

VANGUARD 65



language



VANGUARD 65 RANGE

A range of isodiametric, compact and multifunctional tractors, designed to work with ease both between the rows of vineyards and orchards, as well as in urban contexts for green area maintenance and municipality.

Specialized DNA and modern design for a range of innovative tractors that fully express the power of the 56 hp engine installed under the hood.

VERSIONS

AR

Articulated chassis, minimum width of one meter and a turning radius of only 2.5 meters for exceptional maneuverability even in areas with limited operating space.

RS

Traditional chassis with steering wheels and dual brake pedal used to reduce turning radii. Stability and grip in every working condition, even on sloping terrain.

APPLICATION FIELDS

- Municipalities for green-area maintenance work and snow removal in urban centres.
- Specialized agriculture for all operations in the confined spaces of vineyards and orchards.
- Horticulture and fruit-growing for use even inside greenhouses.
- Forage mowing, including in hilly environments.



CLEAN POWER



The Vanguard 65 range is equipped with a Rehlko engine, formerly known as Kohler, a **3-cylinder Turbo Intercooler delivering 56 hp.**

The advanced common-rail system ensures durability, performance, and low fuel consumption.

The reduction of harmful emissions released into the environment is further guaranteed by the presence of anti-pollution devices: Diesel Particulate Filter, Diesel Oxidation Catalyst and Exhaust Gas Recirculation system.

In addition to conventional diesel, the engine can be powered – interchangeably and without modifications – with **renewable HVO fuels**, which allow for up to 90% reduction in greenhouse gas emissions and contribute to more sustainable agriculture.

ACTIVE AND PASSIVE SAFETY

Stability and grip, even on uneven terrain, are ensured by the design geometry of the Vanguard 65 with its low centre of gravity and optimal distribution of masses on the two axles.

The permanent four-wheel drive, the front and rear differential with simultaneous electro-hydraulically controlled locking and the **unique OS-Frame integral chassis, with 15 degrees of oscillation between front and rear axles**, allow the tractor to remain in traction at all times.

The wet multi-disc brake system, with three discs per brake, ensures safety and adequate stopping distances in all conditions.

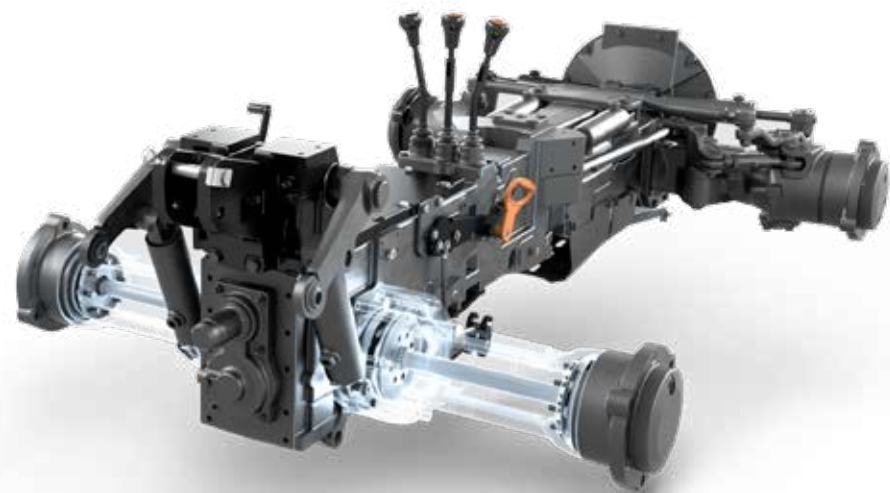
The driving position, equipped with a roll bar or with the optional “Vista Clima” approved cab, ensures protection and comfort for the operator.



MAXIMUM EFFICIENCY

The 'Made in BCS' transmission is equipped with a 12-speed forward plus 12-speed reverse gearbox with synchronised reverser and a multi-disc in oil bath clutch:

- The **24-speed synchronised gearbox** allows you to always select the most appropriate gear for the job at hand, making the Vanguard 65 highly productive in all circumstances. The synchronised inverter also allows rapid changes of direction offering an important advantage during jobs requiring frequent reversals.
- The **wet multi-disc clutch** is significantly softer and better performing than conventional dry clutches. The adoption of this type of hydraulic clutch, fitted within the transmission, brings numerous concrete advantages: greater durability, maintenance-free and maximum manoeuvrability thanks to the tractor's more compact dimensions.



