MUCH MANY ADVANTAGES WITH VALIANT 600

OS-FRAME TRANSMISSION
in order to optimize mechanical efficiency and stability even on rough terrain.

REVERSIBLE DRIVING POSITION
optional on all models.

EXCELLENT DRIVING CONDITIONS
with ergonomic controls placed to be easily found and activated by the operator.

KOHLER ENGINE
with direct injection: low fuel consumption and excellent performance.

SERVICE BRAKES
oil immersed multidiic.

PLANETARY GEARS
on both axes in order to ensure maximum power transmission and durability.

LOOK
modern and captivating.

EXCELLENT DRIVING CONDITIONS
with ergonomic controls placed to be easily found and activated by the operator.

HYDRAULIC SYSTEM
high performance hydraulic system to adopt a great deal of hydraulically-fired equipments.

PTO INDEPENDENT
and synchronized with the gearbox.

SHORT WHEELBASE
in order to reduce turning radius so as to be able to move with maximum ease even in small spaces.

A proposal for all your needs

The Valiant 600 are isodiametric tractors extremely versatile and reliable. They have been studied in detail for specific use in vineyards, orchards, greenhouses and, in general, for specialized crops where the tractor’s structural characteristics are of fundamental importance in allowing work to be done in a practical way. The excellent steering radius, the four-wheel drive that optimizes the power that is transmitted to the wheels and a compact and secure alignment, allow the Valiant 600 provide performances at the top of their category, along with excellent levels of productivity and low operating costs.
Isodiametric tractors, monodirectional or reversible, with central articulation

The **Valiant 600 AR** are specialized tractors, born to be used in particularly narrow areas: row cultivations, vineyards, orchards, greenhouses and nurseries. They are particularly performing machines, thanks to the isodiametric wheels and the frame with central articulation. The limited steering radius, the reversibility of the driving position (optional) and the constant adherence to the ground make the **Valiant 600 AR** multi-purpose and versatile machines. In spite of the limited dimensions, the driving position is particularly comfortable with easily reachable controls also in the reversed position.

Isodiametric tractors, monodirectional or reversible, with steering wheels

The **Valiant 600 RS** are multi-purpose specialized tractors, particularly performing in vineyards, orchards and greens maintenance. The low hub and the all-wheel drive assure stability and adherence to the ground and allow the **Valiant 600 RS** to work both on flat and sloping grounds. The engine power together with the perfect weight distribution on the axles make them safe and trustworthy supporters. The reversible driving position (optional) allows to operate practically and safe both with rear-and front-mounted attachments.

### Valiant 600 RS

<table>
<thead>
<tr>
<th>VALIANT</th>
<th>Type</th>
<th>Power (kw/hp)</th>
<th>No. of cylinders</th>
<th>Displacement</th>
<th>Aspiration</th>
<th>Cooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>KDi 2504M</td>
<td>36 / 49</td>
<td>4</td>
<td>2482</td>
<td>Natural</td>
<td>Water</td>
</tr>
</tbody>
</table>

**Kohler KDi 2504M**: compact, reliable and performing

The **Valiant 600** are mounting a 4-cylinder, 2.5 liter Kohler engine developing 49 horsepower with a vigorous torque of 170 Nm corresponding to just 1500 rpm.

**PLUS**

The new Synchro 24-speed gearboxes (12 forward + 12 reverse) assure a maximum speed of more than 30 km/h for both driving directions, with synchronized inverter. Logical speed sequence, no overlaps throughout all ranges, always allows right gear selection for the tasks for which the tractor is intended to, enabling fuel saving and an overall high operating quality. The “Long-life” clutch designed for **Valiant 600** is a wet multiple discs one, allowing easy and gradual engagements. It is mounted in the transmissions system to reduce engine overhang and the tractor length and it does not require maintenance.
AN ABSOLUTELY UNIQUE CONTEXT

PLUS

High performing hydraulic system

The hydraulic system is a dual circuit, powered by two independent pumps: one pump controls the power steering and electro-hydraulic control (maximum flow rate 15.3 l/min), the other pump controls the hoist and the distributors (maximum flow rate 25.6 l/min). Operation hydraulic pressure is 180 bar.

