Valtra Team

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Editorial

Did you go to one of the Valtra Experiences? I do hope so and that you found it informative and enjoyable. If you were one of those that couldn't get along, then you missed a great event – that's not us boasting its what our customers tell us.

The Valtra Experiences kicked off what we believe will be an exciting year for Valtra: We have our largest range of tractors ever – A Series, N Series, T Series and S Series – from just 74 hp right up to 370hp. There is a choice of transmissions – 3 speed power shifts, 5 speed Versu power shifts and of course, our own highly efficient CVT – Direct. There are Classic, HiTech and Advance levels of specification.

At Valtra we also have a range of unique features: systems like sophisticated Sigma Power – the ability to increase power at the PTO. TwinTrac reverse drive on S, T and N Series. Then there are the simple features – right down to a choice of colours. After all, why should you be lumbered with a manufacturers' house colour? Then there is our simple philosophy; every farm is different so every farmer or contractor should be free to choose exactly the right specification for their individual conditions.
Truly something for everyone.

And, if you were unable to attend one of our experience days or simply want to take your enquiries further it's never too late; why not arrange a demonstration on your farm? Its as simple as contacting your nearest Valtra dealer – and if you're not sure who that is then visit ***www.valtra.co.uk***, click on Company and follow the links or, simply give us a call on 02476 69 44 00. I look forward to hearing from you.

Mark Broom

Valtra Team

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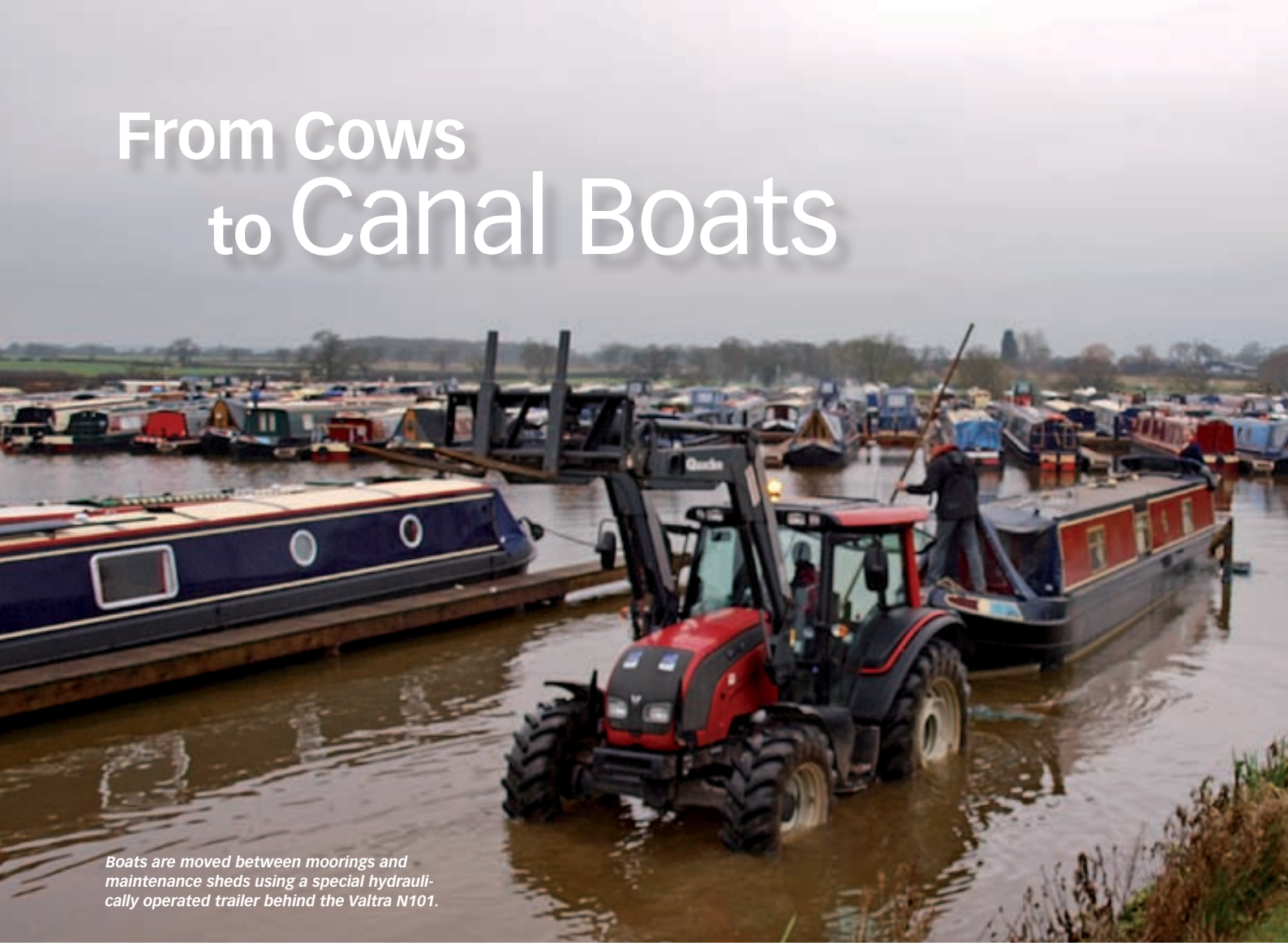
From Cows to Canal Boats



Boats are moved between moorings and maintenance sheds using a special hydraulically operated trailer behind the Valtra N101.

A few years ago dairy farmer **Robert Parton** took stock of his enterprises. Milk production was definitely not making the returns he would have liked and he had to consider his options for the future of his family. Luckily Outlanes Farm, on the road between Nantwich and Winsford, is on the canal that links the Shropshire Union Canal to the Trent and Mersey Canal. A central point from which pleasure boaters can travel throughout a great deal of the British countryside, all the way to London, Bristol, York or Liverpool should they wish; a canal boat marina could well be the way forward.

After some careful costings the 270 cows plus followers that made up the Outlanes Herd were dispersed and most of the farm's 400 acres were let to neighbours.

"We also sold all our machinery – everything," explains Robert, "and in preparation for the marina development purchased a 14ft flat trailer and 14tonne dump trailer."

Robert then received frequent enquiries from neighbours wanting to use the trailers: "they became the basis of our hire business."

