

**VALTRA VALMET**

**600      700**  
**800      900**



**PARTEK**

# Four individual tractors for your individual 60, 70, 80 and 90hp



# ual farming needs

	page
Cabin	4-7
Hydraulic	8-9
Transmission	10-11
Engine	12-13
Technical specifications	14
Accessories	15



# Easy access, comfortable operation, e

The 100 series embraces four models; the 600 at 60hp, 700 at 70hp, 800 at 80 hp and the 900 at 90hp. Tractors of this size are expected to undertake a wide variety of work on every type of farm, jobs which may not take long to complete and can often involve the driver climbing in and out on many occasions. At Valtra we have recognised the demands of this type of operation and developed the 100 series cab specifically to meet these requirements.

## Safe, effortless access

Statistically getting in and out of the cab is when most accidents occur and special care has been taken to make this procedure as safe as possible; generously wide steps, substantial support handles, wide doorways and easy access - on both sides. For added safety the interior light is operated by the door.

## Drive in comfort

The seat, designed to provide maximum comfort during short manoeuvres or day long operation in the field, is adjustable to suit the tallest and smallest driver and the small steering wheel can be steplessly adjusted vertically. For added comfort there is the option of an air suspension seat. Many farming operations require the driver to monitor an implement at the rear while driving forward. To improve comfort during these operations the seat may be angled a few degrees to the left or right. For operating rear mounted equipment the seat swivels through 180°. Most controls are located to the driver's right and all are within comfortable reach.

## 360° Vision

Thanks to the large areas of tinted glass and thin pillars visibility is excellent - through 360°. The cab is large enough for the largest of drivers, and a casual passenger, but it's not too big, allowing access to buildings and forestry. The sloping, narrow bonnet and narrow dashboard allow excellent views of the front wheels and front mounted equipment making accurate driving simple. Rear vision is also excellent, hitching mounted equipment and trailers is a simple task and driving in restricted areas safe. A roller windscreen blind



protects the driver from dazzle. We also provide a special aperture for electrical or hydraulic implement control cables so in cold weather or dusty conditions open windows are unnecessary.



# xcellent vision



## Work in any weather

Rear and side windows provide excellent ventilation, an opening windscreen is an option. A highly efficient fan heater is located under the dashboard providing ample heat and air circulation for most conditions. For extreme weather an additional, optional fan heater may be located in the roof to provide extra heat or cool air circulation. A roof mounted air conditioning unit is also available in conjunction with the fan heater.



**A practical cab for quick jobs or extended**



# ed operations. An excellent all-rounder



Although designed for general farm, forest and utility Valtra Valmet 100 series tractors are of the same high quality as larger more powerful models with many detailed specification features that make them easy to operate.

## Forestry Cab

The 100 series Forestry Cab has all the excellent features of its agricultural counterpart plus additional cab width, making it easier to swivel the seat comfortably when changing from the standard driving position to rear facing for operating cranes and winches. The specification includes a rear throttle pedal and special mounting plate below the rear window for mounting hydraulic implement controls.

## Passenger Seat

As many farm operations require more than one person, 100 series tractors are equipped with a second seat for passengers (not available on all markets). For safety we have located the passenger seat towards the rear of the cab so that the driver's side vision is not impaired.

## Instrument Panel

The large, easy-to-read instrument panel provides the driver with information on all the tractor's basic functions. Analog dials show fuel levels and engine speed and temperature. An optional Agrodigital display provides driving speed, distances travelled and transmission temperature. Autocontrol, an excellent, easy to use electronic power lift management system is an option on 100 series models providing additional information on linkage position.

## Document Storage

A hatch under the dashboard provides storage for the tractor manual and other documents needed by the driver. It also gives easy access to the fuse panel.

## Low Roof Models

For farmers with low buildings the 100 series low roof option is just what's required. 180mm lower than the standard cab overall height does of course depend on tyre sizes. (roof heater/air conditioning not available with this model)

# Excellent all-round hydraulic performance

For many years small or medium sized Valmet tractors have been the first choice for champion ploughmen. A major reason for this choice is an excellent linkage geometry combined with a simple, reliable powerful lift. A system that really works well.

## Up and down

The 600 and 700 models have a lifting force of 2.9 tonnes while the larger 800 and 900 machines have a capacity of 3.4 tonnes. Hitching and dismounting implements is easy too and you have a choice; telescopic link ends or conventional quick hitch, whichever suits your system best.

