else – even if it were handy. Valtra would always be the tractor of choice regardless of age.

■ Roger Thomas

Paradise for anyone with a sweet tooth Five million tonnes of sugarcane a year



In the Sertaozinho region of Brazil there operates a large and sweet company. The Santa Elisa sugar factory annually refines five million tonnes of sugarcane for the world's markets. Most of the sugarcane used at the factory comes from the company's own fields, while a small proportion is purchased from local farmers who supply the factory.

The Santa Elisa sugar factory cultivates around 30 000 hectares of sugarcane in the vicinity of the factory itself. The harvesting cycle for sugarcane is five years. After the fifth harvest, the fields are ploughed to a depth of 20 centimetres, and a single crop of fast-growing peanuts is planted. After the peanuts have been harvested, it is time again for sugarcane. After planting half-metre tall sugarcane plants to a depth of just under 20 centimetres, the soil is left unploughed for five years. The yield is around 75 tonnes of sugarcane per hectare.

Mechanised harvesting taking over

Traditionally, sugarcane has been harvested by hand. When the sugarcane plants are ready for harvesting, their leaves begin to dry and the crops are burnt. There are two main purposes for doing this: the dry leaves are very sharp and thus hinder the harvesting process by hand considerably. Secondly, the fire drives away snakes and any other unwanted critters from the fields. After the fire, men with long knives rush to cut the sugarcane, which measures from three to four metres in height. The work must be done fast, as the sugar begins to decompose around one day after it is burnt.

In recent years, the share of harvesting work done by hand has decreased. Already half of Santa Elisa's crops are harvested by machine, and this proportion is growing all the time. Each

One truck is responsible for two trailers. While one trailer is transported to the factory, the other is loaded. The factory uses its own truck to move the trailers. The truck driver does not need to get out of the cab when connecting or disconnecting trailers.

The harvesting of sugarcane continues night and day from March to October, putting huge demands on farmers and machinery. Expertise and reliability are key factors for successful harvesting.



sugarcane harvester costs around 200 000 euros. The harvester cuts the plants, chops them into sections around the size of a hand's width, and deposits them into the trailer being pulled alongside by a Valtra tractor. The leaves of the plants are blown back onto the fields. Each tractor usually pulls three trailers, each of which carries just under 10 tonnes of sugarcane. The loads fill up quickly, and the Valtra tractors transport them to a truck waiting at the edge of the fields. Each truck can carry 80 tonnes at a time.

Santa Elisa is currently upgrading its fleet of tractors to Valtras. The company already has 20 Valtra tractors in service, most of which are 180-horsepower trailer pullers. One of the key reasons for choosing new Valtras was their fuel efficiency. Compared with the company's previous machines, the Valtra BH180 tractors can do the same amount of work using approximately five litres less of fuel per hour. As each tractor does around 4 000 hours a year, the savings are considerable

The reliability of our tractors was another factor that attracted Santa Elisa's machinery experts to choose Valtra, as was the speed of servicing. The plans are to exchange the tractors after five years, when they have covered 20 000 hours of heavy work. This alone speaks volumes for the reliability of Valtra tractors.

Looking after the environment

Mechanised harvesting is considerably more ecological than traditional harvesting by hand. Burning the fields had a major negative impact on the ground and air. In addition, the mechanised process is a major advantage as it deposits a layer of leaves on the field that helps prevent moisture from evaporating.

The waste liquids that are created during sugarcane processing are collected along pipes into metal containers. The steaming nutrient-rich waste liquids are then sprayed back onto the fields, allowing for the next crop to grow rapidly. The environmental friendliness of the harvesting process and recycling of nutrients has improved rapidly in recent years. Sugarcane itself is quite an ecological crop in Brazil. In addition to being used to create sugar, it is also used to create fuel alcohol that is replaces gasoline for cars, trucks and busses in Brazil.

■ Visa Vilkuna

Driving Valtra from Finland to Italy



Italian farmer **Luca Capraro** drove his new Valtra M120e tractor all the way from the Suolahti factory in Finland to his home in Cesiomaggiore in northeastern Italy. Capraro shared driving responsibilities with friends as they drove non-stop, 24-hours a day. The trip lasted six days, with the tractor travelling at 40 km/h.

