



**Valmet**

**931**



## **Valmet 931**

Completely new and already in a class of its own



## Highlights

The Valmet 931 is more than a new harvester, it represents a totally new class of machine. It has unique features and application flexibility that will allow you to profitably handle a broader range harvesting conditions. The advantages are seen in the parts as well as the whole. Here are a few of the highlights:



Valmet optimizes a new combination of strength and flexibility to deliver higher productivity and profitability.

A new engine, using four-valve technology, provides greater power, faster machine response and improved fuel economy. A maintenance-free belt transmission simplifies engine service.

New market-leading machine control system, MaxiXplorer. It is now more powerful, adjustable and easy to use. It optimizes machine performance and simplifies reporting.

A new CRH22 boom improves performance with its 220 kNm/162,000 lbf-ft lift capacity. More lift gives greater production and allows precise movement at full reach.

This new machine class will increase the flexibility of your operation. Its superb ergonomics, high productivity and reliable operation will make every shift more enjoyable.

# Valmet 931 – finally, a perfect size to make heavy jobs lighter and easier.

**Before:** Difficult assignments in dense forests and rugged terrain stretched both the operator and machine to their limits.

**Now:** The new Valmet 931 provides a highly responsive and productive solution for tough harvesting jobs. Specifically designed to increase production in the most difficult conditions, Valmet's unique design is sure to make tough jobs more profitable and a lot less stressful.

The Valmet 931 is a harvesting powerhouse centered around a new sturdier boom design with greater lift capacity and reach. This boom handles large heads with greater ease, more speed and with better precision.

Power and endurance are key characteristics of the 931's new four-valve engine. Impressive power, 193 kW (259hp) brings equally impressive machine performance, yet it attains high torque at low engine RPM for excellent fuel economy. The new Comfort Bogie provides the machine with superb traction. The refined bogie adds to the machine's exceptional balance, mobility and maneuverability especially when working on soft/wet ground, or in steep terrain.

Other features include a new heavy-duty rear axle design with integrated hose routing, which keeps components protected and

improves reliability. Soft-sealed couplings used throughout the 931 will minimize oil leaks. New guarding with integrated storage compartments keep the service ladders and 170 Ah battery well protected.

The Valmet 931 provides an extremely productive work environment. The spacious, full-rotation and auto-leveling cab is the quietest on the market thanks in part to its direct powered swing drive. The new swing motor reduces maintenance and delivers smoother, more precise boom performance.

MaxiXplorer, Valmet's unique integrated control system puts the operator in complete control of all machine functions. The interface is easy to learn and a pleasure to use everyday.

The result of the new Valmet 931 is a harvesting machine that perfect balance of strength, flexibility, comfort and efficiency.

Choose the Valmet 931 to increase your range of capabilities and for big jobs requiring maximum production and profitability.



## Spacious and quiet

The operator environment is spacious and very quiet thanks to isolation mounts and an improved swing drive system.



## High-performance work environment

Excellent visibility, low noise levels and great ergonomics result in an extremely high-performance operator environment.



## Ergonomics

Valmet's unique boom position, beside the cab, provides clear view to the work area and helps prevent neck and back discomfort.



Great reliability starts with Valmet's well planned chassis design, power train and hydraulic systems.



Sturdy boom with large swing bearing and tilt components provide added durability.

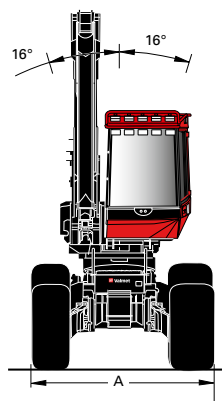
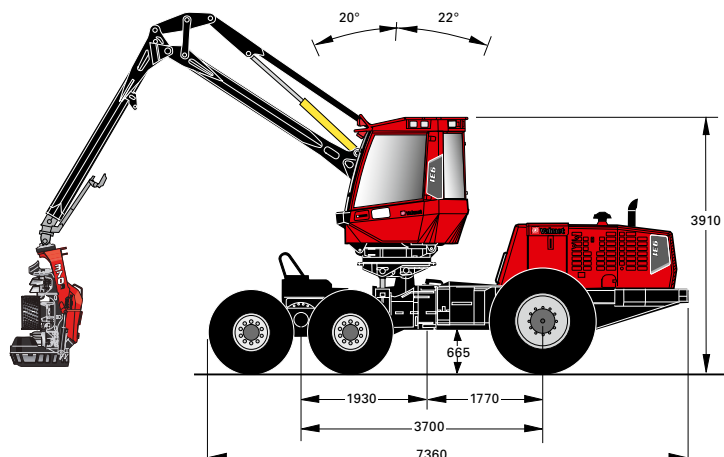


**Unique Valmet Comfort Bogie design ensures excellent climbing power, with improved mobility and maneuverability.**



**Automatic cab and boom leveling system combined with Valmet's unique swing axle coupling provide superior operation on uneven ground.**

# Technical specifications



## Wheel options and machine width (A) with different tires

	Tire option	Width (mm)
6WD (front)	600/55 x 26,5	2 720
	710/45 x 26,5	2 940

	Tire option	Width (mm)
6WD (rear)	600/65 x 34	2 730
	700/55 x 34	2 900

NOTE: Stated dimensions are nominal and may vary slightly.