## Mechanical or Autocontrol

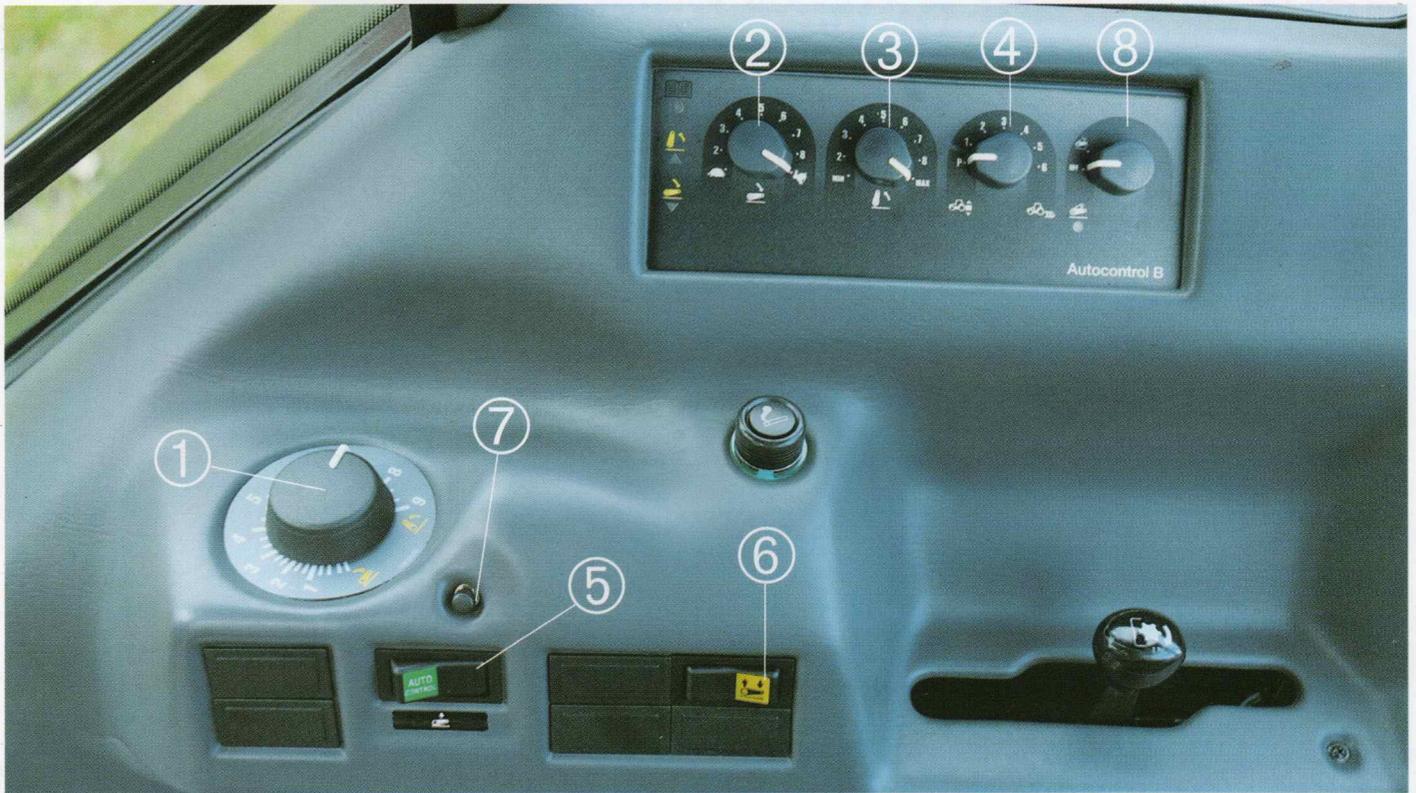
You have a choice of two control systems. Mechanical operation is controlled by a lever on the driver's right and is simple and positive. Our Autocontrol management system is easy too, simply set the working depth, maximum lift height and speed of lift and lower and turning on headlands becomes as simple as flicking a switch to lift or lower the implement to the pre-set heights. AutoControl also includes external lifting and lowering controls located on both rear mudguards. These push-buttons make hitching implements safe and quick.

## Double hydraulic pump - a separate oil reservoir

Using the hydraulic lift housing as a reservoir the maximum free flow output is a creditable 52 litres/min and with reserves to supply up to 24 litres to the implement there is ample capacity to power a wide range of equipment. Mounted alongside the main hydraulic pump and drawing oil from the hydraulic lift housing is a secondary pump providing power to the steering unit. The Hydraulic system accepts mineral, vegetable or synthetic oil with equal efficiency.



# ance - rear and front.



The two standard control valves are operated by a single lever on the driver's right, adjacent to which there is space to fit a single lever control for two additional valves. The extra control valves are available with a position lock to provide constant power to hydraulic motors.

### Autocontrol functions:

1. Position control/working depth
2. Control of raising and lowering speed regardless of implement weight
3. Lifting height upper limit
4. Draft control (five pre-set programmes)
5. Lifting and lowering switch
6. Lift linkage switch (when engaging implements)
7. "Forced lowering" of the implement
8. Drive Balance Control

### Front mounted equipment increases productivity

Front linkages are becoming a popular way of increasing tractor output and efficiency and 100 series tractors are available with factory fitted front linkages as optional equipment. Valtra Valmet front linkages have a capacity of 2.5 tonnes and are complete with their own control valve, which includes a float position. The standard tractor valves remain available to operate other equipment. Valmet linkages have been specifically designed for agricultural and utility operations and are suitable for a wide range of implements they are available with or without a 1000rpm speed PTO system as required.