"The most difficult, tricky part of the transition from farm to marina operation was planning procedures. To be fair the council was helpful but we had a lot of hoops through which to jump before we got the go-ahead; everything from moving the entrance a few yards along the road to wild life considerations – newts may be small but they're highly significant."

The same sentiments applied to British Waterways, the body responsible for most of the UK's canal system. Eventually the go-ahead was given and in the spring of 2008 a start was made on excavating the 4 acre basin and landscaping the 10 acre site that today makes up the 5ft deep moorings for 150 canal boats.

"The site's subsoil is clay so there was no need to line the basin which was helpful."

Farm buildings were also converted to offices and workshops. By February 2009 ground works were complete and Aqueduct Marina was open for business.

"The boat business actually started before the Marina was a reality. Boats for repair and storage arrived by road or were craned out at the canal bank. Business has built up gradually so we didn't start off cold."

Today, a year on and following an effective publicity campaign, Aqueduct Marina's moorings are all taken and, even in mid winter, there is the quiet hum of business about the place. Administrative buildings house the marina offices, boat brokerage and a chandlery operated by Total Boats and where most things required to make a narrow boat a home from home can be found. There is also a café and in the converted cowsheds, (Robert inserted an extra span between two existing cattle buildings) Scenic Boat Builders will fabricate the craft of your dreams and S&S Boat Painting Services

will keep it looking good. If you're a DIY boatman – or woman – units may be hired so you can undertake your own maintenance work; or for the adventurous self build. Outdoor space is available for storage and, for hardier souls, maintenance. Its worth noting that while a couple of men were made redundant when farming operations ceased there are now around 30 permanent full or part time jobs on the site plus several more seasonal posts.

So, has Robert Parton severed all ties with farming? The answer is no. Nantwich Hire operates from the same site.

"When we ceased farming we had several requests from neighbours to borrow our trailers. There was obviously a market there to exploit and develop."

Being in a significant dairy area Nantwich Hire now operates a fleet of muck spreaders, slurry tankers and slurry injection equipment plus power harrows, rollers sub-soilers and other cultivation equipment.

"We also have a couple of horse trailers." Between them Nantwich Hire and Aqueduct Marina operate a pair of Valtra tractors; an N101 at the boat yard and an T151 for hire.

"We can't compete with the big tractor hire fleets but these machines both earn their keep."

The N101 usually works with a home designed, locally built boat trailer which can handle narrow boats up to 70ft in length and around 20 tonnes in weight. To remove a boat from the water is simplicity itself. The trailer is backed down the slipway as hydraulic rams lower the trailer bed below the water. The boat is manoeuvred into position and the trailer raised, the boat's weight being taken on cross members. On dry land the boat is lowered onto blocks and the trailer removed. The second more powerful tractor is usually found working with slurry injection equipment.

"Both machines are HiTech specification – sophisticated enough to handle modern equipment, easy enough to be understood by those unfamiliar with Valtra tractors," is Robert's contention. Both are also fitted with loaders.

"This makes them much more versatile – everything from loading muck through unloading trucks to lifting engines in and out of boats."

The T151 which does quite a bit of road work has a 50kph transmission and suspension and is also fitted with air brakes.

"Equipment is getting heavier and air brakes give that extra level of safety."

Why Valtra? "These aren't our first, we did have another but hired it to our dealer John Bownes Ltd of Winsford to demonstrate to a potential customer. In the end he actually sold it for a good price – so we purchased the T151!" recalls Robert.

"The support of a good dealer is just as essential now – we have a demanding public to service – as it was when we were dairy farmers and relied on our machinery to feed the cattle."

■ **Roger Thomas**

Robert Parton with Paul Duncalf in the driving seat.

Old farm buildings have been renovated to house offices, shops and a restaurant.

High-quality equipment generates
Stepless N142 Direct at work on a grain

Jean-Pierre de Wilde shows off his N142 Direct preparing to spread the fertiliser.

Jean-Pierre de Wilde successfully combines his roles as a farmer in Monampteuil situated in the department of Aisne, Northern France, and as a sales manager at AGCO Finance for Valtra. This requires a great deal of expertise, organisation and passion.

At the age of 41, this farmer-cum-sales manager enjoys a diverse professional life and adopts the same energetic, meticulous and enthusiastic approach to both roles. On his 95-hectare mixed farm he grows beetroot, wheat, horse bean and oilseed rape. At the same time, Jean-Pierre de Wilde spends the majority of his week driving around the east of France for AGCO Finance, the financial driving-force behind Valtra tractors.

"I travel 80,000 kilometres every year, from le Havre to Carcassonne", explains Jean-Pierre de Wilde, who admits that he enjoys the professional diversity and financial stability the two roles afford him. "The new communication technologies available today allow me juggle my roles as farmer and financial advisor. My only requirement is to be available for two weeks during the summer for the harvest, but that doesn't pose too much of a problem as that's when my clients are busy doing the same thing".

The fact that we now have seven-day weather forecasts also means we can organise appropriate sales visits with the help of a service provider, without whom this entire organisation couldn't function.

More than a financial advisor

When Jean-Pierre de Wilde took over half of his parents' farm in Aisne along with his twin brother in 2005, he found a way to combine his interest in finance and his background in agricultural farming. He left his post at a bank where he was responsible for agricultural markets and spent two years working at a manufacturer of agricultural equipment, before joining AGCO Finance in 2007.

"My role is to provide financial solutions to farmers. I offer them advice on their taxes and finances so that they can revitalize their equipment fleet. I deal with customers in collaboration with the dealers", he says.

However, Jean-Pierre de Wilde wants to be more than just a well-informed financial advisor. His background also enables him to demonstrate how buying a new tractor can generate savings and increase a farmer's income.

Nevertheless, he wouldn't be able to lead this double life if it weren't for the support of a service provider, in this case a farmer who rents 100 hectares of land. It's Frédéric who sows some of the grain, takes care of the stubble ploughing and maintains the equipment.

"He offers me security. My brother and I have worked with him for five years. He rotates between the three farms, covering a total area of 360 hectares. This option allows us to pool the cost of equipment and benefit from mutual support of the CUMA (machinery sharing cooperative), which is made up of seven farmers".

savings
farm

A well oiled machine indeed. It has also allowed Jean-Pierre de Wilde's brother to take on a second job, as a sales director for a seed company.