ADVANCED HYDRAULICS

The hydraulic system consists of **two independent pumps**:

- one 17 l/min pump dedicated exclusively to steering and electro-hydraulic controls,
- the other 22 l/min pump dedicated to the rear lift and hydraulic outlets.

The high oil flow to the hydraulic outlets – with an optional **oversized pump delivering 30 l/min and heat exchanger** – allows the use of all modern equipment for vineyard and orchard management, as well as for municipal and green maintenance applications.

Two systems are available for actuating the rear control valves: via mechanical control valves or via a **multifunctional electronic joystick**.

A multi-disc oil-bath clutch drives the rear PTO, which is independent of the gearbox and synchronized with the tractor's forward motion, featuring two speeds: 540 and 540E.

REVERSIBILITY

Vanguard 65 is also available in a version with a **reversible driving position, featuring a platform suspended on silent-blocks**, which increases its versatility and efficiency, making it suitable for multiple agricultural applications and beyond.

The operator can rotate the driving module (seat, steering wheel, and dashboard) by 180° in just a few seconds, allowing work with rear-mounted implements in a front-facing position, thereby improving comfort, efficiency, and safety.

The reversible driving system also facilitates operations in confined spaces or near obstacles, thanks to the ability to optimally position the operator for manoeuvring.



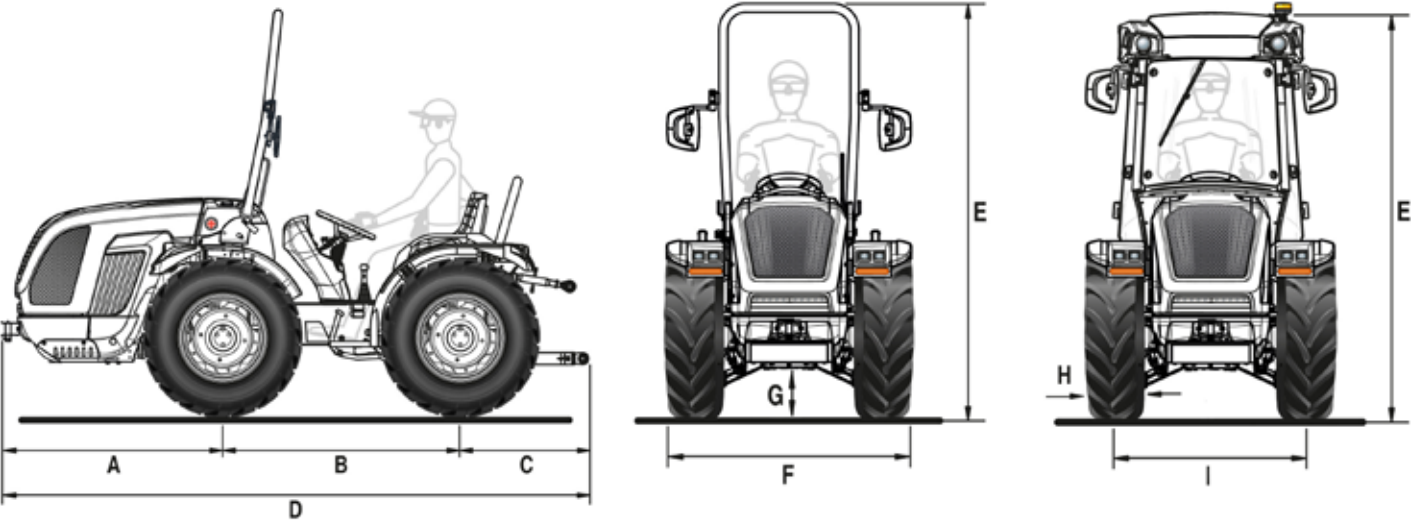
COMFORT AND 360° VIEW

The **'Vista Clima' cab** with four uprights features a conical and compact profile to easily exit tight rows, also on side slopes.

Thanks to the large fully glazed windows and portholes, present both at the bottom and on the roof, the 'Vista Clima' cab offers a **360° unobstructed view** of the wheel track, attachments and surroundings.

Equipped with standard ventilation, heating and air conditioning, the cab makes the working environment highly comfortable in every season of the year.