# A choice of three flexible, efficient transmissions with minimal power loss.

The 100 series transmission is purely mechanical, avoiding the use of low pressure hydraulics. This feature combined with the tractor's light weight ensures great efficiency, performance and low fuel consumption with all the engine power available for traction or for powering the rear or front PTOs.

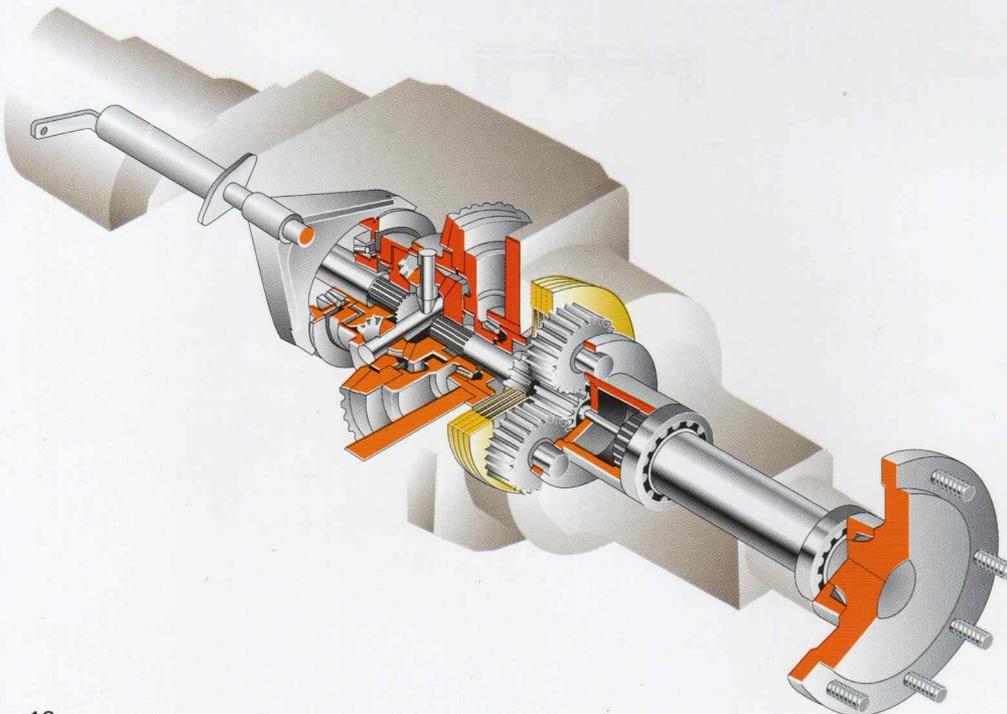
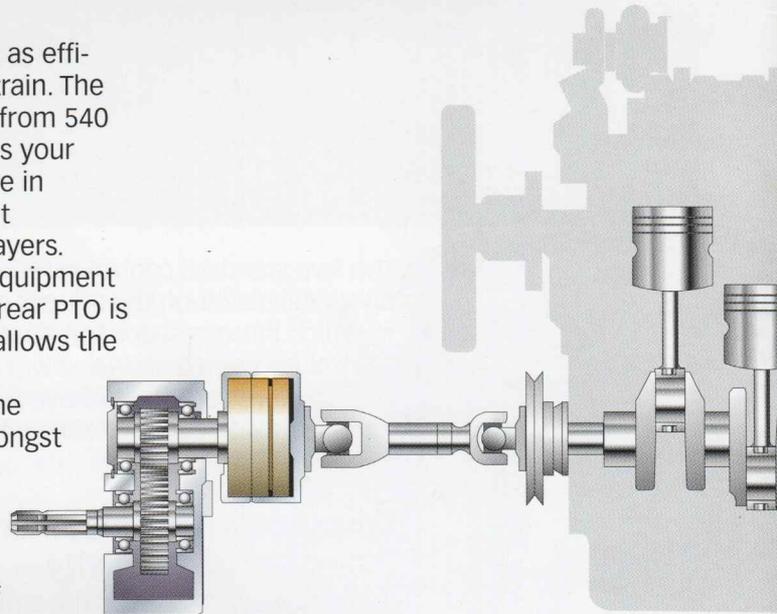
## Positive gear selection and a choice of transmissions

All eight forward speeds (in two ranges) and four reverse speeds in the base transmission are synchronized. As an option this transmission can be equipped with a synchronized splitter giving a 15% overdrive and 16 forward and eight reverse speeds. Seven in the important working range of 4 to 12km/h. Operators requiring very low creep gears can specify the 12 forward 8 reverse speed transmission which gives speeds down to 800 m/h.