Transmission and high quality axles

The Valiant 600 are provided with OS-Frame transmissions awarding the highest tractor maneuverability and the best mechanical output.

The joint in the middle of the machine lets the front axle oscillate up to 15° with respect to the rear axle, stabilizing the machines on steep terrain.

The 4-wheel drive allows absolute safety on every terrain, exploiting to the maximum the machine’s designed towing and security outfits.

The distribution of the weights on the axles, 40% on the rear and 60% on the front, is proved optimal once the rear lifting equipment is mounted.

The Valiant 600 are equipped with planetary gear axles in order to ensure maximum power transmission and durability.

Lever strength

The solid rear hydraulic lift, with its high lifting capacity, relies on multi-purpose practical and versatile connections designed to adapt in a fast and simple way to all marketed equipments. Lifting arms are equipped with normal connections, quick couplers and quick couplers with hook angular lateral adjustment.

PTO with maximum power needed to transmission

The rear PTO is independent from the gearbox and synchronized with all progress speeds. PTO at 540 rpm can be engaged in a practical and safe way through an electro-hydraulic control.

Reserved to the driver

The driving position is custom-fitted on the driver with ergonomic controls placed to be easily found and activated by the operator. The reversibility can be achieved in just a few seconds thanks to the rotating console which allows the driving position consisting of seat-steering wheel-instrument panel, to rotate by 180°, so that the operator can practically and rationally work both with rear and front attachments.

The braking system with multi-disc wet brakes, the roll-bar and the safety belts on the seat assure the highest safety of operation in every conditions.
TECHNICAL FEATURES

VALIANT 600 AR

CHASSIS
Swaying-integral chassis 06-FRAW, with central articulation

ENGINE
4-cylinder Diesel engine with Direct Injection
- Model: KOHLER
- Number of cylinders: 4
- Displacement (cm³): 2482
- Suction: Naturally aspirated
- Power (kW/HP): 36/49
- Nominal speed (rpm): 2600
- Maximum tractor torque (Nm/rpm): 170/1500

COOLING
Water

TANK CAPACITY
45 l

TRANSMISSION
Synchronized gearbox: 24 speeds (12 forward and 12 reverse) with synchronized reverser
- Main clutch: Multi-disc, in oil bath

DIFFERENTIAL
Front and rear with simultaneous differential lock and electro-hydraulic control

AXLES
Front and rear, with epicyclic reduction units

POWER TAKE-OFF
Rear, independent from the gearbox, 540 r.p.m. and synchronized with the gearbox. Engageable under load with brake in disengaged position
- PTO clutch: Multi-disc, in oil bath

ELECTRIC SYSTEM
- Battery (Ah): 100
- Alternator (A): 80

DISTRIBUTORS
Mechanical control to max. 6 hydraulic couplers
- Rear (standard): 2 double acting (Hydraulic lift by rams)
- Rear (optional): 1 single acting and 1 double acting with float or 2 double acting in addition to the standard one (Hydraulic lift by ram and draft and position control)

SAFETY
- Roll-bar frame (standard): Front, homologated

CONSOLE
- Standard: 8.25-16

STEERING UNIT
- Monodirectional or reversible with rotating platform and twin pedal assembly
- Steering wheel: Adjustable

STEERING RADIUS
- Valiant 600 AR: 675 mm

STEERING WHEEL
- With hydrostatic steering by two rams, acting on the central articulation. Flow divider for steering unit for the reversible version

WEIGHT OPERATIONAL
- With roll-bar (kg): 675
- Optional: Flash light, front weight and weights for wheels
**TECHNICAL FEATURES VALIANT 600 RS**

<table>
<thead>
<tr>
<th>Tyre type</th>
<th>8.25-16</th>
<th>250/80-18</th>
<th>280/70R18</th>
<th>320/65R18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyre width (mm)</td>
<td>212</td>
<td>240</td>
<td>282</td>
<td>319</td>
</tr>
<tr>
<td>Tyre height (mm)</td>
<td>848</td>
<td>879</td>
<td>849</td>
<td>873</td>
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<tr>
<td>Tyre track mm/min.</td>
<td>999</td>
<td>1305</td>
<td>996</td>
<td>1312</td>
</tr>
<tr>
<td>Width mm/min.</td>
<td>1211</td>
<td>1517</td>
<td>1236</td>
<td>1552</td>
</tr>
</tbody>
</table>

