

Turboloader



Gianni
Ferrari



M RANGE



H RANGE

Wheel loader, telescopic handler or skid steer loader? Turboloader has it all!

➤ Turboloader is a versatile machine that is ideal for the garden, for public maintenance work, agriculture, construction work, materials handling and any other industry where power and functionality in a compact package is a key factor.



➤ Chassis

The articulated chassis gives a very tight turning radius, reducing the room needed for manoeuvring and enabling Turboloader to move with confidence even in cramped spaces.

The articulated chassis and equal sized wheels ensure agile manoeuvring when used indoors or in building yards. Whatever gap the front half-frame goes through, the rear half-frame will follow.

The rear wheels always follow the same path of the front ones, minimising compaction of the ground. Its articulated steering means Turboloader can work even on the most delicate surfaces without damage, making it ideal for landscaping and maintenance of green areas.



➤ Visibility

Unlike a traditional articulated loader, Turboloader's operator position is located on the machine's front half-frame. Even when steering the machine, the operator always has a perfect view of the way ahead, the implement and the task being performed.

The elevated driving position offers excellent visibility, enhanced safety and superb comfort as well as improving control of the machine and its implements.

The side-mounted dashboard panel and the layout of the lifting boom rams also assist in providing an uncluttered view of the attachment.



- **Turbo loader has the manoeuvrability of a wheel loader**
- **Turbo loader offers the benefits of a telescopic handler**
- **Turbo loader has the compact dimensions of a skid steer loader ... and it's even more versatile!**

This is no compromise, it's a winning combination of great features!



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➤ **Telescopic boom**

Turbo loader's telescopic arm (not available on the MS 220) provides impressive horizontal and vertical reach.

The standard hydraulic parallel linkage makes materials handling faster, easier and safer. The self-levelling feature significantly reduces the amount of manual adjustments and loads are lifted in total safety.

By selecting the floating arm position, the implements will follow irregular surfaces smoothly and with ease.

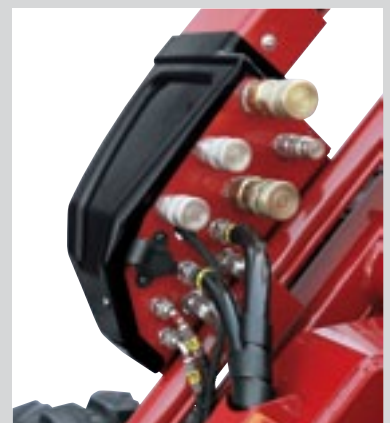
The simultaneous movement of the arm and bucket helps reduce cycle times and enhance productivity.

➤ **Quick connect**

Replacing the attachments is very quick and only takes a few seconds due to the quick connect system.

The implements are easily fitted and released from the operators seat by using an electronic joystick control that activates a pair of hydraulic latches.

The flat-face hydraulic couplings are very easy to clean and are ideal for use in dusty or dirty environments. They prevent fluid leaks and air pockets developing in the circuit during connection and disconnection. They also ensure superior performance due to reduced friction losses.



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- ▶ The M range of Turboloader is fitted with 3-cylinder 22 - 28 hp engines and, with an operating weight of 1,4 to 2 metric tons, it can handle loads of up to 1.100 kg. H range models have an operating weight from 1,9 to 2,3 metric tons and can handle loads of up to 1.400 kg. A 4-cylinder 36 hp engine equips the H360 model. The long wheelbase of the H range gives the machine exceptional stability and driving comfort. This exclusive configuration increases lifting capacity by over 25% compared to the M range, while maintaining the same very compact dimensions and the same manoeuvrability. The optimum weight distribution provides better pushing force delivery and therefore improved bucketing.



▶ Cab

Turboloader can be equipped with an optional heated cab. The 5 adjustable air vents ensure a uniformly distributed flow of air inside the cab, at both footrest and head level. The external thermal units are behind the cab so as not to increase the overall height of the machine. All the glazed surfaces are made of approved tempered glass.

The integral, one-piece

windscreen ensures optimum visibility without obstacles or distortions, while the rear windows provide the field of view required for manoeuvring.

The cab equipment includes two pairs of work lights (front and rear), the kit for road use (headlights, indicators, rotating beacon, horn and rear-view mirrors) and the front windscreen wiper. Inside the cab, the courtesy light, 12V electric socket (cigarette lighter receptacle) and amplified stereo speakers with connection for an MP3 player offer high levels of comfort. Air conditioning is available on request (optional).

▶ Driving position

Designed for intensive use, Turboloader offers superior ergonomics as standard. These include the electro-hydraulic servo-assisted joystick which is sensitive and accurate to use, or the comfortable Grammer seat with lumbar support and headrest, adjustable armrests and suspension (optional in heated version too).