"In the current economic climate, it is becoming increasingly common to perform multiple roles."

Despite the fact that Jean-Pierre de Wilde works on the farm in his spare time to ensure that he meets his targets in terms of profit, he remains passionate about agricultural farming. He also tries to set aside time for his family.

"I don't work on Sundays; that's the day I spend with my wife and two daughters. And I have two weeks' holiday in the summer. That time is sacred to me!"

As for Frédéric, he works closely with the de Wilde brothers. He got involved with service providing ten years ago and has never looked back. Thanks to his training, he can deal with anything, even engineering.

"Top-quality equipment is crucial. It's the only way to reduce the costs of an agricultural business", he states, casting a proud glance at Jean-Pierre de Wilde's latest purchase: a 4-cylinder 150 hp Valtra N142 Direct that has already been used in ploughing the land and cutting verges.

Comfortable, particularly in the field

Jean-Pierre took his research seriously when deciding which tractor to purchase, as he wanted a truly versatile tractor (one that could spread fertiliser and cut verges) that was up to the challenge of replacing the business's larger tractor when that was out of action.

"It hasn't let me down yet. I can plough in 8 furrows and work with a 3-metre-long combination drill. If I had to describe my new Valtra in one word, I'd say comfortable – particularly in the field, but on the road too.

Jean-Pierre ordered his tractor from Valtra using the à la carte system. It is ISOBUS-ready and features suspended front axle, suspended cab, swivelling mudguards, front linkage, InfoLight kit and metallic black paint.

"The ACD Autocontrol function allows a high level of precision when using the rear linkage", explains the proud owner.

According to Jean-Pierre, the N142 Direct has everything the larger models have, in spite of its compact build, adding "It's certainly a match for the 6 cylinders with the same power!"

For his work this coming spring, Jean-Pierre is looking for speed and gentleness to ensure that the naturally moist ground is not damaged too much. The tractor is also fitted with size 580 tyres at the rear to avoid compacting the soil as much as possible.

When asked why he replaced his old tractor, which was already fitted with a CVT, with a Valtra Direct, Jean-Pierre's answer speaks for itself:

"When you are used to a CVT, you don't want to change, so I opted for the Direct rather than the Versu with 5 ratios under load".

He also confirms that the Valtra brand has a good reputation among farmers. The tractors are recognised as being robust and reliable, and the brand has a genuine proximity to its customers. The N142 Direct was purchased from Messeant in Bazuel (Nord).

Jean-Pierre already has a host of ideas about the next Valtra models:

"If I was ever in charge of developing a new Valtra, I'd start with a 4-cylinder N-series 150 hp base, add a new exterior design but keep a similar build. I'd use an advanced cab with a new passenger seat and a few luxury accessories like a refrigerator compartment and a parcel tray. It would be fitted with a Direct transmission but a slightly longer C range, up to about 25–27 kph".

As soon as the winter months come to an end, the N142 Direct will be needed to spread the fertilizer and prepare the soil for the beetroot. For CUMA (machinery sharing cooperative), the tractor will spend a lot of time on the road at around 30 kph around the farm. According to Jean-Pierre de Wilde, the N142 could clock up an average of 500 to 600 operating hours every year as it will also be used during the harvest and for gathering the beetroot.

"The N142 Direct replaced a 6-cylinder, 130-hp tractor and I must admit I have been pleasantly surprised by the convenience of the Valtra. I originally chose the N142 Direct because the model had a reputation for being powerful", explains Jean-Pierre. In conclusion, he also said that "the gearbox is easy to use and the tractor's technology is state of the art; overall a real pleasure to use!"

Jean-Pierre de Wilde is likely to rely heavily on his Valtra N142 Direct over the next few years so he can carry on fulfilling both of his roles successfully.

■ **Jean Batilliet**

The sales manager travels 80,000 kilometres every year so he really makes the most of his "free" time in Monampteuil.

Low fuel consumption – plenty of power

N141

Heavy loads on busy country lanes. With air brakes, suspension and plenty of engine torque the N141 is in control and safe. The chain is usually used for recovering other machines.

Robin Blackmore is happy to spend a day in the cab of his N141, its comfortable and plenty of room.

A herd of cattle, flock of sheep, validation of Valtras (or whatever the collective noun is for a gathering of Valtra tractors), it was the comments of farming neighbours using Valtra and Valmet tractors that had father and son team John and Robin Blackmore seriously considering an N Series Valtra when the time came to replace one of Hill Crest Farm's tractors a couple of years ago.

Hill Crest Farm is 330 acres between Barnstaple and Ilfracombe in North Devon where established enterprises include 370 white and blackface mules lambing in February and ready for market through the summer. Thirty-five acres are let under contract for swede growing for the supermarket trade; "we do much of the ground preparation," explains Robin. Of the remaining ground 60 acres is used to grow red clover and 95 acres for maize on contract for local dairy farmer Tony Dallyn – also a Valtra user. John and Robin also undertake contract tractor work in the area.

As is so often the case silage making, which commences in mid May, is pretty much a co-operative affair. Tony Dallyn cuts Hill Crest lays with a Valtra T191 complete with mowers front and rear. Picking up is done by a contractor with self propelled forager supported by a team of tractors (usually Valmet or Valtra) and trailers; a team of which John and Robin are also part. It was this procession of Valmet and Valtra tractors across Hill Crest Farm that led to conversations with owners and drivers; the reports were of reliability and fuel economy. As a result John Blackmore arranged a demonstration of an N141 HiTech. The four cylinder 150 hp tractor surprised both father and son.

"It handled our Kverneland reversible five furrow auto-reset plough with ease – even on some of the steeper banks," recalls Robin.

"It also appeared to live up to the Valtra reputation of being frugal on fuel – 1¼ gallons of diesel per acre – which on our heavyish land after swede or maize harvesting gangs have been working in poor conditions is good."

Along with hauling their own grass the Hill Crest team also haul contract grown grass from other farms and with maize, the silage season can extend from May to November. Another important operation is the hauling back of slurry for spreading – all in all a lot of road work. The amount of road work had an impact on the N141 specification which was based on the HiTech option and included 50kph transmission, front axle and cab suspension and air brakes.

Don't let anyone tell you different – this is my tractor!

"Roads round here are busy with tourists during the summer months and safety is a primary consideration," is Robin's comment.

