

# VALTRA

Individually Yours

## Valtra T Series

HiTech / Versu / Direct

141–225 hp





# Valtra T Series

141 – 225 hp / HiTech – Versu – Direct

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# Individually Yours

## **UNIQUE CUSTOMER ORDER SYSTEM**

Each Valtra tractor is tailor made according to the individual needs of the customer. To help customers choose the exact equipment and specifications that they require for their tasks, dealers use the Valtra à la Carte tool. The selection covers over half a million possible combinations and special Valtra features, for every preference and every possible field of work. In this way customers pay only for what they really need while helping to save the environment too. The à la Carte customer order system is an efficient and ecologically sustainable way of tailoring tractors today and for the future.

Valtra offers unique features only available on Valtra tractors, these features are designed to improve your productivity and comfort:

- › TwinTrac – reverse drive system
- › AutoComfort – cab suspension
- › SVC Cab – side visibility cab
- › Aires – front axle suspension
- › HiTrol – turbine clutch
- › ForestCab – for improved visibility and safety in forest work
- › ForestTank – integrated steel tank for extra protection
- › Valtra LH Link – pivoting front linkage
- › U-Pilot – headland management system
- › AutoTraction – drive only with accelerator and brake pedals

## **INDIVIDUALITY**

Valtra tractors are designed, manufactured and sold as individual solutions for the customer. We work together closely with the customer and nurture a close partnership with customers, partners and colleagues on all levels of the organisation.

## **RELIABILITY**

Our products are designed for demanding conditions and built to last from one generation to the next. Valtra employees are professionally skilled and work reliably from the factory floor to customer contacts. We are flexible and our promises are realistic.

## **FUNCTIONALITY**

Thanks to our Scandinavian heritage, our products are designed to be attractively unpretentious. They offer exceptional levels of practicality, ergonomics, safety and comfort. Similarly, dealing with our organisation is straightforward and easy.



Made in Finland

6





# Made in Finland

*The first Valmet 15 tractors were manufactured in 1951. In 1960 Valmet established a tractor plant in Mogi das Cruzes, Brazil. In 1979 Valmet acquired the tractor operations of Swedish company Volvo BM. Together with its own predecessors Bolinder and Munktell, Volvo BM had deep roots in the industrial history of Sweden.*

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

In the past five years Valtra has invested over 50 million euros in product development projects. As a result, Valtra's model line-up has in practice been completely renewed.

The Suolahti factory has been modernised in recent years with investments worth tens of millions of euros. AGCO is also investing in its ERP and IT systems, as well as work methods.

These major investments will be manifested for farmers and contractors in the coming years in improved service and the possibility to specify even more precisely the tractors they need for their own work. Valtra has manufactured tractors solely on the basis of individual customer orders for over 20 years, and the new investments will further increase Valtra's lead over its competitors.

## **VALTRA PHILOSOPHY**

Tractors in the Nordic countries have traditionally been used to perform a wide range of tasks. Customers have demanded the performance required to handle all jobs on the farm – including forestry work. Valtra tractors have been designed to fulfil these requirements. The basic design of Valtra tractors combined with AGCO POWER engines are made for these tough northern

conditions, where absolute reliability is essential. True to the Nordic tradition, Valtra tractors are compatible with a wide range of forest tasks without additional customisation. The need to make changes to your tractor is further reduced by our unique customer order system, which allows you to tailor your new tractor to your own individual requirements without having to pay for features that you will not use.

If you visit Suolahti to see your own tractor being built, you will find the Valtra factory in the middle of the forest. This is where all Valtra tractors destined for European markets are manufactured, including the A, N and T Series.

## **THE FACTORY AREA INCLUDES**

1. The AGCO spare parts centre
2. The transmission plant
3. The engineering centre
4. The tractor assembly plant and
5. Customer reception centre

Over 10,000 tractors a year are built here, and over 80% of production is exported.

Valtra's tractor plant is an ISO 9001 certified factory.

# Six-cylinder power

## Performance and productivity

The T Series continues the long tradition of powerful 6-cylinder tractors from Scandinavia. The updated range now includes 12 models ranging from 141-225 horsepower. The T Series offers the right alternative for customers looking for a lot of power for both traditional farming tasks, as well as municipal and forest applications. The T Series is recognised around the world as a heavy-duty machine that nevertheless offers the highest levels of comfort for long hours of efficient work.

The new T Series now offers even more power with even lower fuel consumption. This small miracle is made possible by SCR technology,

which cleans exhaust emissions while optimising engine performance. The T Series still offers a flat floor in the cab and the possibility to work in both directions, making it ideal for forest tasks and other applications. HiTech models also retain Valtra's unique fuel tank integrated in the frame.

The Valtra T Series is recognised as an excellent pulling tractor thanks to its even weight distribution. Pulling power and driving comfort are further improved with the T Series unique front axle suspension. The system works with different loads (for example, when working with a front loader) and in all climate conditions.

MODEL	ENGINE	TRANSMISSION AND ENGINE MAX POWER (WITH BOOST)		
		HiTech	Versu	Direct
Valtra T133	66 AWI-4V	141 (152)	•	•
Valtra T153	66 AWI-4V	155 (170)	155 (170)	155 (170)
Valtra T163e	74 AWI-4V	•	170 (185)	170 (185)
Valtra T173	74 AWI-4V	180 (190)	•	•
Valtra T183	74 AWI-4V	•	188 (201)	188 (201)
Valtra T193	74 AWI-4V	190 (210)	•	•
Valtra T203	74 AWI-4V	•	•	204 (215)
Valtra T213	74 AWI-4V	•	215 (225)	•





# Optimised agility

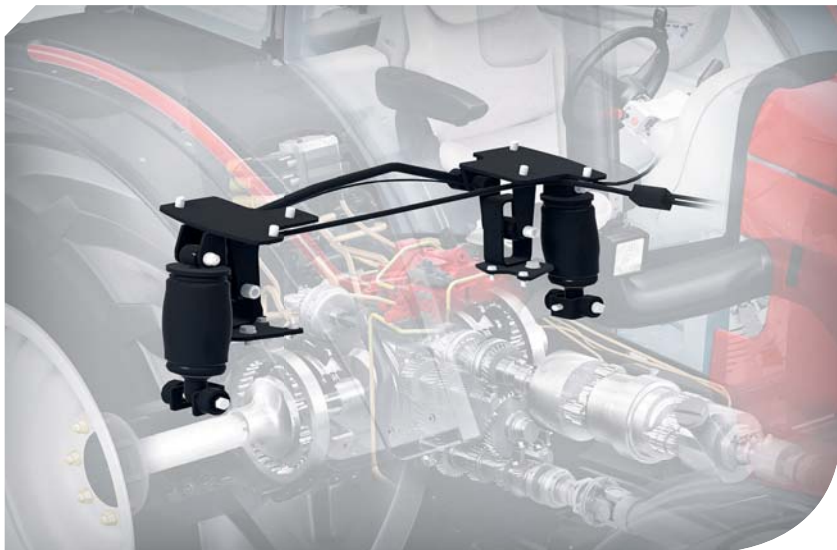
A flat underside and high ground clearance are traditional features of Valtra tractors.