The epic journey took the Capraros from the factory through Finland, Sweden, Denmark, Germany across the Alps to Italy. The team and their tractor were greeted in Verona with a special celebration held at the start of the local agricultural trade fair.

 The cabin is extremely comfortable and quiet. Even though there is a lot of technology in the cabin, all the controls were easy to use. The front suspension worked well and gave a very smooth ride, said Capraro after his 3 000-kilometres journey.

The tractor worked perfectly from start to finish. The team did not have to do any servicing, and they arrived at their destination ahead of time.

 We were positively surprised by the low fuel consumption, which averaged around 10 litres an hour, Capraro added.

After the Verona agricultural fair, Capraro continued his journey by tractor to his farm in Cesiomaggiore. The family farms organic vegetables, in addition to which they have 12 cows. Their new M120 will be used mainly on the fields and for contracting work.



The whole team at the factory in Finland ready to start the journey.



Time for celebration in Italy.



In the middle of the fertile plain

We find ourselves out on the plain in Skåne, Sweden's southernmost county and the most fertile part of the country. Wirketorp farm lies like a small oasis surrounded by agricultural land. Here husband-and-wife team Charlotta and Mikael Wilhelmsson run a modern agricultural business. They also offer Bed and Breakfast on the farm.

Skåne lies in the extreme south of Sweden, close to the Continent by both road and sea, and many of Wirketorp's guests are passing through.

 Many of them are heading for Stockholm or other chosen destinations, says Lotta, and the opportunity to spend the night out in the country, in peace and quiet far from hotels and the big cities, is appealing.

Lotta and Micke's guests also include tourists from other parts of Sweden and Norway who are on their way to Denmark or the Continent

- Our guests are very often tremendously positive towards this type of accommodation, and they do not have such high expectations, says Micke. They just want to stay the night before continuing on their journey.
- It is nice to find that the beds are ready made and to know that you will have a hearty breakfast before leaving the farm, adds Lotta.



A family from northern Sweden once spent the night with us. They were heading for Legoland in Denmark, relates Lotta. Their young son rode on the tractor with Micke. They telephoned to ask whether they could stay with us again on their return journey. They told us that they could have saved the cost of the trip to Denmark for their son, because all he had talked about in Denmark was the time when he rode on the tractor with Micke at Wirketorp farm.

Life and movement on the farm

The couple have been running a Bed and Breakfast at Wirketorp for two years. The reason why they began to rent out rooms is simple; it provides both Lotta and Micke with something to occupy them at home on the farm, and they can keep the large farmhouse alive. They rent out three of the rooms in the house, and their guests have access to a breakfast room, TV and a sauna.

 If we have a large number of overnight guests, I will usually serve breakfast in the main Lotta and Micke welcome their overnight guests with a sign down by the road; Wirketorp Bed & Breakfast.

dining room. It is a large room with a few fine pieces of old furniture, and they usually appreciate this, says Lotta.

How many beds do you have?

 Eight, answers Lotta, adding: We can only take a maximum of eight guests, whom we feed from our own house kitchen. With any more guests, you qualify as a hotel and you have to meet legal requirements for the kitchen, evacuation facilities and adaptations for disabled persons, and so on.

What interesting sights can you offer your guests from afar?

- Most of them know where to go and what they want to see, but if anyone asks we have all the marvellous Skåne castles and manor houses. We also have the small, pretty island of Ven in the Öresund, which is definitely worth a visit. But Skåne naturally has much more to offer, for example plains, sea, and beech woods, and of course there is the national park at Söderåsen.
- About two-thirds of our guests come from Sweden and the rest from England, Germany, Italy and other countries on the Continent. Our furthest-travelled guest so far came from Japan.

Typical Skåne farm

Wirketorp is a plains farm that is typical of the region. The only trees on the farm grow around the farmhouse and in the avenue. A planted beech also stands in the middle of the circle in the courtyard.

The tractor shed houses two fine Valtra tractors, a T170 and an 8550.

We ask whether they like having overnight guests?

 It is good, because it brings a little life and movement into the farm. Many of our guests come to watch me working on the farm or visit the workshop in the evenings because they are interested in what I am doing, says Micke.