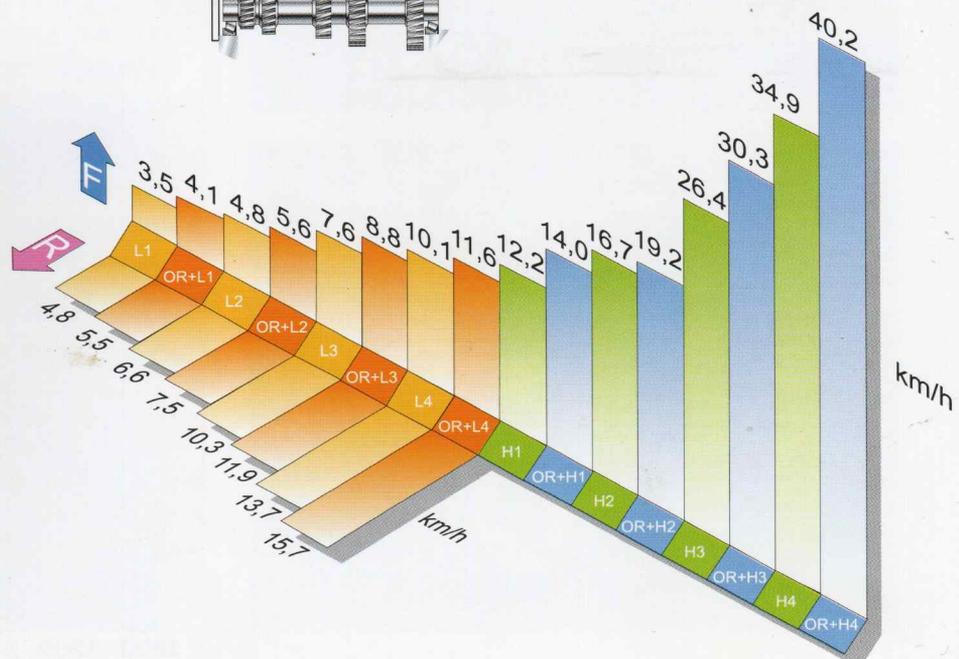
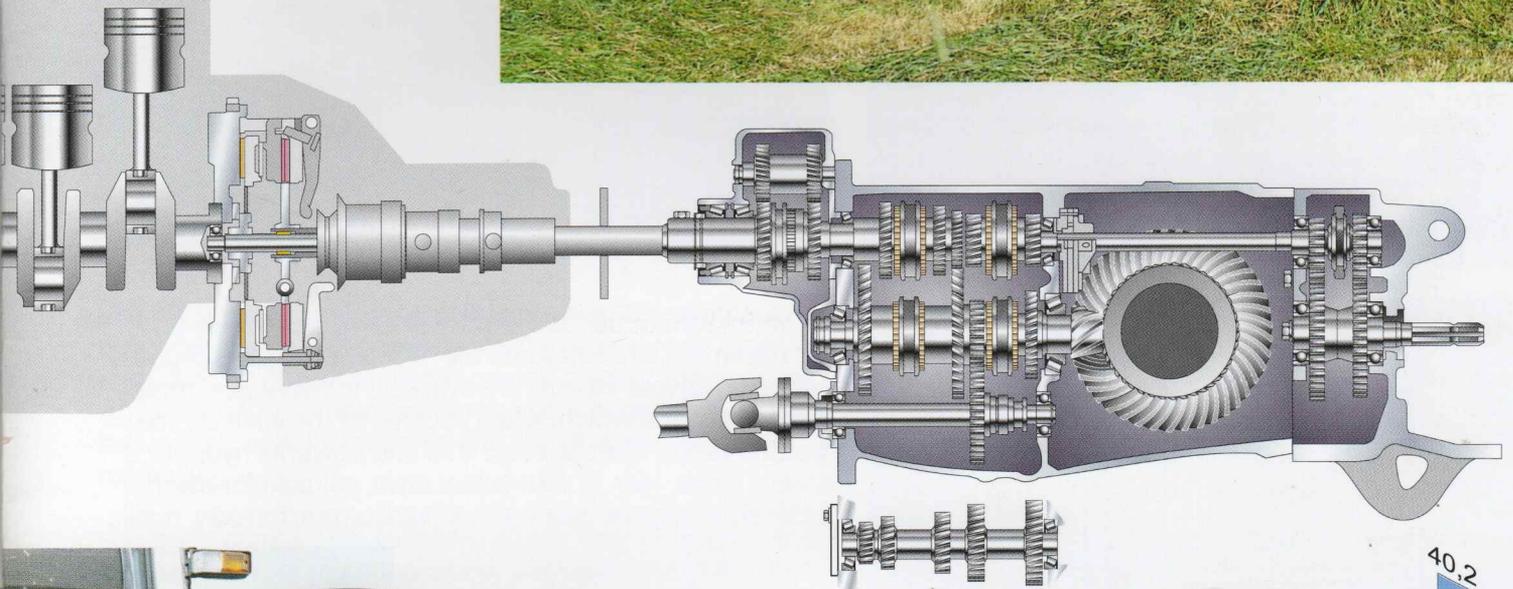
## Efficient PTO - Front and rear

Both front and rear PTOs transmit power to the implement as efficiently as is mechanically possible, through only one gear train. The rear PTO has two speeds as standard and you can choose from 540 + 1000 rpm speed or 540 + 750 rpm (540E), whichever suits your system best. The economy 750 rpm speed is really effective in reducing fuel consumption when operating with equipment demanding low power such as fertilizer spreaders and sprayers. The 1000 rpm speed provides constant power to heavier equipment like forage harvesters, rotavators and power harrows. The rear PTO is controlled by a hand operated independent clutch which allows the operator to accurately control starting and stopping. The optional front PTO operates at 1000 rpm at rated engine speed, a specification which is becoming the standard amongst tractor and implement manufacturers. Unlike most other systems the Valtra Valmet front PTO is controlled electrohydraulically for a smoother engagement of power.