These features not only help the tractor cope well in forestry, but also means that when planting potatoes and other crops which need good ground clearance, the tractor does not have to be specially modified. When in deep mud ruts, the high ground clearance and flat underside means tough conditions can be negotiated easier.

Weight distribution is also a key feature of Valtra tractors. With an even weight distribution, maximum grip is transferred to the ground, without additional weight needing to be added.

## **AUTOCOMFORT**

In addition to mechanical cab suspension, the T Series is available with AutoComfort air suspension which always comes together with Aires front axle air suspension. AutoComfort is a semi-active system that can react to information from sensors and anticipate changes. This prevents the cab from rocking when breaking or changing gear. The system can also be adjusted individually according to personal preferences



55 %

|

45 %

# AGCO POWER engines

## Strongest six cylinder

*The new 6-cylinder AGCO POWER 66AWI or 74WI Common Rail engine is the heart of the T Series. These engines feature SisuTronic EEM4 electronic engine management that can adjust the fuel injection up to five times per combustion.*

*The engine offers tried, tested and reliable technology that performs efficiently in all conditions. The strong design of AGCO POWER engines has proven its excellence over the years.*

### **ELECTRONIC ENGINE CONTROL ENABLES VERSATILE CRUISE CONTROLS**

A viscous fan and common rail fuel injection make the engine quiet while still providing excellent power and torque for all tasks. The engine complies with Stage 3B emission requirements. High torque means lot of power at low revs, which improves fuel economy and towing power while reducing noise levels.

Clean air into the engine = cleans exhaust emissions and lower fuel consumption. The engine's radiator and Intercooler are now positioned next to each other. The transmission cooler and air-conditioning condenser are now hinged to make them easier to clean. A high-level air intake is standard on all T-series models.





# SCR technology

Valtra were the first manufacturer to introduce an SCR system on agricultural tractors, and this system is now in its third generation. It is proven technology and can also be seen in use in the haulage industry.

Valtra's SCR system is an extremely efficient after-treatment system. A urea and water solution is combined with exhaust gasses externally to the engine. It is not mixed with the fuel, and the solution is held in an additional, separate tank.

By eliminating harmful nitrogen oxide emissions, the combustion in the engine can be made more efficient with four-valve technology and higher injection pressures. The entire injection system is new.

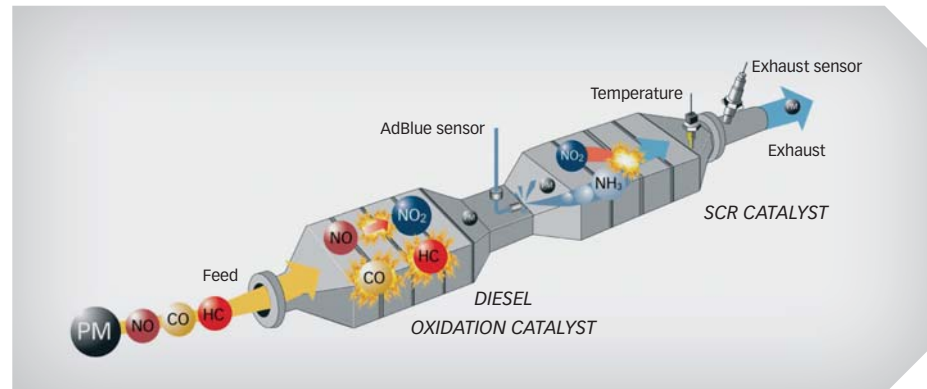
Efficient combustion also means improved fuel consumption – by up to 10% compared with previous engines.

The SCR technology employed by Valtra utilises a combination of a diesel oxidation catalyst (DOC) and selective catalytic reduction (SCR).

The careful positioning of components and their optimal size (a combination of two different types of catalytic converter) allows the size of the tractor to be kept compact.

SCR engines use only clean air, which helps prolong engine life. In addition, the use of AdBlue pays for itself through improved fuel efficiency. The SCR system is virtually maintenance free and does not require the maintenance or replacement of a Diesel Particulate Filter.

## AGCO POWER SCR PRINCIPAL



# Transmissions

HiTech / Versu / Direct





## Transmission: HiTech (Three-Step Powershift)

Driving directions can be switched using the shuttle lever without having to use the clutch. The transition is always smooth and fast, regardless of the load. The shuttle lever also controls the handbrake.

### HITECH

- › Hydraulic forward/reverse Valtra power shuttle for smooth, controlled direction changes.
- › Unique Autotraction (N-auto)
- › Three-step powershift
- › Powershift button control or automatic (Auto 1 or Auto 2)
- › 36 speeds in forward and reverse
- › EcoSpeed models --> 40 km/h at less than 1800 rpm
- › Cruise control (optional)

### 1. CRUISE CONTROL

Cruise control allows the driver to set the desired driving speed or engine speed. The preset speed is maintained automatically regardless of changes in load. When turning at the headland or stopping work, the speed can be temporarily be returned to idle or another preset speed at the push of a button. The working speed is then resumed by pushing the button again. Cruise control makes daily work simpler and faster. The quality and productivity of work are also improved.

### 2. AUTO 1 AND AUTO 2 POWERSHIFT

The benefits of the Powershift transmission are highlighted in work that requires a lot of shifting. The Powershift transmission can be operated either by push buttons or by using one of two automatic programmes. The Auto 1 and Auto 2 programmes change gear automatically when the engine speed goes above or falls below the preset rpm.