The separate throttle and transmission controls allow for low speed manoeuvring whilst keeping the engine at high RPM, so that sufficient hydraulic power is available to operate attachments like the trencher, stone burier, snow thrower, etc.

The cruise control is ideal when working on uneven ground or at constant (even extremely low) speeds.



H 360

► Engine

Turboloader is equipped with low-emission engines that are fully compliant with the current anti-pollution directives. The radiator with anti-clog fin is generously proportioned and ensures high heat exchange even in unfavourable conditions, thus prolonging the life of the engine, the oil and the hydraulic components. On H models a practical hatch provides handy access to the engine compartment for easy checks and daily maintenance.



4WD

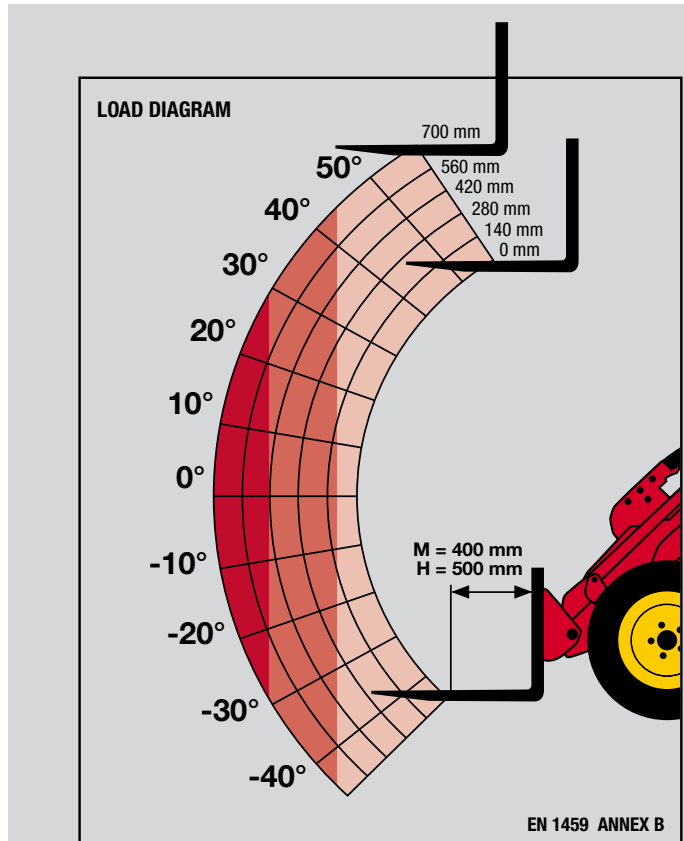
► Transmission

The permanent 4-wheel drive hydrostatic transmission uses high quality, robust, reliable components. The high specification of the components ensures ample pushing force together with a high transport speed, allowing for maximum productivity. Turboloader's standard equipment includes a useful anti-slip device which can help extricate the machine in low-grip situations. As an additional aid for difficult situations a flow divider can be activated which divides the hydraulic flow and obtain a differential locking effect (optional).



► Safety

Operator safety has been given the utmost priority. The ROPS frame is available in rigid 4-post version with see-through polycarbonate roof for a perfect view of the work when boom is raised. A foldable ROPS is also available as a variant which enables the Turboloader to be transported on limited height transports, to pass through reduced headroom openings and to be stored in environments with low ceilings. Turboloader is equipped with an overload prevention device and a load anti-spill device as standard. The first blocks the telescopic extension of the boom in the case of loss of grip at the rear wheels due to a possible excessive load. The load anti-spill device prevents the load accidentally spilling backwards on top of the operator.



| | | | | | | |
|---------|--------|---------|--------|----------|--------|----------|
| M RANGE | 270 kg | 550 kg* | 400 kg | 720 kg* | 640 kg | 1100 kg* |
| H RANGE | 400 kg | 850 kg* | 550 kg | 1050 kg* | 750 kg | 1400 kg* |

* with counterweights, PU filled tyres and cab

Attachments



Utility bucket

| | | |
|---------------------|---------------------|---------------------|
| Width | 115 cm | 135 cm |
| Capacity (ISO 7546) | 0,23 m ³ | 0,27 m ³ |
| Weight | 78 Kg | 85 Kg |
| Tooth bar | optional | optional |
| Teeth | 7 | 8 |



Multipurpose 4 in 1 bucket

| | | |
|---------------------|---------------------|---------------------|
| Width | 115 cm | 135 cm |
| Capacity (ISO 7546) | 0,26 m ³ | 0,31 m ³ |
| Weight | 152 Kg | 164 Kg |
| Tooth bar | optional | optional |
| Teeth | 7 | 8 |