He also likes the comfort of the N141s cab; "Plenty of room for me and my dog" and the fact that Valtra are available in a range of colours; "I like yellow." The tractor was also fitted with 540/65R28 tyres front and 650/65R38 on the rear.

"These help to prevent a mess on wet grass and provide extra traction in maize fields and when ploughing and cultivating. They also improve the ride and put more rubber on the road making stopping more efficient – safer."

Like all good contractors John and Robin keep records of their daily work.

"It helps keep a check on costs and, while many prices are set as much by the competition as our own direct costs it does help to keep a check on reality!"

On a recent contract Robin was hauling maize silage from beyond Barnstaple.

"We hauled back seven loads that day with our 14 tonne trailer – that's 185 miles – the maize field was also wet and hard going and we did it all on 180 litres of diesel and, remember, most of the trip back when loaded is up hill."

Robin is also keen to point out that, unlike his previous tractor, he can keep up with larger tractor and trailer combinations.

With almost two year's experience under his belt is there anything Robin would change about his Valtra tractor? The answer is an emphatic no – "at least nothing important."

■ **Roger Thomas**

Conditions are cramped when almost half of Arneberg's 40 Valtra tractor owners meet up on a sunny winter's day.

Valtra in the heart of Scandinavia

An entire village in Norway drives Valtra tractors

The village is so small that you cannot even find it with a GPS navigation system. Still, Arneberg is large enough to be the home of a remarkable number of old and new Valtra tractors.

If you live in Norway, it is highly likely you have eaten potatoes from Arneberg. The tiny village in the Åsnes municipality of Hedmark county is part of Finnskogen and just a stone's throw from Sweden – in the heart of Scandinavia, in other words. Arneberg is responsible for a significant proportion of Norway's total potato production. And, if you have eaten potatoes from here, it is likely that the farmer who produced the potatoes did so from behind the wheel of a Valtra.

High density

"I would guess there are around 40 Valtra tractors here in the village, both large and small," says Ola Vasaasen, the Valtra salesman at Akershus Traktor. Today he has brought coffee and cake with him to a small gathering of Valtra owners. Around half of all the village's Valtra owners are glad to meet up on this freezing cold winter's day.

"Arneberg has had a high density of Valtra tractors for a long time," says Vasaasen.

High density in this case means virtual exclusivity. Valtra is in fact the definitive market leader in the village. "The N Series in particular has been extremely popular."

Same brand

Bjørn Holstad runs a large, hilly farm, which is why he makes full use of no less than three Valtra tractors. Today, all three are taking part in the Valtra meeting. He has a Valtra 805 from 1988, a six-year-old T Series and a new N Series.

"I still use my T Series every day," says Holstad. Reliability and excellent service are the main reasons that he has stuck with Valtra since 1984. "Since I need more than one tractor, it is definitely an advantage that they are all the same brand."

Easy to drive

The fact that the thermometer shows 22 degrees below zero does not seem to stop either the Valtra tractors or their owners. Even the youngest fans take the cold in their stride. Then again, siblings Gunnar (4) and Anna (5) are suitably dressed, both wearing thermal suits from Valtra.

"We even have a Valtra pedal tractor at home, but soon only Gunnar will be able to fit in," says Anna. She thinks it could still be a while before she is allowed to drive her father Stein Birkely's real Valtra.

"We need two Valtra tractors to ensure efficient operations," says Stein. He believes that the tractors are great for handling tasks such as corn production on the farm. "Valtra tractors are also easy to drive."

Good maintenance

Having a good service provision is vital for a farmer relying on as few interruptions as possible. Not only does local tractor dealer Flisa Traktor provide services for Valtra, service specialist Lars Knøsen also carries out work for the farms in Arneberg.

"The farmers here are good at looking after their Valtras," he admits.

■ **Kalle Seip**

The farmers in Arneberg are good at look after their Valtras, says service specialist Lars Knøsen.

Valtra has a solid foothold in Arneberg, explains Ola Vasaasen from Akershus Traktor.

Arneberg

is a small village in the Åsnes municipality of Hedmark

- ***The village is located in Finnskogen, a large forested area with a scattered population that stretches along both sides of the national border between Norway and Sweden***
- ***The area is named after Finnish immigrants, or "forest Finns", who settled in the area in the 1500s and 1600s***
- ***The village is dominated by agriculture***
- ***It produces a large amount of potatoes among other crops***
- ***Valtra is the local market leader***

This winter Veijo Hyrkäs used his Valtra T162 for a number of tasks, such as building a forest road over a bog in Taivalkoski. Even though his tractors are driven less in wintertime, he still intends to use his Versu tractors for 3000 to 4000 hours a year.

Photos: Risto Pikkupeura

Contractors drive a 1000 hours in 6 weeks

The Valtra T162 Versu tractor owned by contractors Veijo and Valto Hyrkäs from the town of Kuusamo in Finland has been in heavy use. Their tractor has been driven for over 1000 hours during its first month and a half.

"We have used our new Versu to erect marker poles across Northern Finland ready for the coming snowploughing season. We have literally worked around the clock," says Veijo Hyrkäs.

The tractor is driven by a team of six drivers who work two at a time, one driving while the other operates the implement attached to the rear linkage. The implement punches a hole in the ground and then inserts the marker into the hole. The marker poles are erected beside the road every 70 metres or so.

"The work is quite heavy on the transmission and brakes, as it involves a lot of stopping, accelerating up to 40 km/h and then braking again. This same routine is repeated around the clock over a period of two months."

The Valtra T130 that the contractors used for the past four years for the same job racked up 12,000 hours.

"Our new Versu consumes just half the amount of fuel as our last tractor. The 160-litre hydraulics are much more efficient than the old gear pump. Before we had to run the engine at over 2000 rpm, whereas now 1200 rpm is sufficient. Engine noise has also been reduced a lot."

Erecting the marker poles takes around two months altogether, after which the tractors will be used for snowploughing. They will also be used to transport loads, mow the roadsides and maintain gravel roads. For example, the tractors will mow roadsides all the way from Hyvinkää in Southern Finland to Nuorgam in the North, some thousand kilometres apart.