In automatic, the Speed Matching system immediately finds the ideal powershift gear to match the speed when changing between ranges. The kick-down feature shifts to a lower gear temporarily in response to sudden inputs with the accelerator pedal. In addition, the automatic shifting also works when slowing down to assist braking.

### 3. AUTOTRACTION

Auto-N – also a unique Valtra feature – automates much of the driver's routine work in tasks that require repeated stopping and starting, such as when baling and in forestry work. AutoTraction automatically disengages the drive when the engine speed is under 1100 rpm or when the brakes are used at a speed of less than 10 km/h. The drive automatically re-engages when the brakes are released, the accelerator pedal is used, or raising the engine speed to above 1100 rpm. AutoTraction makes it easy to operate the tractor using only the accelerator and brake pedals.



# Transmission: Versu (Five-Step Powershift)

AUTOMATIC FUNCTIONS	DESCRIPTION
Automatic shifting - Mode 1	Factory set gear changes for general driving situations
Automatic shifting - Mode 2	User defined gear changes for specific tasks
Automatic Shifting - C/D Ranges	Automatic changes between C and D ranges to reduce requirement on operator
Shuttle Pre-Programming	Allows a different forward/reverse gear to be programmed so that this is automatically selected when the shuttle is operated
Engine Speed Cruise Control 1 & 2	Engine revs are electronically adjusted to maintain a set rpm
Drive Speed Cruise Control	Pre-programmable target speeds
AutoTraction	Allows clutch-less start and stop for repetitive tasks, such as round bailing
4WD Shuttling Automatics	Automatic engagement of 4WD for a set time when setting off
Diff Lock Automatics	Automatic engagement of 4WD when required
Flexible Idle Speed 1200 > 650 rpm	Lower engine speed when shuttle in P position to save fuel. Increased idle speed if needed for catalyst cooling

## VERSU – EFFICIENT FIVE-STEP POWERSHIFT, LS HYRAULICS

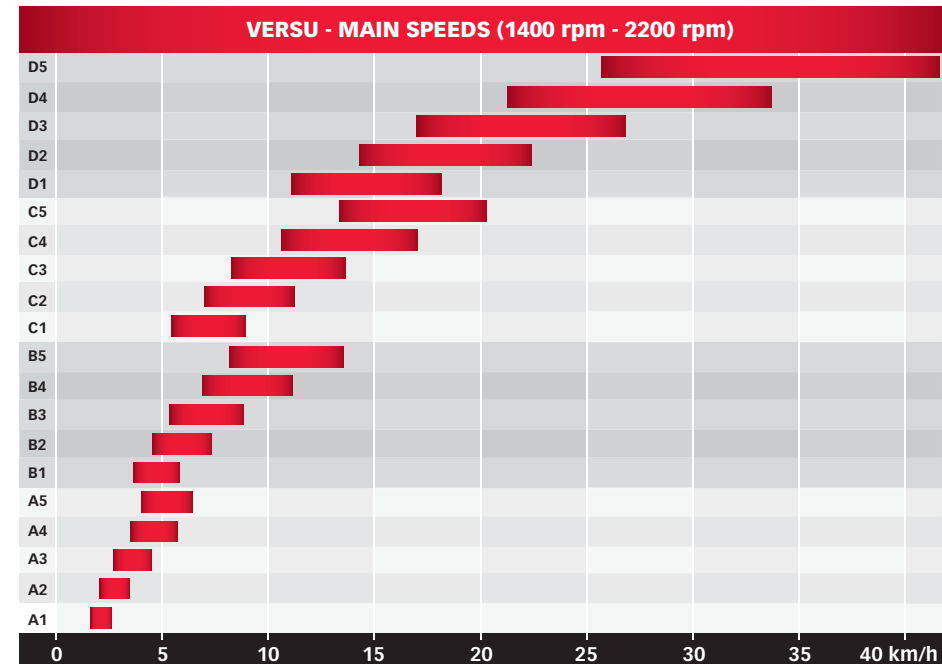
- › Hydraulic forward-reverse shuttle, programmable
- › AutoTraction
- › Automatic powershifts (Auto 1 and Auto 2)
- › 30 forward and 30 reverse gears
- › Valtra Arm driver's armrest
- › U-Pilot Headland Management System
- › Cruise control with two memory settings for both driving speed and engine speed – activated either manually or by U-Pilot
- › Armrest also used to electronically control

the powerful LS hydraulics

- › Separate oils for transmission and hydraulics
- › Front linkage and work hydraulics can also be automated using U-Pilot

## UNIQUE ERGONOMIC VALTRA ARMREST

- › Grab rail for stability and extra grip in rough terrain
- › Armrest can be raised when rotating the seat
- › Enhanced stability grip when using controls for hand throttle, hydraulics and power lift
- › Controls for powershift, U-Pilot, cruise control, hydraulics, and power lift ideally located.



# Transmission: Direct (CVT)

Valtra Direct offers new levels of user-friendliness for the most demanding tasks. The stepless transmission on Direct models has been designed and manufactured from start to finish by Valtra with respect for Valtra's values and the individuality appreciated by our customers in a way that only Valtra knows how. The stepless transmission on all Direct models has been designed to work faultlessly in the most demanding of work and weather conditions.

Unlike other CVT transmissions, Valtra have designed and manufactured, in house, a four range CVT transmission. The benefits of this allow the user to set the transmission to efficiently transfer the maximum amount of torque and power for the job in hand, in turn increasing performance, reducing fuel consumption, and increasing the lifetime of an already proven, reliable transmission. With four ranges, the operator can find the optimum range for individual tasks and for changing conditions.

### 1. TRANSMISSION DROOP SETTING

The transmission droop setting determines how sensitive the transmission system is to changes in engine load.

Turning the potentiometer anti-clockwise gives priority to the engine rpm. When the machine is working under load, the transmission ratio will automatically adjust to maintain engine rpm. In practical terms, this setting maintains power delivery. If the potentiometer is turned clockwise, then priority is given to the transmission ratio. The engine will automatically reduce rpm, whilst still maintaining the most economical transmission

ratio. In practical terms, this increases fuel economy. The transmission droop settings allows the driver to choose between power and economy. Leave the potentiometer in the middle position, and the tractor will function with a normal mix of power and fuel economy.