High tip bucket

| | | |
|---------------------|---|---------------------|
| Width | 115 cm | 135 cm |
| Capacity (ISO 7546) | 0,41 m ³ | 0,48 m ³ |
| Weight | 161 Kg | 170 Kg |
| Max. tipping height | 270 ¹ – 328 ² – 332 ³ cm | |

¹ MS 220 – ² M 220 – ³ M 280/H 360



Light material bucket

| | |
|---------------------|---------------------|
| Width | 150 cm |
| Capacity (ISO 7546) | 0,69 m ³ |
| Weight | 122 Kg |



Pallet fork

| | | |
|-----------------------|---------|---------|
| Length | 80 cm | 115 cm |
| Fork carriage - Class | FEM 2A | FEM 2A |
| Load capacity | 1000 Kg | 1200 Kg |
| Weight | 100 Kg | 125 Kg |



Bale fork

Vertically folding tines for safe transportation

| | |
|-----------------------------------|--------|
| Tines distance (centre-to-centre) | 85 cm |
| Tines length | 140 cm |
| Weight | 95 Kg |



Industrial type grapple fork

| | | |
|-----------------------------|--------|--------|
| Width | 110 cm | 130 cm |
| Tines length | 57 cm | 57 cm |
| (Bolt-on replaceable) Tines | 7 | 9 |
| Weight | 149 Kg | 157 Kg |



Manure fork

| | |
|--------------|--------|
| Width | 125 cm |
| Tines length | 52 cm |
| Tines | 8 |
| Weight | 73 Kg |



Snow thrower

| | |
|-----------------------------|---------------------|
| Type | double stage |
| Working width | 130 cm |
| Ejection pipe rotation | hydraulic |
| Deflector chute inclination | electric |
| Cutting edge | bolt-on replaceable |



Spreader

| | |
|-----------------|-------------|
| Capacity | 110 – 170 L |
| Spreading width | 0,8 ÷ 6 m |
| Power supply | 12 V |



Snow blade

Optional rubber or steel cutting edge

| | | |
|-------------------|------------------|---------------------------------------|
| Overall width | 150 cm | 175 cm |
| Mouldboard | straight | flared |
| Mouldboard height | 55 cm | 63 cm (at centre), 70 cm (at ends) |
| Angling | hydraulic, ± 30° | hydraulic, ± 35° |
| Cylinders | 1 | 2 |
| Trip springs | 3 | 4 |



Roller-compactor

Can be filled with water for 100 kg additional weight

| | |
|-----------------|--------|
| Working width | 130 cm |
| Roller diameter | 35 cm |
| Weight | 225 kg |



Leveller

| | |
|-------|--------|
| Width | 150 cm |
|-------|--------|



Extension boom

| | |
|--------|--------|
| Length | 110 cm |
| Weight | 42 Kg |



Stump grinder

| | |
|-------------------------|-----------|
| Grinding wheel diameter | 500 mm |
| Teeth | 9 |
| Sweep | hydraulic |



Telescopic extension boom

| | |
|------------------------------|-----------|
| Min. boom length (retracted) | 130 cm |
| Max. boom length (extended) | 200 cm |
| Extension | hydraulic |
| Weight | 70 Kg |



Trencher

| | |
|----------------------------|----------|
| Max. digging depth | 80 cm |
| Digging width | 14 cm |
| Trench cleaner | included |
| Cup teeth for regular soil | standard |
| Bits for stony ground | optional |



Auger

Regular or rocky soil boring head as option

| | |
|------------------------------|--------------|
| Hexagonal drive shaft | 50 mm |
| Auger drill diameter (range) | 100 ÷ 450 mm |
| Auger drill length | 100 cm |
| Extension shafts | optional |



Side discharge + mulching mower deck

Conversion kit included

| | |
|---------------------------|---------------------------------|
| Cutting width | 150 cm |
| Blades | 3 |
| Cutting height adjustment | SA™ rapid adjustment 2,5 ÷ 7 cm |



Flail mower

| | | |
|---------------------------|----------------------|-----------------------|
| Cutting width | 120 cm | 150 cm |
| Blade reel | 56 flails (28 pairs) | 100 flails (50 pairs) |
| Cutting height adjustment | 2 ÷ 9 cm | 2 ÷ 9 cm |



1-side hedgecutter

Can be configured to work on left side or right side

| | |
|------------------------------------|---|
| Cutterbar length | 150 cm |
| Tilt adjustment | hydraulic |
| Tilt angle | 120° (+15° up ; -105° down) |
| Max. cutting height vertical bar | 345 ¹ – 403 ² – 407 ³ cm |
| Max. cutting height horizontal bar | 350 ¹ – 408 ² – 412 ³ cm |
| Side shift | manual, 58 cm |
| Max. side reach vertical bar | 130 cm, from machine centre |
| Max. side reach horizontal bar | 272 cm, from machine centre |