Both PTOs may be used simultaneously and are capable of transmitting all available engine power.



ons. Wide speed ranges for every operation -

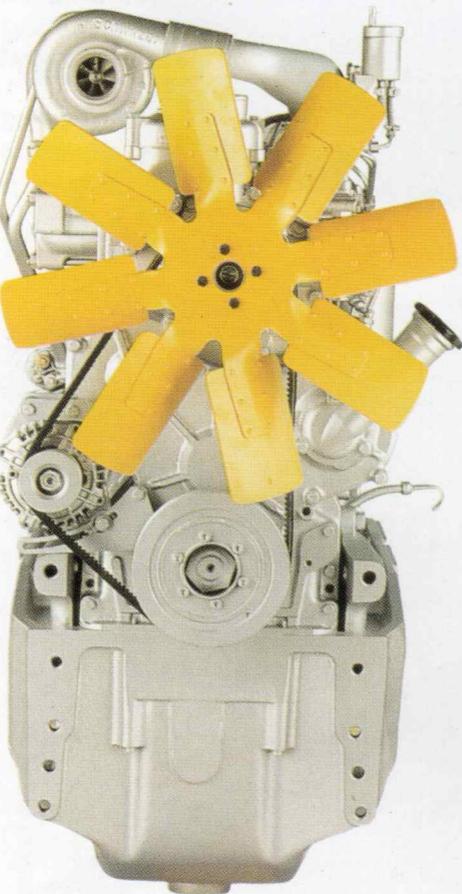


# Powered by Valmet designed and built

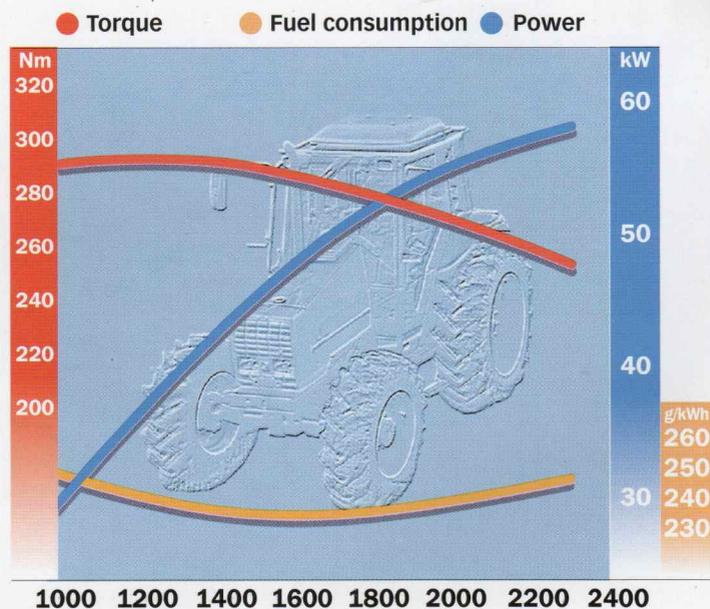
The 100 series engines are designed and built, to the same high standards as those used by bigger, more powerful machines. All are fitted with 20 series engines, the 60hp naturally aspirated 600 and 70hp turbocharged 700 models are powered by three cylinder 3.3litre while the more powerful 80hp naturally aspirated 800 and the 90hp turbocharged 900 feature 4.4 litre four cylinder units.

Valmet engines are well known for their torque reserve. The 70hp 700 boasts a torque reserve of 34%. Much more than is usual in a tractor of this size. The 4 cylinder engines used to power the 800 and 900 tractors are now fitted with Stanadyne injection pumps which have also increased torque, reducing the necessity for many gear changes while decreasing fuel consumption and noise. The 800 and 900 are also fitted with ejector type engine air pre-cleaners which are maintenance free and located below the bonnet. The muffler box is also located under the bonnet adding to significantly improved driver vision.