## Weight

Curb weight: from 19,400 kg (21.4 tons)

## Engine

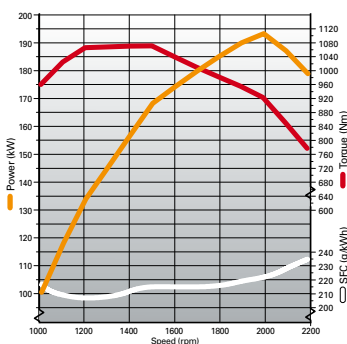
SD74-4V. 6-cylinder, turbo with Commonrail. EPA Tier 3 and EU Stage IIIA compliant.

Stroke volume: 7.4 l (452 cu in)

Power: 193 kW DIN (259 hp) at 1,700 rpm

Torque: 1,070 Nm (789 lbf-ft) at 1,500 rpm

Fuel tank: approx. 370 l (98 gal)



## Hydraulic system

Single-circuit load-sensing/high-low balanced constant pressure, variable piston pump

Flow: 313 l/min (91 gal) at 1,650 rpm

System pressure: 280 bar (4,060 psi)

Working pressure, boom: CRH22: 270 bar (3,916 psi)

Hydraulic oil tank: approx. 200 l (53 gal)

Miscellaneous: Pressure filter for hydrostatic circuit. Return oil filters for hydrostatic drive and hydraulics. Hydraulic oil level warning. Hydraulic booster to compensate pump regulation. Soft-sealed couplings in hydraulic system.

## Frame/Axles

Axle, front: Valmet geared bogie. Differential with mechanical differential lock.

Axle, rear: Swing axle with hub reduction. Differential with mechanical differential lock. Hydraulic swing axle override with leveling.

## Brake system

Fully-hydraulic multi-disc brakes. Hydraulic accumulator charging valve.

Driving brake/ Working brake: Multi-disc brakes in oil bath. Automatically engaged when working.

Parking brake: Spring-action brake with electro-hydraulic control. Emergency brake

Braking performance: Conforms to ISO 11169:1993 and VVFS 2003:27.

## Power transmission

Hydrostatic-mechanical, controlled by MaxiExplorer. Transfer gearbox with 2 positions. Disengageable front-wheel drive.

Differential locks: Mechanical electro-hydraulic control

Driving speed: 0-25 km/h (0-15.5 mph)

Traction force: 175 kN (42,700 lbf)

## Boom

Model: CRH 22, 9.8 m      CRH 22, 8.5 m

Reach: 9.8 m (32 ft)      8.5 m (28 ft)

Lifting torque, gross: 217 kNm (160,100 lbf-ft) 217 kNm (160,100 lbf-ft)

Slewing torque, gross: 47 kNm (34,670 lbf-ft) 47 kNm (34,670 lbf-ft)

Head: 360.2/365      370.2

**Steering**

	Hydraulic articulation joint.
Lever steering:	Load-sensing (LS) proportional steering from boom controls/rocker
Steering angle:	+/- 40° Electric end-limit damping.
Available options:	Load-sensing proportional servo steering.

**Electrical system**

Voltage:	24 V
Battery capacity:	2 x 170 Ah
Generator:	2 x 100 A

**Lighting**

	More than 30 lux in work area. Halogen cab, boom, and reversing lights.
Available options:	Xenon lights on cab and boom. Roof-mounted work lights, Halogen or Xenon. Long-distance lights, Xenon.

**Ergonomics**

	Autolev – fully-automatic cab and boom leveling. Comfort-enhancing leveling. Cab coupled to swing axle. Boom and cab on horizontal, rotating platform. Hydraulic stabilization when maneuvering.
Horizontal leveling:	Longitudinal 20°/22° and lateral 16°
Rotation:	±180°
Available options:	Boom damping.

**Cab**

	Safety tested. Leveling. Thermal and acoustic insulation.
Safety:	Conforms to ROPS ISO 8082, FOPS ISO 8083, and OPS ISO 8084
Seat:	Choice of ergonomically designed seat for individual adjustment of the seat cushion, back and lumbar support, arm rests, and control panels.
Windshields:	Forward side windows of 15 mm (0.6") safety glass.
Heating/ventilation:	Heating and cooling unit ECC. Filtered air intake with allergen filter.
Noise level:	As per ISO standard.
Vibrations:	As per ISO standard.
Miscellaneous:	Manual tilt. Multi-position safety lock. Electrical kit for com-radio and telephone (12-24 V). Windshield wiper and washer on front and roof windows.
Available options:	Sun blinds. Swivel seat. Electrically-controlled platform under cab. Radio with MP3 player and USB port. Air-ventilated KAB seat or air-ventilated BeGe seat with head rest. Microfilter.