### 2. SPEED BALANCE, FORWARD/REVERSE

When the potentiometer is in the middle position, the speeds in both forward and reverse are equal (100%). Turning the potentiometer clockwise reduces the driving speed in reverse by 10 to 90 percent, and turning anticlockwise reduces the driving speed forwards accordingly. This function can be used when extremely slow speeds are required (down to 0,01 km/h) or when manoeuvring at headlands.

### 3. ENGINE BRAKING CONTROL

Switch between three positions: low, normal and high. The high setting is recommended for slippery conditions, for example on snow or ice.

### 4. TRANSMISSION MODE SELECTION

Automatic mode is the default. Manual mode is engaged via the terminal.





Four work areas: A, B, C and D.

Two operating modes: automatic and manual

**WORK AREA A**

0-9 KM/H

Extremely high pulling power for small and precise speeds. Direct models are also available with ground speed PTO, offering optimal pulling power with trailers.

**WORK AREA B**

0-18 KM/H

Universal range for heavy pulling tasks, such as heavy tillage, harvesting and transporting in the forest.

**WORK AREA C**

0-27 KM/H

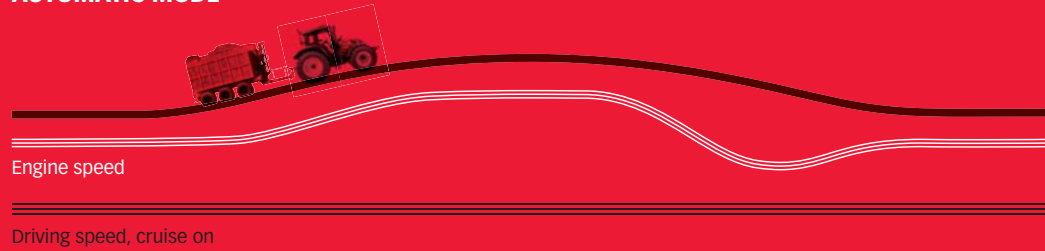
Ideal range for transporting on fields or in demanding conditions. Suitable also for a wide range of field tasks that require power.

**WORK AREA D: ROAD TRANSPORT**

0-50 KM/H

For general transport use when high pulling power is not required. Suitable for transporting and high speeds.

**AUTOMATIC MODE**



Automatic mode is optimal for most operations in the field and on the road. Automatic mode uses the highest possible transmission ratio to optimise fuel use.

**MANUAL MODE**



Manual mode can be selected in A and B work ranges. The transmission ratio is controlled solely by driver using the CVT lever. Suitable especially for harvesting tasks that require specific speeds for different conditions and crops.





# Hydraulics

## HiTech

HiTech models have an open centre hydraulic system. The transmission and hydraulics share the same oil. The system is protected with pressure and return filters. The pump output is 73 or 90 l /2200 rpm. Maximum output is 20 or 25 kW, and the maximum pressure is 196 bar. The maximum oil amount for external use is 30 litres or 40 litres with additional fill for the transmission.

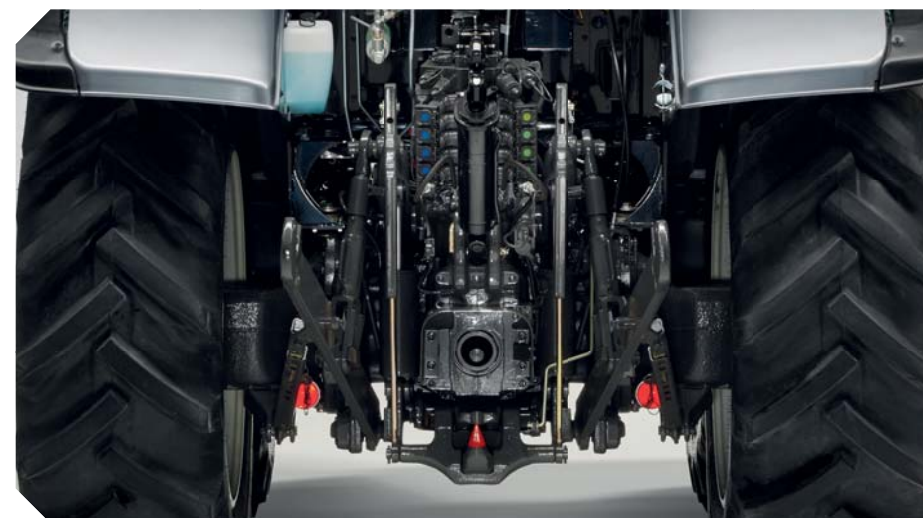
HiTech models come standard with two adjustable hydraulic valves (single or double operation). The first valve can be locked for continuous pumping, while the second valve has a floating position. All valves are controlled directly by lever without joints or transmissions.

Two additional valves at the rear and a flow control for the first valve (standard on 90 l/min versions) are available as an option.

### FRONT LIFT OPTIONS

- › Lifting force of the front linkage either 35 kN or 50 kN
- › Control with the rear hydraulics on basic models
- › Joystick control with optional front valves
- › Versu and Direct models available with two pairs of quick couplings
- › Optional 1000 rpm PTO

In addition, two electronically controlled valves can be specified. These valves are controlled using the joystick on the driver's armrest and can also be used to operate the front loader.



# Hydraulics

## Versu and Direct

### LOAD SENSING HYDRAULICS ON VERSU AND DIRECT MODELS

- › The pump is an axial piston type with a maximum output of 115 l/min. A 160 l/min high output pump is available as an option.
- › The variable displacement pump is below the surface of the oil, eliminating the need for a separate feed pump.

Up to 10 auxiliary hydraulic valves are available: five at the rear, three fully-adjustable valves at the front, and two fixed flow valves at the rear. A Power Beyond implement coupling can also be specified as an option.

All T Series models can be optionally specified to come with an electronic Autocontrol rear linkage with an exceptionally wide lifting area. Drive Balance Control is standard on all T Series models.

The front linkage on Versu and Direct models includes traction control (optional on HiTech models).

The lifting power on all models is 85 kN with the exception of the T133H model which has a lifting power of 81 kN. These three point couplings are of the HD type, again with the exception of the T133H model.

The T Series is specified with the appropriate towing equipment for each market. Instead of a standard pick-up hitch, a hydraulic push back hitch is available, making it exceptionally easy to attach a trailer.

All hitches can also be equipped with a K80 ball hitch that allows secure trailer attachment. This both increases driving comfort and decreases wear.