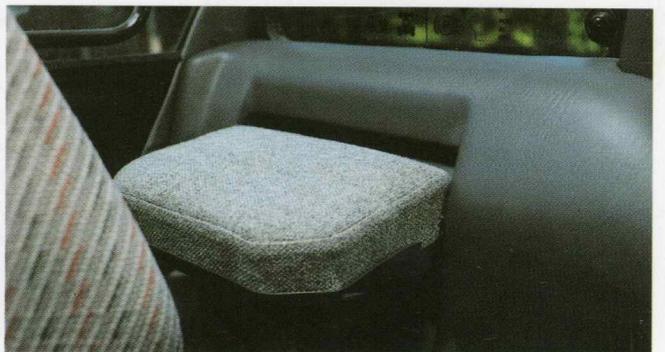
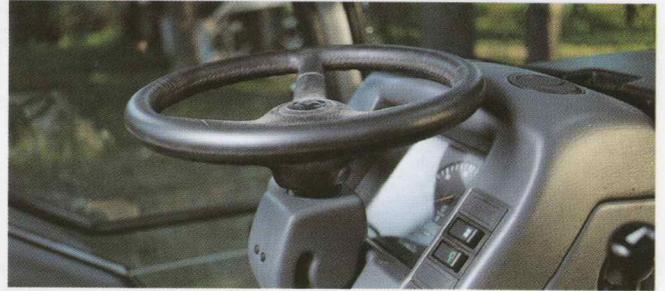
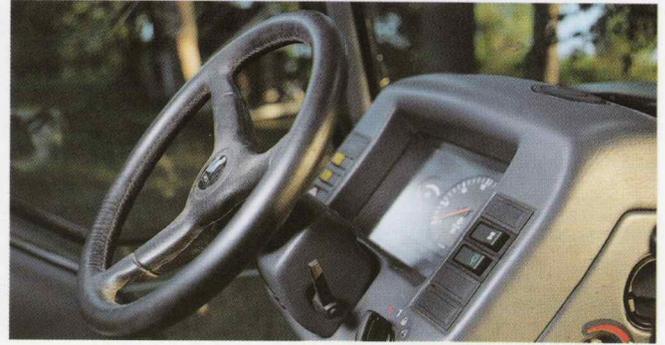
Valtra Inc. manufactures all Valtra Valmet tractors to individual customer order and specification. You, our customer, decide exactly what equipment is fitted on the production line. This unique method of operation reduces tractor stocks and therefore costs, enabling high value tractors to be produced at competitive costs and with a much wider range of optional equipment than is available from our competitors.



All Valtra Valmet tractors are designed as four-wheel drive for maximum efficiency and the 100 series is no exception. However, all four models are available in two-wheel drive form if required which, when coupled to the wide choice of transmissions, front and rear PTO and powerful hydraulics, makes them, two- or four-wheel drive, suitable for a very extensive range of operations in agriculture, forestry, public



# t engines



utility, local authority and civil engineering. The standard cab is functional and comfortable. The forestry cab facilitates the use of rear mounted cranes, diggers and winches, while the lowline cab eases entry into low buildings. Open cab models with ROPS frame and sun roof are available, naturally.

For driver comfort the excellent heater may be augmented by a second roof mounted unit or airconditioner. The radio provides entertainment during mundane operations while the optional air suspended seat adds to driver comfort. Other options include front, roof mounted working lights essential for night operation of the front linkage or loader.

Arguably one of the most important specification choices is tyres. Fit the correct type and size and performance is considerably enhanced. This is why, along with the standard tyres, we offer a wide range of alternative equipment from wide, low profile low ground pressure tyres. Industrial and forest tyres are also available.

You also have a choice of colour: red, green, blue, white or yellow and if you wish we can put the name of your farm or the driver on the side of the roof when the tractor is built. A small but significant indication that underlines the fact that all our customers are important individuals.

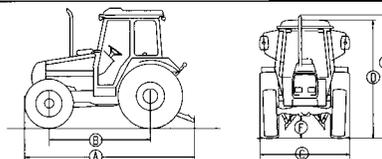


# Technical Specifications

Model	600	700	800	900
Engine Valmet	320D	320DS (Turbo)	420DR	420DSR (Turbo)
Max Power kW(hp) DIN @ engine rpm	44(60) 2270	51 (70) 2270	59 (80) 2270	66 (90) 2270
Max Torque Nm @ engine rpm	220/1400	290/1400	290/1400	330/1400
Torque back up %	19	34	17	18
No. of Cyls./Capacity ltr (cu in)	3/3.3 (201)	3/3.3 (201)	4/4.4 (268)	4/4.4 (268)
<b>Transmission</b> Fully synchronized				
Gears - Forward/Reverse	8/4 or 12/4 Creeper or 16/8 Splitter			
Max speed km/h (mph)	30 (18,6) or 40 (25)			
PTO rpm	540+1000 or 540+540E or 540 for platform models			
Front linkage + PTO (optional)	24 kN (2.5 tn) + 1000 rpm			
<b>Hydraulic</b>				
Max lifting force kN (tn)	28 (2.9)	28 (2.9)	33 (3.4)	33 (3.4)
Max pump capacity ltr/min (U.S.gal/min)	37 or 52 (10 or 14)	37 or 52 (10 or 14)	52 (14)	52 (14)
Powerlift type	Mechanical or Autocontrol electro hydraulic			