VANGUARD 65 AR



A	B	C	D	E min / max (with roll-bar)	E min / max (with cab)	F min / max	G min / max
1248	1390	779	3417	2195 / 2270	2087 / 2132	1002 / 1438	200 / 275

Dimensions in mm

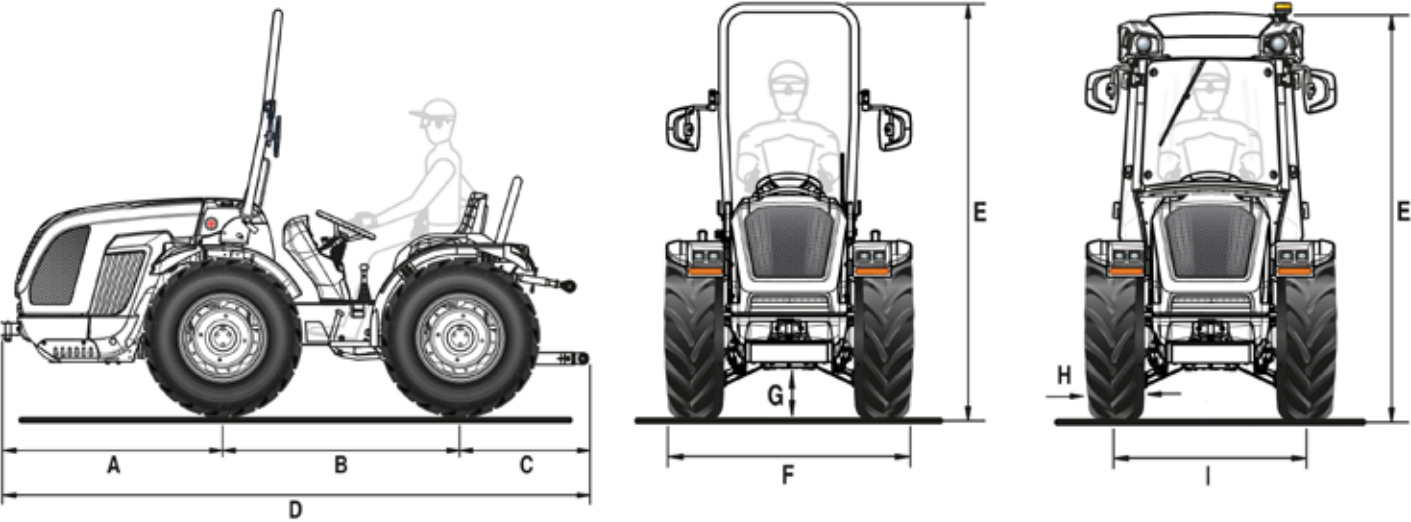
	8.25-16	210/95 R16	250/80-18	280/70 R18	280/70R18 Garden
	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim
H	212	208	240	282	282
I	794 / 1110	794 / 1110	865 / 1107	869 / 1119	869 / 1119
F	1006 / 1322	1002 / 1318	1105 / 1347	1151 / 1401	1151 / 1401

	320/65 R18	260/70 R20	31x15.50-15 XTC	31x15.50-15 STG	33x15.50-15 XTC
	with adjustable rim	with adjustable rim	with fixed rim	with fixed rim	with fixed rim
H	319	258	368	394	391
I	931 / 1119	846 / 1120	1003	1003	1003
F	1250 / 1438	1104 / 1378	1371	1397	1394

Dimensions in mm - min / max
H = Tyre width - I = Wheel track - F = Tractor width