#### **VERSU AND DIRECT: SEPARATE OILS**

- › The transmission and hydraulics have separate oils, extending the reliability and longevity of both systems by keeping possible impurities from implements apart.
- › Separate oils are a rare solution in CVT transmission and almost unique in Powershift transmissions.
- › Heat exchange between the oils, helping to maintain a steady temperature.
- › Up to 40 litres of the hydraulic oil can be used externally when the tank is filled with 58 litres of oil (47 litres with 65 litres in the tank).
- › All programmable valves are controlled electronically via a CAN Bus. Each valve can be preprogrammed from the driver's armrest.
- › All valves have 4 positions (including a floating position).
- › Flow control for each valve block for up to 80 l/min.
- › Set the operating time from 1 to 60 seconds, or select continuous flow.
- › Valves can also operate with single actions without separate settings.
- › Standard fixed flow valve controls lower quick couplings (flow 7-8 l/min) using switches.

- › Optional fixed flow valve connects directly to application (such as for forwards-backwards motion of hydraulic hitch).
- › Power Beyond implement couplings can also be specified for maximum output at the rear.

#### **CONTROL THE HYDRAULICS FROM THE VALTRA ARM DRIVER'S ARMREST ON VERSU AND DIRECT MODELS**

- › Main functions of the load-sensing hydraulics are controlled from the driver's armrest.
- › The integrated tractor terminal is used to enter the settings for the hydraulic valves, transmission and U-pilot.
- › Three factory presets for the hydraulics, making them easy to begin using.
- › Factory presets: 1) 10 % flow + floating positions (for attaching implements), 2) 50% flow and 3) 100% flow.
- › M1, M2 and M3 memory places for individual settings.
- › The new U-Pilot system can also be used to store settings for up to 30 implements.



# Valtra Cab

## HiTech

Valtra cabs are built specifically to be spacious, ergonomic and safe for the driver. The cab on the T Series is by far the most spacious in its size class, yet it still offers excellent visibility through its tinted windows. Large doors make it easy to climb in and out of the cab. Designed for versatile use, the cab also features a flat floor. Three sturdy steps lead up to the cab, and the fuel tank has been designed to keep mud off the steps.

The doors are large and open wide with the aid of gas cylinders. The door handles are easy to grab. The doors have metal frames and greased hinges.

**The pillar screen in the cab displays the gears, driving speed and automatics. An approved passenger's seat with seat belt is available as an option (except on TwinTrac models).**

**The cab is large enough to allow the standard 180-degree rotating seat to swivel**

**easily. Excellent visibility is ensured by 5.7 square metres of glass. The reverse-drive system is available as an option.**

Valtra's continuous work on lowering noise levels in the cab has paid dividends. The engine, transmission, hydraulics, chassis, cab suspension, insulation materials and other details have all been honed to create a truly quiet environment of less than 70 dBa.

In HiTech cabs the transmission and hydraulics are operated with a traditional lever. The optional driver's armrest has been designed for controlling front loaders.

With cab suspension, the front attachments of the cab work like flexible hinges, while the rear can move up to 100mm in relation to the rear axle. The suspension elements are coil springs, while a panhard rod prevents any lateral movement of the cab.





## Versu / Direct

### **IN VERSU AND DIRECT MODELS, THE TRANSMISSION AND HYDRAULICS ARE CONTROLLED FROM THE VALTRA ARM DRIVER'S ARMREST**

The driver's armrest is used to control the main functions of the tractor. The integrated tractor terminal is used for entering settings for the hydraulic valves, transmission and U-Pilot.

The Valtra instrument panel is stylish and easy to read. There are analogue dials for fuel level, engine temperature and engine speed (rpm). The Proline dashboard that comes as standard on Versu and Direct models also features an analogue speedometer on the right hand side. The large screen in the middle can display a wide

range of optional information, as well as operating hours and a clock at all times.

There are two heating units, one in the ceiling and the other beneath the instrument panel, guaranteeing a comfortable temperature in even the coldest conditions. The lower heating unit has two speeds, while the ceiling unit has four. The ceiling unit has vents in six directions, covering all the windows. The air-conditioning unit is also in the ceiling, and its components have been further improved to provide optimal working conditions. In addition to standard air-conditioning, automatic climate control is available as an option.



# Valtra ARM

## Versu and Direct controls

The controls on the Valtra ARM driver's armrest are customised for each model series, but the basic functions are the same, making it easy for drivers to switch between Valtra tractors. The armrest also has a sturdy grab handle that offers excellent support for making precision adjustments of the hydraulics. It also provides additional support on rough terrain and makes it easy to lift the armrest.

The red lever in front of the grab handle is used on Versu models as a hand throttle and on Direct models as a CVT lever to quickly limit speed in tight places. It can also be used to adjust the transmission's ratios when driving in manual mode.

### Excellent screen clarity

- › Day and night settings with different colours

### Editing is now even easier

- › Use the pulse wheel

### Versatility that doesn't go to waste

- › Three memory locations for individual transmission settings
- › Factory settings can also be restored easily

### Uninterrupted productivity

- › Cruise control settings are retained even after restarting the engine

### Trip computers for accurate task information

- › Allows productivity and efficiency to be easily monitored

### Hydraulic pressure release

- › Quickly selectable float position to facilitate coupling/uncoupling of hydraulic pipes

### More information at a glance

- › Cruise settings displayed together with the drive settings

### New and improved U-Pilot

- › Only the name remains the same (see page 27)







## VALTRA ARM DRIVER'S ARMREST AND MAIN CONTROLS

1. Display terminal
2. Hydraulics F/R
3. Hydraulic flow presets/ operators own settings
4. 3rd and 4th service valves for implement operation when fitted with a loader.
5. Joystick for controlling either front or rear valves (or a mix of both), front loader or front linkage.
6. Hydraulics on/off
7. Buttons for menu operations, hydraulics & transmission
8. U-Pilot play/pause
9. Cruise speed + / range or gear change +
10. Cruise speed - / range or gear change -
11. Cruise speed preset
12. U-Pilot stop
13. Cruise off
14. Cruise speed preset 2
15. Rear linkage transport/ stop/working
16. Float / fast soil engagement
17. Rear linkage depth control
18. CVT lever
19. PTO engagement
20. Additional hydraulic services
21. Hand rail
22. FWD engagement





# U-Pilot

Much more  
than a headland turning system

A totally new U-Pilot is a standard feature in Versu and Direct models. With the new U-Pilot you are not only able to automate cyclic functions but also to set and save hydraulic settings for different implements or operators. By using U-Pilot the operator can concentrate on the implement and its operations instead of controlling the functions.