**STEERING RADIUS VALIANT 600 RS WITH THE FORESEEN WHEELS:**

<table>
<thead>
<tr>
<th>Tyre type</th>
<th>8.25-16</th>
<th>250/80-18</th>
<th>280/70R18</th>
<th>320/65R18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyre width (mm)</td>
<td>258</td>
<td>368</td>
<td>394</td>
<td>351</td>
</tr>
<tr>
<td>Tyre height (mm)</td>
<td>872</td>
<td>800</td>
<td>800</td>
<td>782</td>
</tr>
<tr>
<td>Tyre track mm/min.</td>
<td>987</td>
<td>1325</td>
<td>1100</td>
<td>1208</td>
</tr>
<tr>
<td>Width mm/min.</td>
<td>1245</td>
<td>1583</td>
<td>1468</td>
<td>1576</td>
</tr>
</tbody>
</table>

**VALIANT 600 RS CHASSIS**

- Swinging integral chassis OS-FRAME with steering wheels
- Engine
  - 4-cycle Diesel engine with direct injection
  - Model: KOHLER KD2250AM
  - Displacement: 2482 cm³
- Power kW/HP: Naturally aspirated, 36 / 49
- Nominal speed (rpm): 2400
- Maximum tractor torque (Nm/rpm): 170 / 1550
- Cooling: Water
- Tank capacity (lt.): 4

**TRANSMISSION**

- Synchronized gearbox: 24 speeds (12 forward and 12 reverse) with synchronized reverser
- Power-take-off: Front and rear with differential lock and electro-hydraulic control

**AXLES**

- Multidisc, in oil bath
- Tyre width mm./Optional 250/80-18 * 280/70R18 * 320/65R18 * 260/70-20 * 31x15.50-15 XTC and STG * 31x13.50-15 Garden

**DISTRIBUTORS**

- Mechanical control to max. 4 hydraulic couplers
- Rear (standard) 1 double acting Hydrostatic lift by ram
- Rear (optional) 1 single acting and 1 double acting with flat or 2 double acting in addition to the standard one (Hydraulic lift by ram)
- Rear (optional) 1 single acting and 1 double acting with flat instead of the standard one (Draft and position control)

**HYDRAULIC SYSTEM**

- Flow rate to the hoist and the distributors (l/min.) 25.6
- Flow rate to hydraulic pump which controls the hydroguide and electro-hydraulic control (l/min.) 15.3
- Maximum hydraulic pressure (bar): 180

**ENGAGEMENT CONTROL**

- Electro-hydraulic

**ELECTRIC SYSTEM**

- Battery (Ah): 100
- Alternator (A): 80

**REAR LIFT**

- Standard: by two external rams – Optional: draft and position control
- Three-point hitch: standard couplers cat. 1 – Optional: quick couplings cat. 1 – 1 L-shaped lift arms, lift rods adjustable in length and hooko adjustable in width
- Three-point tie bar: With manual adjustment

**STEERING UNIT**

- Driving platform: Monodirectional or reversible with rotating platform and twin pedal assembly
- Steering wheel: Adjustable
- Standard: Front, homologated
- Optional: ‘Bostrom’ seat

**SERVICE BRAKES**

- Oil immersed multidisc, acting on the rear transmission, with mechanical control

**STEERING**

- With hydrostatic steering, acting on the front wheels. Flow deviator for steering unit for the reversible version

**SAFETY**

- Roll-bar frame (standard) Front, homologated

**CONSOLE**

- Digital type: With chron-tacho-gyrometer, water thermometer, control warning lights and acoustic alarm. Reading of rpm, forward speed and rotation speed of power takeoff

**TYRES**

- Standard: 280/70R18 * 31x13.50-15 XTC and STG * 31x13.50-15 Garden

**WEIGHT OPERATIONAL**

- With rear lift: 1560 kg
- Optional: Accumulator for weight compensation HDR with Dual Floating System (only for reversible version), Flash light, front weight and weights for wheels
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.

WARRANTY
A precise certainty for the customer’s satisfaction: 2-year warranty included in the price.

LUBRICANTS
BCS recommends to use the original PowerLube lubricants.