TECHNICAL FEATURES	VANGUARD 65 AR
ENGINE	Rehiko KDI 1903 TCR Diesel common rail direct injection Turbo intercooler 3 cylinders 1861 cc Liquid cooling Stage V
Power	42 kW / 56 hp @2600 rpm Max torque 190 Nm@1500 rpm
Engine speed management	Electronically regulated with hand throttle knob and button with functions for: memorize/recall/exclude the set engine speed
CHIASSIS	Swinging integral chassis (±15°) OS-FRAME with central articulation
DRIVE	Permanent four-wheel drive
TRANSMISSION	24-speed synchronised gearbox: 12 FWD and 12 REV with synchronised reverser
Min/max forward speed (km/h)	0.7 / 32
Transmission clutch	Multidisc in oil bath
DIFFERENTIAL	Front and rear with simultaneous locking and electro-hydraulic control
AXLES	Front and rear with planetary reduction units
REAR PTO	Independent from the gearbox and synchronised with forwarding speed. Negative safety hydraulic brake to stop the PTO
PTO clutch	Multidisc in oil bath with electro-hydraulic control
PTO rotation speed (rpm)	540/540E
HYDRAULIC SYSTEM	Dual circuit with independent pumps
Hydraulic flow rate of the power steering and electro-hydraulic controls (l/min)	17
Hydraulic flow rate of the lift and control valves (l/min)	22 (optional: oversized pump with 30 l/min flow rate and heat exchanger)
Maximum hydraulic pressure (bar)	180
REAR LIFT	By two external cylinders. Standard: up/down lift - Optional: position and draft-controlled
3-point implement hitch	Standard: normal couplings cat. 1 - Optional: quick-couplings cat. 1 and 2, L-shaped (arms adjustable in length and hooks adjustable in width)
Third point tie rod	Standard: with manual adjustment - Optional: hydraulically controlled upper link and tie rod link arm (only for lift with L-shaped arms)
Ball joint lifting capacity (kg)	1510
REAR CONTROL VALVES	Mechanically controlled
Standard	With rear up/down lift: 1 double-acting and free flow oil return (total 3 hydraulic outlets) - With position and draft-controlled rear lift: 1 double-acting, 1 multifunctional double-acting and free flow oil return (total 5 hydraulic outlets)
Optional	With rear up/down lift: up to 7 hydraulic outlets in total and free flow oil return
Joystick (optional)	Proportional electronic control of rear lift and control valves consisting of: 1 continuous flow with adjustable flow rate and free flow oil return, 3 double-acting (replacing the standard ones), oversized pump and heat exchanger (total 8 hydraulic outlets)
DRIVING POSITION	Monodirectional or reversible with rotating platform suspended on silent blocks and twin pedal assembly
Steering wheel	Height adjustable
Seat	Comfort seat with adjustable suspension according to the operator's weight, safety belt and man-on-board sensor
SERVICE BRAKES	Multidisc in oil bath with mechanical control, acting on the rear wheels
Parking brake	Acting on service brakes
STEERING	Hydrostatic steering with two steering cylinders acting on the central joint. Flow deviator for steering unit in the reversible version
SAFETY	Front homologated roll-bar with gas spring for easy lowering and lifting
CABIN (optional)	VISTA CLIMA model, homologated and soundproofed with monocoque body with a 4-upright suspended on silent block. Ventilation, heating and air-conditioning system. Fabric seat, car radio preparation, LED beacon lamp, front and rear LED working lights
DASHBOARD	Instrument panel with analogue gauges and TFT digital colour display
Standard equipment	Vehicle Control Unit, LED street light and indicator system, single-pole dashboard socket, rear 7-pin socket
TYRES	Tractor: 8.25-16 * 210/95R16 * 250/80-18 * 280/70R18 * 320/65R18 * 260/70R20 Garden: 280/70R18 Terra Tyre: 31x15.50-15 XTC * 31x15.50-15 STG * 33x15.50-15 XTC
TOW HOOKS	Standard: front and rear CUNA cat. B adjustable in height - Optional: rear tow hook EC approved or EC with Slider frame or CUNA with Slider frame or EC tow bar with Slider frame
RUNNING ORDER WEIGHT	With roll-bar: 1625 kg - With cabin: 1770 kg
ADDITIONAL OPTIONS	Self Cleaning System™, front bumper, beacon lamp, front LED working lights, rear adjustable working light, front weights 110 kg total and wheel weights 45 kg each

VANGUARD 65 RS



A	B	C	D	E min / max (with roll-bar)	E min / max (with cab)	F min / max	G min / max
1248	1390	779	3417	2195 / 2270	2087 / 2132	1207 / 1643	200 / 275

Dimensions in mm

	8.25-16	210/95 R16	250/80-18	280/70 R18	280/70 R18 Garden
	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim
H	212	208	240	282	282
I	999 / 1305	999 / 1305	996 / 1312	984 / 1324	984 / 1324
F	1211 / 1517	1207 / 1513	1236 / 1552	1266 / 1606	1266 / 1606

	320/65 R18	260/70 R20	31x15.50-15 XTC	31x15.50-15 STG	33x15.50-15 XTC
	with adjustable rim	with adjustable rim	with fixed rim	with fixed rim	with fixed rim
H	319	258	368	394	391
I	1074 / 1324	987 / 1325	1100 / 1208	1100 / 1208	1100 / 1208
F	1393 / 1643	1245 / 1583	1468 / 1576	1494 / 1602	1491 / 1599