Also changing implements is much faster and easier when you have all the settings stored in U-Pilot. Just connect the implement and choose the right hydraulic settings and function sequences from the U-Pilot memory. Easy and productive.

Sequences can be recorded in the field or built manually when the tractor is stationary. Furthermore, sequences can be edited or changed allowing the user to tailor or edit a sequence to exactly how they want it.

## NEW U-PILOT

- › Two Play buttons in the armrest – one for going into work and the other for coming out of work
- › Hydraulics can be controlled with U-Pilot
- › Hydraulic settings stored for each implement
- › Up to 30 implements can be stored
- › Editor function

## U-PILOT EDITOR

- › Edit hydraulic settings
- › Edit transmission settings
- › Editing mode activates automatically when U-Pilot turned on
- › Trip computer settings

# Auto-Guide

## **AUTO-GUIDE, TELEMETRY AND ISOBUS**

The third generation T Series is an excellent range for versatile use that meets customer requirements in whichever segment he or she is working. T Series models (with the exception of the T133) can be factory fitted with Auto-Guide readiness or full automatic steering.

## **BENEFITS OF THE AUTO-GUIDE TO YOU**

- › Saves the environment by streamlining use of fertilisers and pesticides
  - › Permits accurate operation in darkness, fog and dust
  - › Allows driver to focus on using the implement
  - › Reduces driver fatigue
  - › Speeds up work
  - › Eliminates the need for a row marker system
  - › Reduces soil compaction by standardising same driving lines
  - › Allows data to be stored for precision farming and traceability
- › Reduces overlap and underlap
  - › Saves fuel and time
  - › Reduces use of seeds, fertilisers and pesticides
  - › Reduces weed growth by improving herbicide application





# AgCommand

Your complete fleet management solution

**AGCOMMAND**

All T Series models can be fitted with AgCommand telemetry system. It records the movements and work performed to a central internet based server. From the server it is possible to view the tractor and its functions (from the tractor can-bus), as well as it's in-field performance. Viewing is possible at all times and performance data can be easily found by selecting the appropriate date parameters.

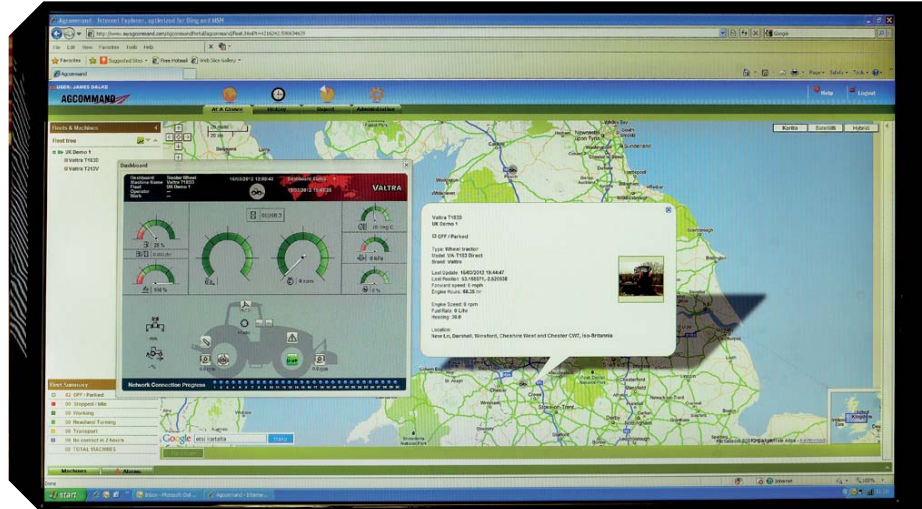
Fleet owners and contractors can easily monitor their machinery via AgCommand - both in near real time and from historic records. The precision is good enough even to record work done in separate areas of the field.

AgCommand can be accessed by the machine's owner from any computer with internet access. The tractor data is transmitted from the tractor to a server via a GSM-network.

Service schedules can also be set to alert the owner when a machine is due to be serviced. This can also be monitored by your local dealer to reduce downtime.

**CUSTOMERS APPRECIATE THE MANY BENEFITS OF AGCOMMAND:**

- › Near real-time access to important machine data
- › Increased machine and operator productivity
- › Availability of important vehicle health information to help insure maximum uptime
- › E-mail or text message alarms in case of abnormal machine activity
- › Easy scheduling and management of vehicle maintenance
- › Fully automatic data recording and transfer



# TwinTrac reverse drive

Work in both directions - increased productivity with reduced operator fatigue

Valtra are the only manufacturer to offer a reverse drive system on tractors from 111hp to 370hp. The whole system is designed and built by Valtra. TwinTrac is not just a piece of optional equipment but a complete tractor that has been designed to work in both directions. The system includes twin controls in the rear of the cab, including an extra steering wheel and forward-reverse shuttle, plus accelerator, clutch and brake pedals. In Versu and Direct models, the Valtra ARM driver's armrest brings all the controls to the rear of the cab.

When working in reverse, visibility of the implement and working area is excellent. Many implements also work better in front of the tractor and especially the tractor's wheels. The large cab provides an ideal working environment when working in reverse.

TwinTrac enhances versatility while taking nothing away from the tractor's other excellent properties.