It is enjoyable and enriching, almost like travelling oneself," concludes Lotta, "and it is interesting to meet other people and cultures.

If you would like to say the night at Wirketorp, you can find full details at www.wirketorp.se.

■ Eric Andersson



The three Wilhelmsson children and their playmate Melina, on the left. Little sister Linea and the future tractor drivers, Karl-Johan on the right and Jonatan at the rear.

No Myths Over Valtra Performance



Both Stackpole Farms' Valtras clock up well over 1 000 hours annually mostly spraying, fertilizing or handling bulk materials.

Cawdor Castle, home of the **Cawdor** family, is located a few miles to the east of Inverness overlooking the Moray Firth.

Legend has it that towards the end of the 14th century the Thane of Cawdor received instructions in a dream about building a new castle. He was to load his donkey with gold and let it loose on the hill side. Where it rested for the night was to be the site of his new home. The donkey slept under a thorn tree around which the castle was built and the remains of the tree are still there to this day; except scientists now believe it to be a holly tree. Cawdor castle is also linked with Shakespeare's Macbeth but as he was born about 1005 and the castle was not built for another few hundred years it is unlikely that this legend holds water.

The lands owned by the Cawdor family extend to many thousands of acres but most of these are let to tenant farmers with only a few farmed by Stackpole Farms Ltd, the farming company set up to manage the in-hand land. Stackpole Farm is spread over four main blocks; the 1 200 acres on the coast are sandy, 600 acres around the castle and 400 acres at Forres are mostly gravel based. Then there is 800 acres of heavier land with boulders at Moyness. Managed by **David Robertson** the cropping plan is spread over 2 300 acres with the remaining 700 acres let to contract potato and carrot growers while a free range pig rearing company occupies 100 acres. There is also some set aside. Arable crops are established using a minimum tillage regime; 850 acres of winter wheat which goes mostly for distilling, 50 acres of winter feed barley, 500 acres of high nitrogen spring barley for

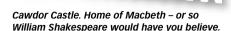
malting. The 300 acres of oats, spring and winter are sent for milling for porridge oats and oat cakes. There is 530 acres of winter and spring oil seed rape.

David Robertson plus his staff, normally of two but now down to one, use two 200hp plus tractors for crop establishment and two smaller machines for the other work, mostly fertilising with 24m pneumatic spreader and spraying, also with a 24 m machine. Other operations for the smaller tractors include rolling, topping set aside, grain cart and other trailer operations plus, grain handling; mostly loading wagons with bulk grain and unloading big bags for fertiliser.

Back in 2000 it became obvious that one of the smaller 120hp tractors needed replacing but talk amongst David's farming friends questioned the reliability of models from the same manufacturer. At the same time similar conversations praised the performance of Valtra machines. David decided to try a Valtra and after a demonstration purchased an 8350



David Robertson, taking a brake to talk to Valtra dealer Alistair Young, is happy to spend long days in the cab of his 8550 as both he and his dog Sam find it very comfortable.



from Valtra dealer Alistair Young Engineering. With its slow revving eco-engine this has clocked up over 3 300 hours since delivery in February 2001. It has proved highly reliable and, apart from regular maintenance, has not required the services of a mechanic. More recently Stackpole's other second string tractor also suffered from a series of reliability problems and in April last year was replaced with a 160hp Valtra 8550. In a little over twelve months this machine has clocked 1 200hrs, without trouble. While maintenance and down time are reduced with corresponding improvements in productivity, there is also a noticeable reduction in fuel consumption. Stackpole Farms purchases fuel for all of Cawdor's departments and then 'sells' it on as required. As a result accurate records are kept and it is a simple matter to work out consumption for the various tractors. The 135hp 8350 has returned an average of 10.7 litres per hour over 1 000 hours resulting in a decrease in fuel costs in excess of £500 over one thousand hours. Added to this is the advantage of the twenty extra horsepower of the 8350 over its predecessor. Figures also show the 8550 is returning a worthwhile reduction in fuel costs over its predecessor and maintenance costs are most significantly lower.