## Dimensions and Weights

Model	Tyres	A = Overall length B = Wheel base C = Width D = Height to top of cab (std cab) E = Height to top of cab (lowline) F = Clearance under front axle Fi = Clearance under rear axle							Weight Full fuel tank less ballast weights
		A, mm	B, mm	C, mm	D, mm	E, mm	F, mm	Fi, mm	
600-2, 700-2	Reverse/Forward 16.9R30/8 10.00-16/8	3745	2112	2032	2613	2433-	505	405	3160, 3210
600-4, 700-4	16.9R30/8 12.4R24/8	3860	2255	2050	2613	2433-	427	405	3390, 3440
800-4, 900-4	16.9R34/8 13.6R24/8	4043	2387	2080	2695	2515	472	495	3560, 3590



With low cab 180mm lower

## Tyre Options

Rear / Forward	600	700	800	900
16.9R30 + 10.00-16	○	○	○	○
16.9R34 + 10.00R16	○	○	○	○
13.6-38 + 7.5-16	○	○	○	○
18.4R34 + 11.00-16		○	○	○
16.9R30 + 12.4R24	○	○	○	○
18.4R30 + 13.6R24	○	○	○	○
16.R34 + 13.6R24	○	○	○	○
480/70R30 + 360/70R24	○	○	○	○
13.6R36/8M + 12.4R24/8M	○	○	○	○

Rear / Forward	600	700	800	900
13.6R38/M + 13.6R24/M	○	○	○	○
18.4R34 + 14.9R24		○	○	○
520/70R34A + 420/70R24TA		○	○	○
14.9R38M + 12.4R28/M		○	○	○
18.4-34/14 + 14.9-24/14FOR		○	○	○
18.4-34/14 + 14.9-24/10IND		○	○	○
16.9-34/14 + 13.6-24/12IND	○	○	○	○
16.9-34/14 + 13.6-24/10FOR	○	○	○	○

## Speed Ranges in Km/h (mp/h) at max. output speed 16.9R34 Engine Speed 2270

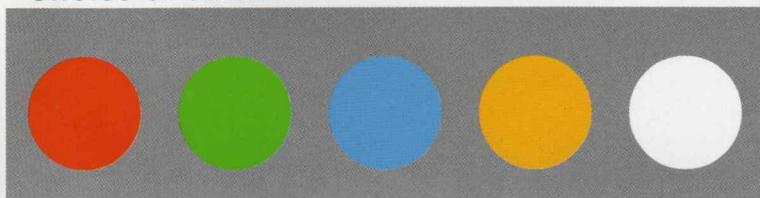
Options	Creeper	Low Range	Low Range + Splitter	High Range	High Range + Splitter
1	0.8 (0,5)	3.5 (2,2)	4.1 (2,5)	12.2 (7,6)	14.0 (8,7)
2	1.2 (0,7)	4.8 (3,0)	5.6 (3,5)	16.7 (10,4)	19.2 (12,0)
3	1.8 (1,1)	7.6 (4,7)	8.8 (5,5)	26.4 (16,4)	30.3 (18,9)
4	2.4 (1,5)	10.1 (6,3)	11.6 (7,2)	34.9 (21,7)	40.2 (25,0)
1R	4.8 (3,0)	4.8 (3,0)	5.5 (3,4)	4.8 (3,0)	5.5 (3,4)
2R	6.6 (4,1)	6.6 (4,1)	7.5 (4,7)	6.6 (4,1)	7.5 (4,7)
3R	10.3 (6,4)	10.3 (6,4)	11.9 (7,4)	10.3 (6,4)	11.9 (7,4)
4R	13.7 (8,5)	13.7 (8,5)	15.7 (9,8)	13.7 (8,5)	15.7 (9,8)

<b>Motor</b>	600	700	800	900
Ejector type inlet air filter	-	-	●	●
Silencer under bonnet	-	-	●	●
Electric stop	-	-	●	●
<b>Cab</b>				
Tinted glass%	●	●	●	●
Front opening windscreen	○	○	○	○
Sun visor	●	●	●	●
Adjustable steering wheel	●	●	●	●
Radio	○	○	○	○
Roof Mounted vent and heater unit	○	○	○	○
Rear window wiper washer	○	○	○	○
Air suspended drivers seat	○	○	○	○
Air conditioning	○	○	○	○
Digital display (4wd only) (Agrodata)	○	○	○	○
Cigarette lighter	○	○	○	○
Rear working lights	●	●	●	●
Front working lights	○	○	○	○
Roof mounted headlights	○	○	○	○
Forestry Cab	○	○	○	○
Low line cab	○	○	○	○
<b>Hydraulic</b>				
Mechanical Hydraulic	●	●	●	●
Autocontrol electro hydraulic	○	○	○	○
Front linkage and /or PTO 1000	○	○	○	○
Auxiliary valves 2 pcs	●	●	●	●
Auxiliary valves, 3rd + 4th	○	○	○	○
Free flow return	●	●	●	●
Telescopic link ends	●	●	●	●
Ball-Hitch link ends	○	○	○	○
Hydraulic top link	○	○	○	○
Lift rod hydraulically adjustable	○	○	○	○
Extra lift cylinder	-	○	●	●
<b>Other Equipment</b>				
Extra fuel tank	○	○	○	○
Front weights	○	○	○	○
Rear wheel weights	○	○	○	○
Front mudguards (2wd)	○	○	○	○
Front mudguards (4wd)	○	○	○	○
Pick-up hitch	○	○	○	○
Trailer hitch	○	○	○	○
Agricultural drawbar	○	○	○	○
Front end loaders	○	○	○	○