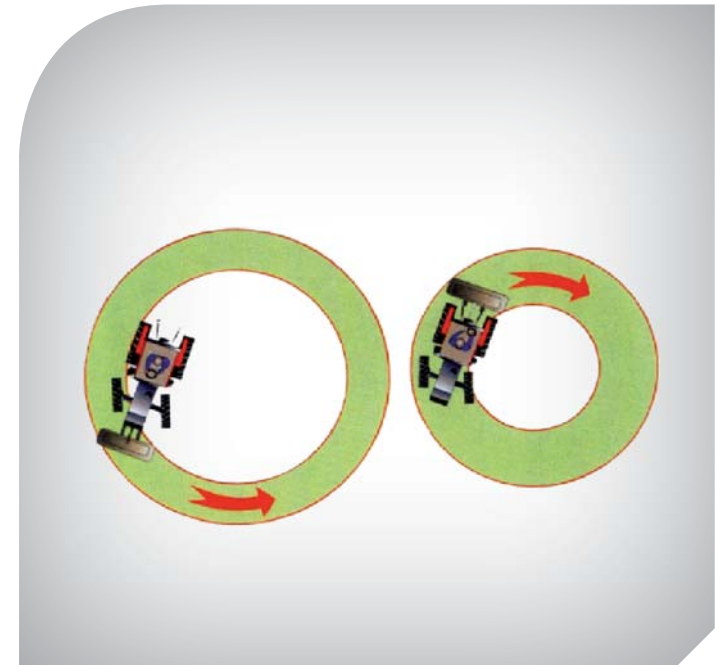
Note that the rear of the tractor also has all hydraulic operations, powerful linkage with position control and a multispeed PTO.

## TWINTRAC - THE MOWING MACHINE

Statistics prove the efficiency of working in reverse. Accordingly, working with a TwinTrac combination improves productivity by 10 to 30 percent compared with working in the forward direction using a butterfly combination. The more irregular the shape of the land, and the more headland turns that are required, the greater is the advantage of working in reverse. The amount of stress on the driver is also reduced, as visibility of the implement is excellent and there is no need to look over one's shoulder. Fuel consumption also improves correspondingly with the gains in efficiency. If a satellite-based auto steer system can be used, using a standard butterfly unit is also very efficient.

## TWINTRAC REVERSE DRIVE CAN ALSO BE USED FOR OTHER APPLICATIONS, SUCH AS:

- › Mulching
- › Stump grinding
- › Fencing
- › Hedge Cutting
- › Flail mowing/topping
- › Loading/unloading forestry forwarders





KESLA C945T

KESLA 700T

25m

JUNKKARI

TwinTrac reverse drive





# T163e EcoPower



Save money and fuel with the new EcoPower switch.

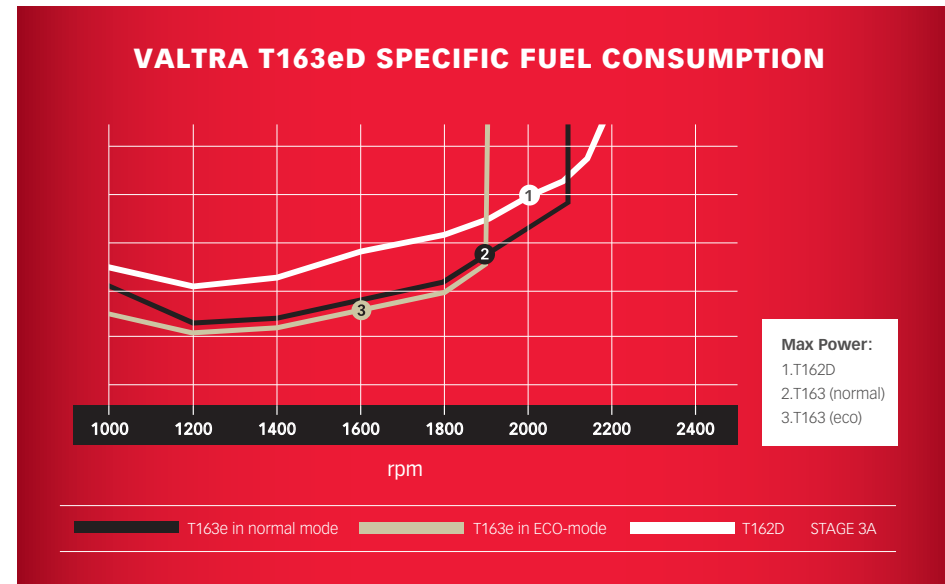
**UNCOMPROMISED FUEL SAVINGS WITH THE NEW ECOPOWER MODELS: NOW AVAILABLE FOR THE FIRST TIME ON DIRECT MODELS.**

## T163E DIRECT

- › ECO / Normal mode
- › Nominal engine speed at 1800 rpm, maximum output at 1700 rpm
- › Fuel savings up to 10% – over and above that of the new SCR engine
- › ECO mode selected by a switch, lowering the engine speed – and costs!
- › In Normal mode nominal engine speed at 2100 rpm, maximum output at 1900 rpm
- › Valtra EcoPower now available with a CVT transmission

## T163E VERSU

- › ECO / Normal -modes
- › Nominal engine speed at 1800 rpm, maximum output at 1700 rpm
- › Fuel savings as with Direct model
- › Tried and tested EcoPower solution now with full use of the PTO:
  - New 540E + 1000E PTO
  - 540 rpm: 1594 engine rpm
  - 1000 rpm: 1750 engine rpm



# Forestry

## Where Valtra was born

*Valtra is not only strong in the field; the tractors were born in the forest and as a result, we offer the most comprehensive line-up of forestry options available. With the option of a forestry cab, featuring a protective cage around the roof and roof windows at the back of the cab, visibility, productivity and operator safety are greatly increased over that of competitor products.*

### **FOREST CAB**

All Valtra cabs are FOPS & ROPS approved. The polycarbonate windows on forestry cabs are also OPS approved for lateral shocks. When specified

for forestry use, Valtra tractors are also available with factory-fit forest tyres. At Valtra, we are also able to provide factory fit forestry guards and winches.





# Valtra service and training

*The Valtra Training Centre at the Suolahti factory in Finland is responsible for the training of our international servicing and spare parts personnel. Centralised training ensures high-quality and consistent servicing, as well as a rapid flow of information from our customers to the entire Valtra organisation.*

The Valtra Spare Parts Centre prepares all servicing, repair and spare parts manuals. Valtra literature, including our user manuals, represents the very best in the tractor industry. Valtra's modern and efficient centralised spare parts system delivers fast and guaranteed parts and service support. Within Europe parts can be delivered within 24 hours. In many regions our spare parts service operates 24 hours a day. The Valtra T Series is simple and straightforward

to service and maintain. The change intervals for the engine, transmission and hydraulics oils are long, and changing the oil is easy to do. The T Series has been designed to provide easy access to the cooling system, air cleaner, oil and fuel filters. The engine cover lifts vertically to facilitate maintenance. The cooling system can also be opened separately for cleaning. All of these aspects are a benefit to our customers in all regions and climates.