**Harvesting heads**

	Valmet 360.2	Valmet 365	Valmet 370.2
Weight: from	1,245 kg (2,745 lb)	1,250 kg (2,756 lb)	1,470 kg (3,241 lb)
Felling/cutting diameter:	650 mm (25.6")	650 mm (25.6")	700 mm (27.6")
Feed speed:	0-5 m/s (0-16.4 ft/s)	0-5 m/s (0-16.4 ft/s)	0-5 m/s (0-16.4 ft/s)
Feed force, gross:	26-28.4 kN (5,845-6,385 lbf)	23.6-28.3 kN (5,305-6,362 lbf)	28.2-30.7 kN (6,340-6,902 lbf)
Opening, upper knives, max.:	640 mm (25.2")	700 mm (27.6")	640 mm (25.2")
Roller opening, max.:	550 mm (21.7")	650 mm (25.6")	600 mm (23.6")
Rotator:	Roller slewing with hydraulic motor.		
Control and info system:	MaxiXplorer		

**Control and information system**

MaxiXplorer	Integrated system for machine and head control. Operator-specific settings for head, boom, and machine functions. Cross-cutting information and machine status display. Production registration. Administrative tools.
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**PC**

Processor, clock speed:	Pentium M 1.4 GHz
Internal memory:	1 GB RAM
Hard drive, size:	40 GB
Color display:	12", anti-reflection glass
DVD player:	Option
USB ports:	8, one of which on the front of the display for easy access
Serial ports:	2
Operating system:	Windows XP Pro
Keyboard with trackball:	Included
Available options:	A4printer.GPSantenna.Productionreports.

**Documentation**

Printed operating and starting instructions.
Instruction manual and spare parts catalog on CD.

**Available options**

Sprinkler system. Semi-automatic, water-based fire extinguishing. Conforms to RUS 127.
Hand-held extinguishers. 2 x 6 kg (13 lb) ABE-3. Powder extinguishers.
Printed instruction manual (also electronic in Maxi)
Printed spare parts catalog (also electronic in Maxi)
Diesel heater 9.1 kW incl. timer and hydraulic oil heater.
Stump treatment equipment
Biodegradable hydraulic oil
Service ladders
Toolbox with tools

**Notes**

Standard and extra equipment are market-dependent and vary between countries. The specification describes possible equipment, which is either standard or optional. Stated weights are based on standard equipment. Specifications and designs are subject to change without notice.

# Why choose a Valmet harvester?

High productivity, low operating costs, innovative technology, superb operator environment – these are just some of the features that make Valmet forestry machines some of the best in the world. Behind all this is a highly-focused strategy to continually build upon the advantages of owning a Valmet harvester. A strategy based on the following principal ideas.

## Ergonomics

Your forestry equipment and its mobile work environment is critical to an operators ability to maximize production without fatigue and is a key factor for success. This is an important reference point used in developing the unique ergonomic designs of Valmet harvesters. Automatic leveling cabs, side mounted booms and large operator compartments work together to keep the harvesting head centered in the operators field of vision.

## Economy

The ambition to maximize profitability is one of the most important forces driving the development of Valmet harvesters. Each small improvement that increases productivity and reliability, reduces costs, or saves time is of interest. Tangible and quantifiable examples from today's Valmet harvesters include energy-efficient engines, highly efficient hydraulics, fast heads, and unsurpassed productivity.

## Productivity

More work in less time – a comment we often hear from contractors who switch from competing brands to Valmet. There are many reasons, large and small. The most important include extremely high-performance operator environments, great maneuverability, effective heads, powerful control and information systems, and large work areas from stationary positions.

## Customer Support

Fast and competent service bears directly on forestry machine performance and economy. An extensive service network provides the Valmet owner with a sense of security. Well-trained technicians provide additional assurance, as they are Valmet experts. Another benefit is ProSelect, our special line of accessories and consumables. The range is based on a selection of items that are all of the highest quality and designed for both Valmet and other brands of professional forest machinery.

## Environment

Forests are an essential and fragile element of the global ecology. Consequently, every new Valmet product, and all its component parts, is considered from both short-term and long-term environmental perspectives. This has resulted in real environmental improvements such as highly-effective exhaust emission control and low, evenly-distributed ground pressure in Valmet harvesters. Environmental considerations also permeate our broad range of accessories and consumables, such as in our special, rapidly biodegradable oils.

## Global Experience

Valmet harvesters are found the world over. Consequently, they are designed to deliver optimum profitability regardless of conditions. The same fundamental concept is applied to our global service and dealer network that provides support to thousands of Valmet owners on a daily basis.