Drivers' favourite

In addition to the Versu tractors that they have already driven for 1000 hours, Veijo and Valto Hyrkäs have another even newer Versu and two Valtra T130 tractors, one a 6600 model and the other a 6400. The contractors also have two trucks and four excavators. The company employs 21 workers during peak seasons and 11 throughout the year. The two brothers purchased the contracting company from their father in 1999, when the fleet included two Valmet tractors.

According to the brothers, the new Versu tractors have stood up well to the hard work. Erecting markers is usually very tough on brake discs, but the new model has shown no signs of weakness. The drivers also like the new Versu. The company had already a Valtra T Series Advance model at the start of the autumn, but when the drivers had begun using the Versu models they convinced the brothers to change the order from an Advance model to a Versu.

■ **Tommi Pitenus**

– Thanks to the new 160-litre hydraulics, fuel consumption is half what it used to be, Veijo Hyrkas and Jari Saavaniemi point out.

Not just price, not fuel consumption, but Total Economy

The operating costs of a tractor depend not only the purchase price, but also on its power and operating costs and how often it is available for use.

Purchasing a tractor is a big decision. The most important consideration of course is to find the tractor that offers the best overall performance. Dozens of different factors should be taken into account when comparing tractors, and the value of each of these factors is different. Needs vary according to different regions, different farms and especially different uses and tasks, so it is unlikely that your neighbour or anyone else will have the right answer for you. The ability to customise your Valtra tractor and order it the way you want it directly from the factory makes it easier to discover the ideal tractor for your work – a tractor that does not lack anything, but that also does not include anything unnecessary that you have to pay for.

When evaluating the cost of a new tractor, the first factors that come to mind are its price and fuel consumption. However, these are not necessarily the most important factors overall.

"In terms of overall total economy, the most important aspect is that the tractor is able to handle the tasks given it and for which it was bought. Even a cheap tractor is expensive if it stands idle or cannot perform its tasks. A tractor that seems expensive can quickly make up for the price difference if it can perform in all conditions, even when presented with entirely new tasks. It is not common to change tractors every year, even when farmers acquire more land to cultivate or consider new contracting opportunities," explains **Timo Mattila**, Product Marketing Manager at Valtra.

A tractor that is too big or too small for its tasks is uneconomical. The fixed costs of a big tractor are a burden if it is not used sufficiently. On the other hand, even though modern tractors can cope quite well with oversized implements, excessive time can be spent on tasks if using undersized machinery, resulting in higher operating costs and fuel consumption.

You don't buy a drill, you buy the hole

There is an old saying that you don't buy a drill, you buy the hole that the drill can produce. The same applies to agricultural machinery. The purpose is to get the manure spread, trees cut or field ploughed, not to buy a new tractor as such.

"Self-propelled implements have become increasingly popular for spreading manure, spraying and harvesting fodder. Even though the work efficiency per hour of specialised machinery is higher than that of tractor-implement combinations, the total economy can still be lower. The main problem with self-propelled implements is their high purchase price. The capital costs of machinery that spends most of the year standing around doing nothing can become very high," says Mattila.

Another important factor to keep in mind is that specialised machinery demand a good machinery chain and solid infrastructure in order to operate efficiently. The productivity of self-driven forage harvesters can be extremely high, but it does not make sense if the fodder reaches the silo so quickly that there is not enough time to compress it properly and quality suffers as a result.

The user comfort and ergonomics of tractors are also productivity factors. Of course, customers spend many on these features so that their work would be more pleasant and safe, but work efficiency also improves if the

driver can remain fresh and alert longer.

Consider operating costs over the entire lifespan

When discussing the operating costs of a tractor, attention is usually paid to fuel consumption. In reality, however, fuel consumption is usually not the decisive factor in terms of total costs. The savings potential that can be achieved in terms of fuel consumption is even smaller. Modern diesel engines all consume almost exactly the same amount of fuel per kilowatt. Bigger savings can be generated in terms of capital costs and work efficiency. Considerable savings can also be achieved from reliability, long-lasting engines and long service intervals.

Valtra's engines (AGCO Sisu Power) are designed specifically for off-road use. These sturdy engines offer a very long lifespan, strong torque and superb reliability.

A reliably tractor pays, a broken one costs

Reliability is an important component of total economy. A functional tractor generates income, whereas a non-functional one causes losses.

"Reliability or lack thereof can mean thousands or even tens of thousands of euros. It is easy to calculate how much it costs in terms of repairs and lost income if a machine is out of use for a week or so during the peak season. Considering the potential losses due to the quality or quantity of the harvest, the price can be very high indeed," Mattila adds.

Is the sum of many factors, including the tractor itself, a reliable and accessible service network, and the user. The potential costs from a breakdown should also be compared to servicing and maintenance costs. This helps to understand the importance of properly and regularly looking after one's tractor.

■ **Tommi Pitenus**

Regular maintenance keeps your tractor in good working condition and prevents problems from occurring when you need your tractor the most.

Valtra's at home even ***in the cloister***

Handover of T171 HiTech, front left: Ludger Heydler, Area Manager of Valtra Vertriebs GmbH Brother Richard Schmidt OSB, economist and head of the Plankstetten Monastery Markus Neger, Neger Landtechnik.

Visitors can purchase organic produced from the monastery's own shop.

The Benedictine Plankstetten Abbey has been designated by the Federal Ministry of the Environment as a "pilot operation of ecological farming" and serves as a model to other farms, both regionally and nationally – a true prime example of ecological farming.

The monastery complex is located in the area between Nuremberg, Regensburg and Ingolstadt. Thanks to its Roman church and Baroque monastery complex, it is a building of national importance. In the past few years, the abbey has consistently broken new ground in ecological farming and has gained national importance by means of its exemplary regional self-sufficiency concept. The main component of the concept is that the monastery is relatively independent from the surrounding area in terms of supply security.

The monastery's farming was completely converted to ecological farming methods in 1994. With an operating area of approx. 120 hectares of farmland, the conversion was no easy undertaking, however. The farming area is divided into 100 hectares of arable land, 20 hectares of grassland and 5 hectares of farmyard and other areas. The areas are farmed exclusively using Valtra tractors. These include a 6400 (>10,000 operating hours), an 8400 (7,000 operating hours), an 8450 (6,000 operating hours) and, since September 2009, also a T171 HiTech. The crop utilisation is divided into: spelt (17 ha), malting barley (16 ha), brewing and baking wheat (10 ha), broad beans (6 ha), peas (6 ha), potatoes (5 ha), corn (5 ha), oats (5 ha) and sunflowers (1 ha). The livestock comprises approx. 45 suckler cows with breeding and mast, as well as approx. 100 porkers. Another mainstay is the monastery nursery, which is managed according to Bioland guidelines. It has over 1,200 m² of greenhouses, 1.5 hectares of open land for vegetables and 4 hectares of orchards. Chicory is cultivated in the disused beer cellars.