● = Basis

○ = Options factory fitted

## Choice of colours



The information contained in this brochure is intended as a general guide only. The product specification may vary from country to country and the manufacturer reserves the right to modify its products without prior notice. The manufacturer therefore disclaims all liability in case the product supplied does not in all respects correspond with the information of this brochure. Please always check the product specification with your local dealer.

**Valtra Inc.**

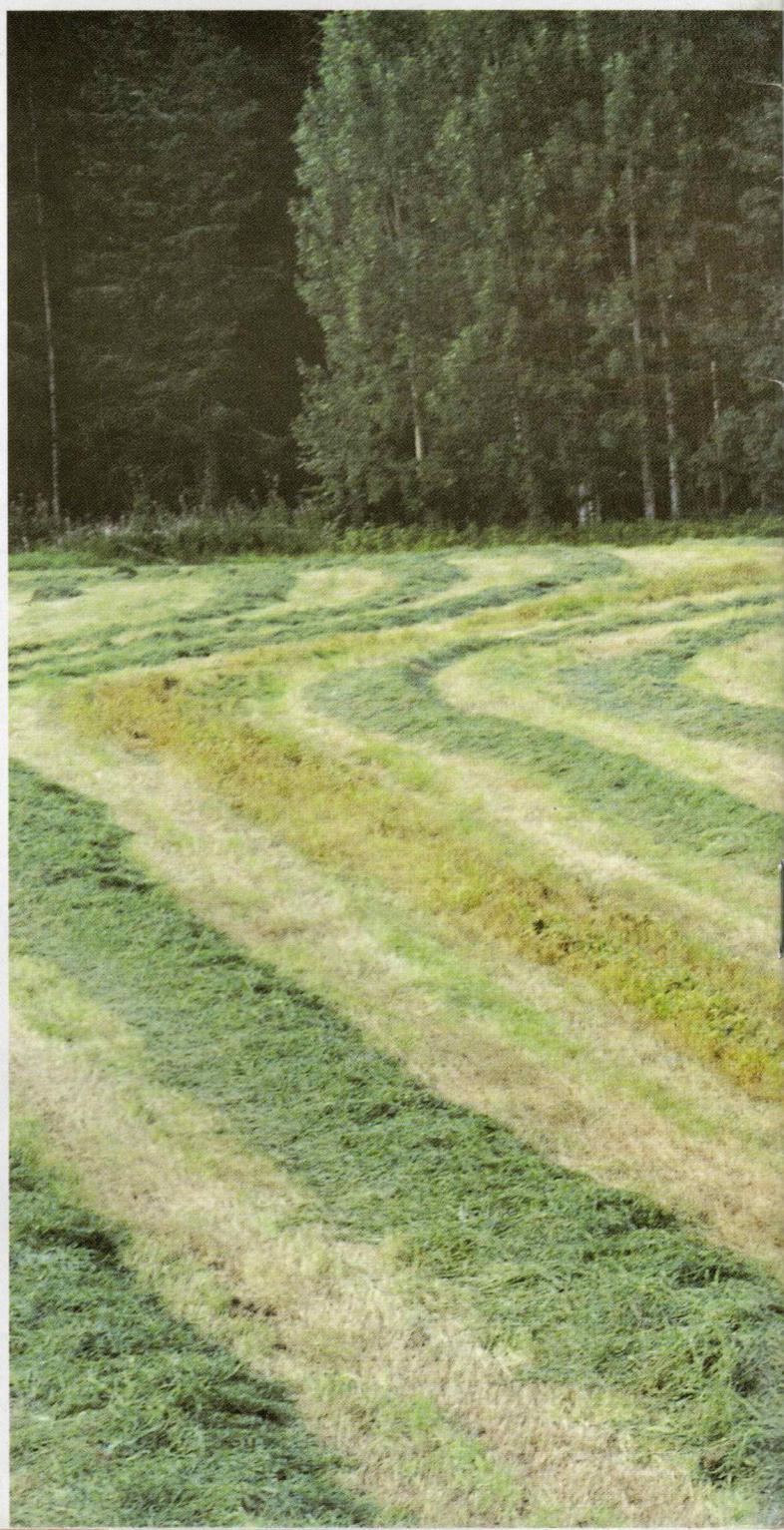
Sörnäisten rantatie 23

FIN-00500 HELSINKI

Phone +358 20455 4480

Fax +358 20455 4484

[www.valtra.com](http://www.valtra.com)



**VALTRA VALMET**