Dimensions in mm - min / max
H = Tyre width - I = Wheel track - F = Tractor width

TECHNICAL FEATURES	VANGUARD 65 RS
ENGINE	Rehiko KDI 1903 TCR Diesel common rail direct injection Turbo intercooler 3 cylinders 1861 cc Liquid cooling Stage V
Power	42 kW / 56 hp @2600 rpm Max torque 190 Nm@1500 rpm
Engine speed management	Electronically regulated with hand throttle knob and button with functions for: memorize/recall/exclude the set engine speed
CHIASSIS	Swinging integral chassis (±15°) OS-FRAME with steering wheels
DRIVE	Permanent four-wheel drive
TRANSMISSION	24-speed synchronised gearbox: 12 FWD and 12 REV with synchronised reverser
Min/max forward speed (km/h)	0.7 / 32
Transmission clutch	Multidisc in oil bath
DIFFERENTIAL	Front and rear with simultaneous locking and electro-hydraulic control
AXLES	Front and rear with planetary reduction units
REAR PTO	Independent from the gearbox and synchronised with forwarding speed. Negative safety hydraulic brake to stop the PTO
PTO clutch	Multidisc in oil bath with electro-hydraulic control
PTO rotation speed (rpm)	540/540E
HYDRAULIC SYSTEM	Dual circuit with independent pumps
Hydraulic flow rate of the power steering and electro-hydraulic controls (l/min)	17
Hydraulic flow rate of the lift and control valves (l/min)	22 (optional: oversized pump with 30 l/min flow rate and heat exchanger)
Maximum hydraulic pressure (bar)	180
REAR LIFT	By two external cylinders. Standard: up/down lift - Optional: position and draft-controlled
3-point implement hitch	Standard: normal couplings cat. 1 - Optional: quick-couplings cat. 1 (arms not adjustable in length) or quick-couplings cat. 1 and 2, L-shaped (arms adjustable in length and hooks adjustable in width)
Third point tie rod	Standard: with manual adjustment - Optional: hydraulically controlled upper link and tie rod link arm (only for lift with L-shaped arms)
Ball joint lifting capacity (kg)	1510
REAR CONTROL VALVES	Mechanically controlled
Standard	With rear up/down lift: 1 double-acting and free flow oil return (total 3 hydraulic outlets) - With position and draft-controlled rear lift: 1 double-acting, 1 multifunctional double-acting and free flow oil return (total 5 hydraulic outlets)
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Joystick (optional)	Proportional electronic control of rear lift and control valves consisting of: 1 continuous flow with adjustable flow rate and free flow oil return, 3 double-acting (replacing the standard ones), oversized pump and heat exchanger (total 8 hydraulic outlets)
DRIVING POSITION	Monodirectional or reversible with rotating platform suspended on silent blocks and twin pedal assembly
Steering wheel	Height adjustable
Seat	Comfort seat with adjustable suspension according to the operator's weight, safety belt and man-on-board sensor
SERVICE BRAKES	Multidisc in oil bath with mechanical control, acting on the rear wheels. Independent manoeuvring brakes acting on the rear wheels
Parking brake	Acting on service brakes
STEERING	Hydrostatic steering with two steering cylinders acting on the front wheels. Flow deviator for steering unit in the reversible version
SAFETY	Front homologated roll-bar with gas spring for easy lowering and lifting
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TOW HOOKS	Standard: front and rear CUNA cat. B adjustable in height - Optional: rear tow hook EC approved or EC with Slider frame or CUNA with Slider frame or EC tow bar with Slider frame
RUNNING ORDER WEIGHT	With roll-bar: 1660 kg - With cabin: 1800 kg
ADDITIONAL OPTIONS	Dual Floating System™ hydraulic suspension including 5 hydraulic outlets and free flow oil return, Self Cleaning System™, front bumper, beacon lamp, front LED working lights, rear adjustable working light, front weights 110 kg total and wheel weights 45 kg each

THE SERVICES



SPARE PARTS

A complete range of original spare parts,
guaranteed directly by the manufacturer.



ASSISTANCE

A team of specialists, well prepared and available
to assure an efficient and resolving service.



LUBRICANTS

We recommend to use the original PowerLube lubricants.

The information in this leaflet is not binding: the models described may be modified, without notice, by the Manufacturer.
MZ 12/25



MADE IN ITALY