The primary products produced on the farm are largely used and processed in the monastery's own operations. The entire fat stock is slaughtered and processed in the monastery butchers. The majority of the cereal is used in the Riedenburger brewery for the production of three types of beer, including the monastery's own beer. The monastery bakery uses baking cereals from its farm for its bakery products. Finally, the monastery kitchen is also a large consumer of the farming products, particularly table potatoes and vegetables from their nursery. The farming products are also available to buy in the monastery farm shop. All these factors underline their regional self-reliance.

They also have considerable regional independence in terms of forestry. This includes an area of approx. 60 hectares. The vast majority of the wood is used as timber in the various construction projects. The monastery's own joinery turns the wood into windows, doors, furniture, etc. The small wood is chopped and burnt in the monastery's woodchip heating system.

■ **Thomas Lehmann**

Valtra is known in Brazil especially for its large tractors that are widely used within the sugar industry, for example.

Valtra do Brasil 50 years

Valtra is the ***second most popular tractor brand*** in South America

The Valtra factory in Mogi das Cruzes, Brazil celebrated its 50th anniversary in January. Over the past half century Valtra has earned the loyalty of Brazilian farmers. Today, Valtra is the second most popular tractor brand in South America.

The Valtra story in Brazil began in the 1950s, when the Finnish company – then known as Valmet – began exporting tractors to Brazil. In 1959 and 1960, a total of 1250 Valmet 33D tractors were exported from Finland to Brazil.

Although exports to Brazil began promisingly, the country wanted to establish its own native tractor industry. The Brazilian Government thus invited tractor manufacturers to submit plans for opening new factories in Brazil. Valmet drew up its own plans in record time and won the bid. The company Valmet do Brasil was duly registered in January 1960 and a former textile plant was acquired in Mogi das Cruzes, approximately 70 kilometres from the centre of São Paulo in the direction of Rio de Janeiro. The first Valmet tractor to be manufactured in Brazil was unveiled on
14 December 1960, less than a year after the bidding competition was first announced.

The 1960s were turbulent years in Brazil. Inflation spiralled, and tractor prices had to be raised on a monthly basis. Following the military coup in 1964 the military government imposed strict price regulations, creating its own challenges for the tractor business. Three of the six tractor plants in Brazil were forced to discontinue operations, but Valmet survived.

The 1970s marked a period of growth for Valmet do Brasil. In 1973 the Linha 73 series was introduced, and the brand's traditional red colour was changed to yellow – which is still the most popular colour for Valtra tractors in Brazil. The assembly plant was expanded, and in 1977
Valmet do Brasil manufactured 15,000 tractors.

The 1980s began with the introduction of a new model series, the Linha 8, in July 1981. Valmet also introduced the first Brazilian four-wheel-drive tractor, the 118-4. This model established the basis for Valtra's current market leadership among large tractors in Brazil. In 1983 Valmet introduced the 138-4 Turbo, the first Brazilian turbocharged four-wheel-drive tractor model.

In 1992 Valmet do Brasil began using Sisu engines alongside MWM engines. This led to the introduction of engine assembly in Brazil two years later.

Brazilian agriculture was hit by a recession in the mid-1990s. Valmet do Brasil survived the crisis by implementing the same strategy as employed in Europe. The customer order system was introduced in Brazil in 1996". At the same time Valmet do Brasil also began offering colour options.

Three model series entered production in the 2000s: the light BL series, the medium-duty BM series and the heavy-duty BH series. A new tractor boom began in Brazil at the end of 2006. Valtra do Brasil benefitted the greatest from this upswing, as it traditionally commanded around 50 percent of the tractor market among sugar plantations. In 2007 the company introduced a line of harvesters that were manufactured in co-operation with the parent company AGCO in the Santa Rosa plant.

■ **Tommi Pitenius**

Valtra do Brasil's 50th anniversary was celebrated in January in Mogi das Cruzes.

EasyWheels robot sprays weeds in cornfields

Tractors equipped with the Auto-Guide steering assist system and U-Pilot headland management system can already work practically by themselves. Due to safety concerns, legal restrictions and other reasons, however, it is more likely that the automatic field robots of the future will be smaller in size than tractors. Furthermore, these small robots would not plough, plant or harvest, but instead handle such tasks as spraying individual weeds, pulling watering hoses and sowing individual plants that the agricultural machinery of today cannot do.

"The EasyWheels Field Robot took silver medal in an international field robot competition in the Netherlands in 2009. In the competition the robots had to move and manoeuvre independently in a cornfield. Green golf balls were scattered in the field to represent weeds. The field robots had to find the balls and spray them with herbicide," explains Timo Oksanen, a researcher at the Department of Automation and Systems Technology at Helsinki University of Technology who led the team.

EasyWheels is the result of a joint project by students from Helsinki University of Technology and the Department of Agrotechnology of the University of Helsinki. Each year the two universities organise a joint project course consisting of students of both engineering and agriculture. Some of the field robots that take part in competitions are the same from year to year, only improved. The Finnish teams, however, have built a completely new robot each year for learning purposes.

"Extra points are awarded in the competition for low cost. Altogether the parts for EasyWheels cost less than 2,000 euros," says Oksanen.

EasyWheels features four-wheel-steering, camera eye, infrared distance sensors and an ultrasonic sensor on all four corners – a bit like a parking sensor in a car. The robot processes all this information using a sensory fusion. By inspecting its environment in many different ways, the robot is able to move along rows of corns and find the green golf balls, even those that are partly covered by corn leaves, better than robots that rely on a single sensor.

"What is special about EasyWheels is that it can work just as well in either direction – just like Valtra tractors equipped with the TwinTrac reverse-drive system. The robot simply rotates its camera eye in the direction it wants to move. It also features a modular construction, so its front and rear axles and engine can be changed in just minutes," adds Oksanen.