Both tractors are ideally suited for field work but to extend their versatility further David has had them both with loader brackets and uses them for materials handling, utilising the power shuttle to load bulk grain trucks. The farm only has one loader but with brackets on both machines the system is highly flexible particularly as it only takes a moment or two to fit the loader, including connecting hydraulics. With a high capacity bucket loading grain trucks does not take long and the added expense of running a telehandler is avoided.

The cab also comes in for praise: As a 'working' farm manager David puts in some long hours in the cab, often followed by a stint in the office. Comfort is important to keep fatigue at bay and he is well pleased with his operating environment – so is his dog Sam!

■ Roger Thomas



The driver can control all ISOBUS implements with one Virtual Terminal.

The amount of information recorded and needed by farmers is increasing rapidly in the agricultural business. Tractors and implements are becoming more complex, relying on large quantities of electronic data to work properly. To ensure that the collected information can be fully utilised, the ISO 11783 international standard has been developed to harmonise the data interface between tractor, implements and onboard computers is standardised.

The ISO 11783 standard has been jointly developed by tractor and implement manufacturers

including John Deere, Fendt, Kverneland and Valtra. These manufacturers have also created a specification defining how this standard should be interpreted. This specification is commonly known as ISOBUS.

Modern implements and tractors have many functions that are automated or electronically controlled. Today's agricultural machines therefore rely on at least one onboard computer. In addition, many measurements must be taken in order to make these functions work. For example, wheel speed and actual speed are constantly monitored so that the tractor can automatically reduce wheel slip. Similarly,

fertiliser spreaders rely on speed information in order to adjust the amount of fertiliser being spread.

The ISOBUS system allows the Electronic Control Units (ECU) of the tractor and the implement to communicate and share information via a CAN bus. The implement can then use the actual speed that is being measured by the tractor and thus reduce the need for additional sensors on the implement itself. Thanks to the ISOBUS system, the implement and tractor are truly connected together as one machine.

Simple to use

Traditionally, complex implements have required their own specific Control Box allowing the operator to control the functions of the implement. This system works if only one implement and Control Box is needed. When using several implements, the operator must have a cabin full of different Control Boxes. With the ISOBUS system the role of the Control Box is handed over to the Virtual Terminal (VT), which is capable of controlling every ISOBUS-compatible implement regardless of its manufacturer. The operator requires only a single VT for this, which also allows him to control more than one implement at the same time.

The use of the ISOBUS system is simple. With an ISOBUS implement, the operator has to connect only one cable to the tractor's Implement Bus Breakaway Connector. The Virtual Terminal can be in the cabin at all times, and it will automatically recognise the implement and download the control software from the implement ECU. After this the tractor-implement combination is ready for action.

The ISOBUS implement and tractor work together just like normal machines. In the future, however, it will be possible to go further. The implement could even start to control the tractor. For example, farmers often try to drive as fast as possible to maintain the full capacity of their loading wagon. There is

always the risk that the capacity of the chopper is exceeded and will become stuck. With the ISOBUS system, the loading wagon could theoretically slow down the tractor speed and thus prevent overloading the chopper.

Significant benefits

In the long run the farmer saves money, as he no longer has to pay for a new Control Box every time he buys a new implement. The single Virtual Terminal is simple to install ergonomically, and the use of the VT stays the same even if the implement is changed. The ISOBUS system also automates the implement settings, thus combining the implement, the tractor and the VT into a system that offers the same benefits as a self-propelled machine.

The recording of work data, such as working hours and area, is very important in modern farming. The ISOBUS system is perfect for this, allowing also the data to be transferred simply to the farm computer. The system can also handle precision farming tasks simply by connecting a GPS unit.

ISOBUS is really the communication system of the future. It offers many possibilities to ease the work of the farmer and to increase the productivity of the farm. With so many manufacturers already involved with the ISOBUS system, the future looks bright.

■ Jussi Kaarlonen



ISOBUS implement is connected by one cable to tractors connector.



Johanna Herlevi and Doris managed 73,95 meters in the pull off, which put her 19 centimeters in front of her brother Matti.

Silver and bronze for the Valtra Shell Pulling Team at the European Championships

The Valtra Shell Pulling Team took silver and bronze in the Pro Stock 3500 Class at the European Tractor Pulling Championships in Füchtorf, Germany on Saturday 11 September. The competition was extremely tight, with victory eventually going Geert Amhouts of the Belgian Code Red Team.