# AGCO Parts

## and Valtra customer service

To ensure reliable and uninterrupted running of a T Series tractor, only fluids that have been specially designed for it should be used. Look for the labels "Valtra Genuine Spare Parts" or "AGCO Parts" on product packaging. The same parts are used for new Valtra tractors.

### **SERVICE KITS**

Valtra offers convenient ready-prepared service kits for 100-hour, 500-hour and 1000-hour services. These kits include all necessary original parts, guaranteeing quality and results. Using original parts helps ensure your safety.

### **VALTRA PREMIUMCARE**

Custom made service and extended warranty plans covering up to 5 years/6000 hours are available from your Valtra dealer.

### **FINANCE SOLUTIONS**

To help fund your farm machinery purchases, AGCO Finance offers a choice of dedicated retail finance options, specifically tailored to the agricultural environment.



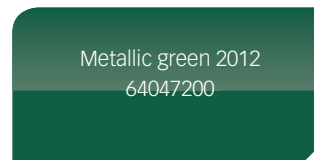
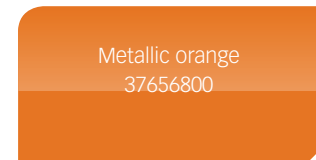
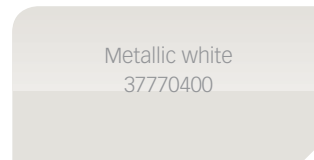
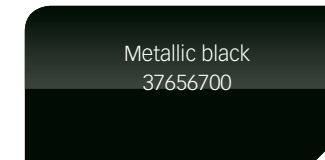
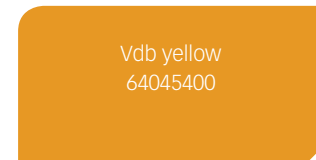
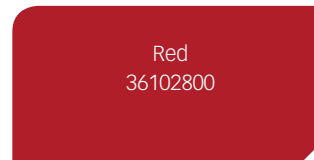
# Colours



Valtra is the only tractor manufacturer in the world producing tractors in a range of colours. In 2008, the Valtra colour line celebrated its 20th anniversary.

As Valtra tractors are tailor-made to the customers wishes, you can also choose the colour of the tractor yourself. The standard colour options available are red, metallic red, metallic green, metallic blue, black, orange, metallic steel grey and yellow.

The colours on this page are matched as accurately as possible to the actual paint colours used. Due to print processes, we cannot guarantee that colours shown are 100% accurate.



AGCO, Your Agriculture Company, is a premier manufacturer of agricultural equipment, providing high-tech solutions for professional farmers feeding the world. The company is dedicated to delivering superior customer service, innovation and quality. AGCO products are distributed in more than 140 countries worldwide.

Please note that the information in this brochure is subject to change, and the tractors pictured here have been individually specified by their owners.

# T Series technical specifications

MODELS	HITECH				VERSU				DIRECT			
	T133	T153	T173	T193	T153	T163e	T183	T213	T153	T163e	T183	T203
<b>ENGINE</b>												
AGCO POWER	66 AWI-4V		74 AWI-4V		66 AWI-4V		74 AWI-4V		66 AWI-4V		74 AWI-4V	
Number of cylinders/capacity, l	6/6.6		6/7.4		6/6.6		6/7.4		6/6.6		6/7.4	
<b>POWER HP /KW /1900 R/MIN (ISO 14396) *</b>												
Max power, hp (kW)	141 (104)	155 (114)	180 (132)	190 (140)	155 (114)	170 (125)	188 (138)	215 (158)	155 (114)	170 (125)	188 (138)	204 (150)
Max power, transport boost, hp (kW) **)	158 (116)	170 (125)	190 (140)	210 (155)	170 (125)	185 (135)	201 (148)	225 (165)	170 (125)	185 (135)	201 (148)	215 (158)
<b>TORQUE NM/1500 R/MIN</b>												
Max torque, Nm	580	640	660	680	640	740	770	850	640	740	770	800
Max torque, transport boost, Nm	630	680	730	800	680	810	820	900	680	810	820	850
<b>TRANSMISSION</b>												
Number of gears *)	36/36				30/30				stepless CVT			
Powershift	3				5				stepless CVT			
Std speeds min-max *)	0,6–43 km/h ***)				0,6–43 km/h ***)				0,02–43 km/h ***)			
EcoSpeed ****)	option				option				STD			
<b>PTO (TWO SPEED)</b>												
540, engine r/min	1874				1874				1874			
540e, engine r/min	1539				1539				1539			
1000, engine r/min	2000				2000				2000			
Ground speed PTO	option				option				option			
Front PTO, engine r/min	option, 1920				option, 1920				option, 1920			
<b>HYDRAULICS</b>												
Max pump output, l/min	73 (90)				115 (160)				115 (160)			
Max number of valves rear	4				7				7			
Max number of valves front	2				3				3			
Power Beyond	-				option				option			
<b>POWER LIFT</b>												
Capacity kg	8100	8500 HD			8500 HD			8500 HD				
Slip control	option				STD				STD			
Drive Balance Control	STD				STD				STD			
Front lift (option) lift power, kN	3500				3500 (5000 option)				3500 (5000 option)			
<b>MEASURES AND WEIGHTS</b>												
Tyres	16/9 R28 - 20/8 R38		480/70 R30 - 620/70 R42		16/9 R28 - 20/8 R38		480/70 R30 - 620/70 R42		16/9 R28 - 20/8 R38		480/70 R30 - 620/70 R42	
Wheelbase, mm	2748				2748				2748			
Lenght, mm	5148				5148				5148			
Width, mm	2280		2338		2280		2338		2280		2338	
Height, mm	3035		3047		3035		3047		3035		3047	
Turning radius, m	5.6				5.6				5.6			
Ground clearance rear, mm	600				600				600			
<b>WEIGHT</b>												
Without extra weight, kg	6200	6300			6420			6420				
Fuel tank (max), l	335				375				375			
Basic Fuel tank	165				285				285			
AdBlue tank, l	27				27				27			

\*) Max Engine Power in HiTech Models at 2000 r/min. In T163e at Eco-mode max power at 1700 r/min. \*\*) Also SigmaPower in T183, T193, T203, T213 \*\*\*) Alternative top speed 50 km/h \*\*\*\*) Reduced engine speed for 40 km/h, in Direct also for 50 km/h

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VAL 1853 02/14-3K

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