■ **Tommi Pitenius**

EasyWheels Field Robot

- Joint project by students from Helsinki University of Technology and the University of Helsinki
- Awarded the silver medal at the international Field Robot Event in the Netherlands
- Able to manoeuvre independently through a field and identify and spray weeds
- Valtra was the main sponsor of the project

The Valtra-sponsored EasyWheels Field Robot took silver medal in an international competition in the Netherlands in 2009.

Giving Nature a Hand

Starting any business requires a certain amount of courage, but launching one that relies on a mixture of voluntary contributions and lottery and government funding is a bold move. But that is essentially what **Peter Frizzell** did some ten years ago. Today the company is expanding and, depending on the season, a significant employer.

Based at South Lopham, Norfolk, Peter studied for an Applied Biology degree and went on to gain an MSc in environmental studies at Imperial College after which he undertook short term contracts for English Nature, he also carried out some voluntary work which both provided experience and, importantly, a network of contacts.

"I also enjoyed the practical nature of his work, my scientific filling in the background knowledge to fully understand what was going on."

The next natural progression was some sub-contracting and before long experience, access to the right contacts and a reputation for a job well done gave Peter the confidence to tender for jobs in his own right; "I hired machinery and the system worked." He recalls.

The business expanded and in 2002 Peter invested in an articulated compact tractor.

TwinTrac is invaluable when clearing mature gorse and small trees.

Cut gorse dumps make homes for wildlife including adders and small mammals.

Flailed gorse is collected, the stumps sprayed allowing important natural heathers to regenerate.

Hedge cutting is also within Peter's range of operations.

Small enough for the work we were doing at the time, powerful enough to get the work done and, importantly, I could afford it!" The type of work was expanding; everything from grass and gorse cutting to allow wild flowers and heathers to develop, to excavating ponds to improve wetland habitats. Peter's team also undertook fencing of various types.

"Essentially anything that paid!" Volunteering had provided Peter with useful skills.

Moving around East Anglia Peter and his gang often found themselves working along side full time employees of various wild life trusts and conservation groups.

"Several operated Valmet or Valtra tractors that they'd purchased new or used – everyone spoke well of them and I needed a bigger tractor."

In 2005 Peter Frizzell purchased a used 6750 HiTech. At just over 100 hp this provided the power that Peter needed for the bigger jobs he was handling but, being a four cylinder was compact enough to operate in woodland.

"We were lucky to find a machine in good condition that was within our budget – we haven't been disappointed and it's worked hard."

With his business expanding, during the busy winter months Peter is joined by several sub contractors, there was a need for a second tractor.

"The 6750 had been a success so we looked at a second Valtra – a new one this time." Local Valtra dealer, J. Riley Beet Harvesters (UK) Limited of Attlebridge near Norwich came up with an attractive package for a four cylinder 150 hp N142 Versu with TwinTrac, a forestry cab and suspension package.

"We do a lot of road work between sites, comfort on the road is important – it's my brother Tim that does most of the driving. We also require the tractor to get in amongst trees so the roof windows and added protection round the roof are beneficial – no one wants a bent and scruffy tractor – not good for the image. TwinTrac is ideal for the heavier flail work we get called on to do – the driver can look down onto his work and avoid nasty obstructions before the flail or tractor hit it – anything from a rock to mattress! Also all the controls are located in the arm rest and stay in the same relative position when the seat swivels – everything remains the same and easy to operate."

Despite the overall financial situation Peter and Tim's business continues to expand although Peter is concerned about levels of future funding.

"We'll have to keep a sharp eye on developments to make sure we don't over reach our selves."

However, the team's willingness to tackle almost any job offered – stump grinding, footpath and bridge building, manufacture and installation of interpretation and information boards have all been added to their list of skills. Diversification has also helped even out work loads as some of the jobs can be undertaken during the spring and summer – bird nesting season – when work on most types of habitat is forbidden. Peter and Tim also have the advantage that they have invested wisely in the right sort of equipment.

■ **Roger Thomas**

Tim (seated) and Peter Frizell with Paul Sayer of J Riley and Valtra's Colin Gregory.

Over 33,000 hours of daily use

Valmet 6400 hard at work in veneer mill

The 1997 Valmet 6400 has worked over 33,000 hours at the Balti Spoon veneer mill in Kuusalu, Estonia. On the day we visited the temperature was minus 20 degrees centigrade, but the tractor was running as usual, carrying logs from the yard to the mill's production lines. The sides of the engine cover have faded in the sun faster than the decals on the cab, but both are still original.

At the Balti Spoon veneer mill in Kuusalu, Estonia, Production Manager Indrek Saar is so used to the Valmet 6400 that works in the yard that he pays no attention to it.

"For as long as I remember it has always worked there. The tractor is driven 8 to 16 hours every day, transporting logs from the yard to the production lines," Indrek Saar explains.

The Balti Spoon veneer mill belongs to the Möhring Group and is a major operation. It employs 450 people and processes an enormous amount of wood each day. Trucks arrive from across Northern and Eastern Europe and empty their loads in the yard, where the Valmet 6400 then sorts the logs and transports them to the start of the production lines. This is a critical phase in the operations of the entire mill. Several wheel loaders also work in the yard.

"Problems? Downtime? We haven't had any problems – at least nothing so major that I would remember," Saar admits.

The tractor was purchased from Valtra's Estonian importer and distributor Taure AS, which also services the machine. Taure's service records confirm Saar's recollection. Taure's service technicians have visited to carry out the necessary maintenance every 250 hours, almost on the clock. Neither the engine or the transmission has ever been opened. Several thousands of hours have passed without any special requirements other than scheduled maintenance. The few exceptions involve nothing more unusual than changing the alternator belt and repairing the water pump, for example. The biggest repairs involved changing the turbo at 18,506 hours and servicing the front axle at 21,940 and 30,920 hours.

A fast and versatile tractor

The tractor is ideally suited for the demanding and fast pace of work at the mill. It is fast, inexpensive and versatile compared to the specialised machinery. The Valmet 6400 is equipped with a Kronos forestry trailer fitted with a 4000-series loader and frog legs.

"When we purchased the tractor back in 1997 we of course considered other machinery options as well. The tractor proved to be the best choice for this work. We will continue using the Valmet as long as it remains reliable. When the time comes eventually to trade it in, we will start with a blank piece of paper," Saar says.