There went the victory, commented chief engineer Mauno Ylivakeri as the accelerator cable broke on Johanna Herlevi's tractor on pull off.

The cable broke on Johanna's Doris tractor first time on her first pull, which still recorded 91.75 meters. Of the fourteen other competitors, eleven achieved full pulls. On their second attempts, Doris and Code Red made up for disappointing first pulls with impressive full pulls. Altogether 13 tractors thus made it to the pull off, although one tractor retired with engine failure.

 A lot of weight was added for the second pull. In fact, the sled was extremely heavy right form the start, which really punished tractors that spun their tires a lot, like ours, said **Pekka Herlevi**.

In the pull off, all 12 competitors achieved pulls of between 63.98 and 75.05 meters. Ultimately, the difference between Johanna and the winner was just ten centimeters. **Matti Herlevi** and Caesar were 19 centimeters behind Johanna and Doris. Pekka Herlevi's pull of 66.97 meters was only good enough for ninth position.

 We had a heavy thunderstorm this morning right before the competition, and another downpour right before our own event. It was really hard to get traction with the tires, Pekka Herlevi commented.

An estimated 5 000 spectators were on hand to watch the Pro Stock competition.

■ Tommi Pitenius

- An important part of the production line



Keeping up with the harvesters - whatever the weather.



- deliveries to the freezing plant have to be continuous - regardless of conditions.

It has to be admitted that peas are a vegetable that have grown spectacularly in popularity thanks to modern freezing methods. But, as we chase the last one round our plate how many of us ever give any thought to just what goes into producing those 'Farm Fresh Peas'.

Based in South Lincolnshire, Holbeach Marsh Co-operative consists of 30 member growers and 50 service growers with a contract to supply Pinguin Foods UK with 12 500 tonnes of frozen standard peas and 4 000 tonnes of petits pois; that's 16 500 tonnes going mainly to prestigious high street stores. Once harvesting commences the field becomes and extension of the factory production line an six varieties are grown on 8 200 acres to provide the required yield and ensure continuity of supply over the eight or nine week harvesting period which, once started runs 24 hours a day 7 days a week - unless a major catastrophe occurs in the field or factory. There is one simple rule: No more than 150 minutes should pass between harvesting and completion of freezing and packing. If this time is exceeded the peas start to go sour and become unacceptable to the retailers and their customers. Think of it; two and a half hours is not long considering an hour or more of that can be taken up by road transport if traffic is heavy in this popular holiday area.

So how do they do it?

Holbeach Marsh Co-operative run a fleet of 8 FMC self propelled harvesters. These are supported by two tractors with high lift trailers used to ferry the peas from the field to the road transport vehicles, tractor drawn water and fuel bowsers, a mobile workshop, mess wagon with toilet facilities, telehandler with sweeping brush and a couple of four wheel drive trucks to supply the necessary support and for escort duties when moving from field to field. The crews work 12 hour shifts with several of the harvester drivers coming from Australia and New Zealand. While the Co-Operative owns the harvesting machines the tractors and some of the other kit is hired in for the harvesting period. This year Nigel Cannon, one of two field supervisors and a farmer in his own right, chose three Valtra T150s after a successful demonstration on his own farm.

 Then we found we required a fourth tractor as one regularly used on one of the bowsers would not be available so, at short notice Valtra came up with a T160 as well, commented Nigel Cannon.

Normally all the harvesting machines work together with the support vehicles on the headland and the team have the ability to change an engine or undertake any other repairs to the harvesters right in the field. They could also undertake minor repairs on the Valtra tractors but as these are new and under warranty the

dealer R W Marsh, would be expected to be on site in double quick time, whatever the time of day – or night. Local service engineer **John Crunkhorn** is fully aware of this and has an excellent reputation for turning out at all hours to all types of machinery but with just a week of the season remaining he has enjoyed a full night's sleep as the tractors this year have proved 100% reliable.

With the harvester's tank full of shelled peas it is the tractors job to pull alongside and collect the contents which, depending on machine, could be 1½ or 2 tonnes. Once around 7 tonnes has been collected from the various harvesters it's off to the waiting road vehicles which take around 14 tonnes each. Any more and there is a chance that the tender peas on the bottom of the load will become squashed. Also waiting longer puts continuity of supply to the factory in jeopardy and a chance of exceeding the 150 minute rule.