The 6400 has always been a popular model among drivers. In the 1990s the Valmet seemed like a luxury to the Estonian drivers who were used to Eastern European tractors. Today, after more than a decade, the ageing machine remains a favourite thanks to its reliability and ease of use. Although the tractor has its own driver in principle, many other employees drive the tractor during their shifts.

Jaan Bender picking up his new tractor in 1997. The Valmet 6400 was a luxury at the time compared to Eastern European tractors, and it remains popular thanks to its reliability and ease of use.

On the day of our interview the temperature is minus 20 degrees centigrade with a chilling wind on top. The tractor has spent the night outdoors, albeit with the comfort of an engine block heater. In the morning the tractor once again loads three-metre birch logs from the stacks left in the yard by the trucks into its trailer. It then transports its loads to metal racks by the walls of the mill, which are then lifted to the start of the mill's production processes.

■ **Tommi Pitenius**

Veneer for furniture manufacturers throughout world

Production Manager Indrek Saar says that the Valmet 6400 has worked extremely reliably every day for over a decade.

Balti Spoon manufactures primarily wooden veneer for furniture manufacturers. Its veneer is used, for example, for the surfaces of tables, shelves and cupboards, as well as for flooring, doors and even for ping pong rackets. Balti Spoon's products are delivered to furniture manufacturers throughout entire world.

"The thicknesses and the dimensions of our veneers vary according to customer needs. The veneer is manufactured both by peeling and by slicing. We use birch, beech, oak, ash and other tree species in our manufacturing processes," Saar describes.

Balti Spoon is part of the Möhring Group. The company also has a mill in North America, and it previously operated mills also in Germany and Brazil.

"The company was established in the early 1990s when Karl Heinz Möhring, the late founder of the Möhring Group, was looking for a location in the Baltics for a new mill. He had fought here in the Second World War and remembered the birch forests. The Balti Spoon mill was one of the first major industrial investments in this part of Estonia following re-establishment of independence," Saar remembers.

■ **Tommi Pitenius**

Valtra Support

Northallerton College Himalayan Expedition

Sunset on Everest.

Northallerton Youngsters with their leaders on Kala Patthar with Everest in the background.

It took eighteen months of hard work to raise the £45,000.00 required to get a group of Northallerton College youngsters and their leaders to Everest Base Camp and on up to the 5,545 meter summit of Kala Patthar. The trip included a flight from Kathmandu to Lukla in a small twin engined plane through – not over – the majestic peaks of the Himalayas. From Lukla its a matter of walking! But at these high altitudes that's not as easy as it sounds; it's a long, hard slog!

As part of the trip and before the assault on Base Camp and Kala Patthar the youngsters spent some time in the Sagarmatha National Park working with Khumjung Village Committee and local children on the Khumjung Village clean up campaign and, of course, no visit to this area would be complete without a visit to the Khumjung Monastery to see the so called Scalp of the Yeti!

Accommodation for the three week trip was in mountain lodges and, fitness apart, one of the most important aspects of this expedition was the correct kit. With their 16 year old son George part of the team Valtra dealer Brian Robinson approached Valtra for sponsorship. Valtra supplied the team, students and leaders, with high-tech Gore-Tex jackets embroidered with expedition logos and the team member's names.

Mark Broom, National Sales Manager of Valtra Tractors UK, said: "Having met team members, we've seen how determined they all were to raise the necessary funds. Ruggedness and hardworking tenacity are qualities we really value at Valtra and we've been impressed by the Northallerton College team's dedication. We've been delighted to support the expedition, are please they learned so much on the trip and returned safely."

■ **Roger Thomas**

Volvo BM Valmet 305 and 405

The Volvo BM Valmet 305-4/405-4 was an excellent general-use tractor. Depending on the tyre specifications, the tractor weighed 3,200-3,300 kilos. The transmission featured 8+4R fully synchronised gears, and a creeper gear was also available, making for 12+8R gears.

When Scantrac, the combined marketing company of Volvo BM and Valmet, began marketing the products of its parent companies outside of Finland in the early 1980s, the four-wheel-drive Valmet 604-4 model proved to be very popular. The 604-4 was the successor to the lightweight Valmet 502 and 602 models. Despite its popularity, a specific target of criticism was its 6+2R transmission, which was considered to be outdated.

The Valmet factory in Tourula, Jyväskylä, began developing a new 8+4R transmission immediately once the 05 Series models 505–905 had reached production. The new transmission was ideal. All gears were synchronised, and the helically cut gears ensured both durability and low noise. In addition, the transmission featured pressurised lubrication.

The gears for the transmission used for larger models were manufactured by Volvo BM, so when the Swedish partner took the strategic decision to discontinue the production of tractor parts, Valmet had to think of a new solution. The answer came from its sister factory in Brazil. At the time the Brazilian Government was providing export grants to domestic companies, so the new transmission presented a win-win situation for Valmet in Finland and Valmet do Brasil. The country's best suppliers, such as ZF, were used when preparing for production. The transmission was then successfully tested in Finland. Only one prejudice remained: could Brazilian quality be trusted? This scepticism proved to be unfounded. The quality of the new transmission exceeded all expectations.

The engine plant in Linnavuori modernised the 2.7-litre Valmet 310B engine, in part by adding a turbocharger, thus creating the TD 27 model. Two power outputs were offered: 53 horsepower for the Volvo BM Valmet 305 model and 61 horsepower for the Volvo BM Valmet 405 model. The centre frame was made out of steel and served as the fuel tank. It was also given the same shape as on larger models, thus protecting the four-wheel-drive mechanism's Cardan axle. ZF was chosen for the driven axle, achieving a slewing angle of 50 degrees. This made the tractor extremely agile.

The cab was based for the most part on the previous 604 model. A brand-new rounded cab with frameless glass doors was developed at the same time, but the company's sales organisation considered these "helicopter cabs" to be too advanced – which was a mistake. The hydraulics were also based on previous models.

The new models were launched in June 1985 in Suolahti. The reception was very positive. The products were presented under the Volvo BM Valmet brand, as Volvo BM continued to supply certain parts for the rear axle, for example. The 305 and 405 would be the last models with the twin designation, as the following year the name of all models was simplified to Valmet.

These models have an extremely good reputation and are highly valued to this day. Salesmen say that whenever these models are traded in, they can find a buyer for them immediately.

■ **Hannu Niskanen**

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