So all quite straight forward, the harvesters strip the pods and open them, haulm is returned to the ground and the peas into a trailer. Easy in good conditions but then the weather, in true British style, turns and then the tractors really do need all the traction they can provide because this is one harvest that just has to keep on going regardless of the rain and the 2004 season has been really wet.

So what do the drivers think of the Valtra T Series?

Martyn Payne runs a small farm with his father and is regularly in the driver's seat while Peter Paget works as a driver for a farming company within the co-operative. Firstly, and

Once around 7 tonnes has been collected from the harvesters is transferred to road trailers.





Drivers Peter Paget (seated), Martyn Payne (left) and field supervisor Nigel Cannon have come to appreciate the abilities and comforts of Valtra's T Series and their frugal fuel consumption.

importantly for men working 12 hour shifts, the cab comes in for considerable praise; "comfortable with lots of room". And it's the little things that also get noticed like the cab step light and the cab light itself which has a slight delay when getting out.

 Nice touches when working the night shift, comments Martyn. The front suspension also goes down well: "Effective particularly when running along bumpy tracks".

Peter Paget normally drives a John Deere:

– Every bit as good and in some areas better, is his comment. But it is Nigel Cannon who speaks for them all over one very important matter; fuel.

 We've all noticed it. These tractors will all work something over 500 hours in eight, perhaps nine weeks. The tractors we used last year; McCormick MTX140s, would only go for 2 days at the most on a tank full of fuel. These will go for three.

Admittedly the McCormick at 265 litres does not carry quite so much fuel as the Valtra at 330 litres but even so, conservatively, there is around a 16% fuel saving – say £5.50 per day with the added bonus of over 6% more power. And while the tractor's fuel consumption is only a minor part of the total fuel bill for the operation, a reduction that equates to a day's free tractor hire is very worthwhile, to say the least.

In one of the most difficult pea harvests for some years the Valtra tractors have performed well, impressed their drivers and reduced fuels. A successful start in another new area of operation for Valtra.

■ Roger Thomas



A clean tractor outside – "Makes a positive impression on the people who see it on the roads and in the fields."



After lacquer treatment – looks like a new tractor



A clean seat.

Your tractor can also be a display window for your farm

Most companies take great pains to create an attractive display window to their surroundings, and we know that this is very important when customers, credit givers, financial institutions, employees, job applicants, and others evaluate them.

When we drive into the countryside we spontaneously take note of the state of the various crops in the fields and how well the work has been carried out. We also notice how tidy it is around the buildings, their standard of maintenance, and how well the buildings fit into the landscape.

Agricultural tractors and machinery also make a significant contribution to the attractive overall impression that farmers want to live up to.

Nobody can doubt that a well maintained, clean and shiny tractor promotes respect and

makes a good impression on people, irrespective of whether they are farmers, mechanics at a tractor station, or contractors.

What are the advantages provided by a well maintained, clean and shiny tractor?

- They make a positive impression on people who see it on the road on in the fields.
- There is less contamination from tractors that spread animal fertiliser and work in stables.
- It is easier to attract and retain skilled employees.
- Employees are more satisfied.
- There are fewer breakdowns.
- Greater efficiency. The desire to work slightly longer hours is heightened by clean, hygienic surroundings.
- Preventive maintenance is improved, any leaks or other initial defects will often be discovered during cleaning or can be seen more easily

on a clean tractor.

- Less damage to the tractor. The first scratches or dents make the greatest impression.
- Longer lifetime.
- Higher resale value.

But then there is the cost?

Yes, but seen as a whole the financial advantages outweigh this.

Time and motion studies carried out by the Danish Institute of Agricultural Technology (Statens Jordbrugstekniske Forsøg), in connection with various agricultural tasks show that 15 % of the time spent on field work goes on cleaning and maintenance. The problem in practice is that this time is seldom included in calculations.

■ Michael Husfeldt

Suggestions for cleaning tractors

- Remove all external removable panels and bonnets.
- It is easiest to remove loose dirt and remains of crops with compressed air.
 Don't forget the ventilation filter.

Driver's cab.

- Vacuum the driver's cab.
- Clean inaccessible corners with compressed air.
- Vacuum the driver's cab once again.
- Wash the ceiling and trim with a suitable detergent. Remove spots of oil with a solvent.
- Clean the seat and especially the rubber surround.

- Wash and polish the windows.
- Wash the floor of the cab.

The external parts of the tractor.

- Apply oil dissolving detergent to the body of the tractor and wash it down with
- a high-pressure cleaner (preferably hot water so that the pressure can be reduced).
- Wash the insides of removable panels and bonnets and replace them.
- Wash the wheels inside and out with a brush.
- Wash the entire outside of the tractor with a suitable shampoo.
- Wipe off the water to avoid lime deposits.
 - Polish the windows outside.



Examples of Valtra Sprays for cleaning, lubricating and protecting a tractor.

Repair any chipped paint by sanding first, and then priming, and finish off by painting with the right colour top coat. Wax the lacquer and plastic components once or twice a year to prevent fading.

1964

- A good year for tractors



The Valmet 565 was a fine tractor and is today a valuable collector's item. With standard equipment, the tractor weighed 1 930 kg. Its 2.7-litre three-cylinder Valmet 310 A engine delivered 52 horsepower at 2 250 rpm.

Valmet 565 introduces synchronised transmission

Looking back at the history of tractors, 1964 stands out for the number of significant new models that were introduced that year: the Massey Ferguson 100 Series, brand-new tractors from Ford and those white David Browns. Valmet's big innovation that year was the 565 model featuring synchronised transmission.

The basis for the Valmet 565 was its 361 D model, which was already a big sales success. The improvements that led to the introduction of the 565 nevertheless improved Valmet's position in the market. The advertising campaign for the 565 featured a tractor pulling a heavy load of logs up a hill with the accompanying text: "Now you can drive a tractor like a car".

The shifting pattern of transmissions on earlier model was widely criticised. As a result, H-shifting pattern was introduced and the gearbox was made easy to use. The six-speed transmission was based on a basic 3+R transmission with multiplier. The shifting between 2 and 3 was synchronised, as were the multiplier. Combined with a floor-mounted accelerator, this allowed the tractor to be driven like a car.

The Valmet 565 also introduced larger tyres, the most popular size being 13–28. This increased ground clearance. The top speed also increased to around 30 km/h. For competitive reasons, SAE ratings were used for horsepower in those days. The output of the 565 was 52 hp at 2 250 rpm. The Bosch fuel pump was replaced by a Simms Minimec unit featuring forced feed of fuel for improved cold starting. The Valmet 565 was one of the best tractors in this regard.

The radiator grill was redesigned for the 565 and featured a large metallic V. This same concept is reflected in the current Valtra logo, where the first V is taller than the other letters.

There were two versions of the 565 model. "Series I" was manufactured in 1964 and '65 and featured a hydraulic pump in front of the crankshaft. The driver's seat was cup shaped and cushioned by a simple rubber cone.

The Valtra 565 II was introduced in 1966 with many improvements and optional features. The hydraulic pump had been moved to the timing gear, and it could be disconnected for cold starting. For the first time, Valmet offered an independent PTO. This solution differed from that offered by the competition. There were two

clutch pedals on the left side of the footstep, the inner one for driving and the outer one for the PTO. This way both could be disconnected separately or together. The trade name for this innovation was twin-clutch rather than double-clutch, as the latter referred to the same functions on a single pedal. A hydrostatic crawling gear was available as an option.

The Valmet 565 was manufactured until 1968, when it was replaced by the yellow 500 Series. Altogether over 15 000 were manufactured, and the model increased Valtra's presence both in Finland and abroad. The Valmet 565 was exported to Sweden, Austria, Iraq and Thailand, among other markets. The synchronised transmission was introduced in Brazil in 1968 on "Sincro-o-Mático" models. In principle, the same 565 transmission is still being manufactured in Brazil. Perhaps 250 000 of these have been manufactured in total.

For all you friends of old tractors, watch out for a special 1:16 miniature model of the Valmet 565 on sale at Valtra dealers at the end of the year.

■ Hannu Niskanen