¹ MS 220 – ² M 220 – ³ M 280/H 360



2-side reach arm hedgecutter

Cuts both right and left sides as standard

| | |
|------------------------------------|---|
| Cutterbar length | 150 cm |
| Controls | hydraulic |
| Operating angle | 360° |
| Max. cutting height vertical bar | 648 ¹ – 706 ² – 710 ³ cm |
| Max. cutting height horizontal bar | 526 ¹ – 584 ² – 588 ³ cm |
| Max. side reach vertical bar | 240 cm, from machine centre |
| Max. side reach horizontal bar | 355 cm, from machine centre |

¹ MS 220 – ² M 220 – ³ M 280/H 360



Stone burier

| | |
|--------------------|--------|
| Working width | 125 cm |
| Max. working depth | 15 cm |
| Hoes | 24 |
| Roller width | 145 cm |



Rotary tiller

| | |
|--------------------|--------|
| Working width | 130 cm |
| Max. working depth | 25 cm |
| Hoes | 24 |



Front hoe

| | |
|-----------------------------|----------------|
| Max. digging depth | 2,3 m |
| Swing arc | 170 ° |
| Bucket width | 40 cm |
| Bucket capacity (ISO 7451) | 0,036 m³ |
| Breakout force at the tooth | 2.200 Kg |
| Stabilizer width | 130 cm |
| Stabilizer bars | hydraulic |
| Side shift | hydraulic lock |



Swing dipper arm

| | |
|-----------------------------|----------|
| Max. digging depth | 1,5 m |
| Swing arc | 170° |
| Bucket width | 30 cm |
| Bucket capacity (ISO 7451) | 0,025 m³ |
| Breakout force at the tooth | 2.200 Kg |

➤ Turboloader is a versatile, compact, agile and powerful machine. **Turboloader: don't call it just "loader" ...**

TECHNICAL SPECIFICATIONS

| | MS 220 | M 220 | M 280 | H 360 |
|--|--|---|-------------------------------|--------------------|
| Model | | | | |
| Engine | | | | |
| Fuel | Diesel | Diesel | Diesel | Diesel |
| Model | Kubota D902 | Kubota D902 | Kubota D1105 | Kubota V1505 |
| Power / Displacement | 22 hp / 898 cc. | 22 hp / 898 cc. | 28 hp / 1123 cc. | 36 hp / 1498 cc. |
| No. Cylinders / Cooling | 3 / Liquid | 3 / Liquid | 3 / Liquid | 4 / Liquid |
| Fuel tank capacity | 24 L | 24 L | 24 L | 24 L |
| Transmission | | | | |
| Type | Hydrostatic closed loop system with variable displacement piston pump and orbital motors | | | |
| Piston pump / orbital motors | Poclain / Sauer-Danfoss | | Sauer-Danfoss / Sauer-Danfoss | |
| Driving wheels | 4WD | 4WD | 4WD | 4WD |
| Pushing force | 9.000 N | 9.000 N | 11.200 N | 11.200 N |
| Traction control | Anti-slip selector switch circuit (standard) - Differential lock through hydraulic flow divider (optional) | | | |
| Forward / reverse motion (standard) | 1 pedal (single foot pedal + direction switch on the joystick) | | | |
| Forward / reverse motion (optional) | 2 pedals (forward foot pedal + reverse foot pedal) | | | |
| Maximum speed | 12 km/h | 12 km/h | 12 km/h | 19 km/h |
| Parking brake | Mechanical | Hydraulic negative action multi-disc brakes in oil bath | | |
| Steering system | Articulated chassis, with power steering wheel | | | |
| Wheels/Tyres | | | | |
| Industrial type (standard) / Turf type (optional) / Agricultural type (optional) | 23x8.50-12 | 23x8.50-12 | 26x12.00-12 | 26x12.00-12 |
| Puncture proof infilling | optional | optional | optional | optional |
| Lift boom | | | | |
| Telescopic arm | — | • | • | • |
| Maximum lifting height (at pin) | 246 cm | 304 cm | 308 cm | 308 cm |
| Maximum overhang (at mounting plate) | 54 cm | 124 cm | 120 cm | 120 cm |
| Breakout force (at 50 cm from mounting plate) | 1.420 kg | 1.420 kg | 1.420 kg | 1.420 kg |
| Hydraulic lifting capacity (at pin) * | 2.100 kg | 2.100 kg | 2.100 kg | 2.100 kg |
| Self-levelling system | Hydraulic parallelogram as standard | | | |
| Floating position | • | • | • | • |
| Mounting plate | Quick connect & release system controlled from the driver's seat | | | |
| Hydraulic system | | | | |
| Type | Open loop with 2 gear pumps | | | |
| Gear pumps | Sauer-Danfoss | Sauer-Danfoss | Sauer-Danfoss | Sauer-Danfoss |
| Oil flow | 61 (36+25) L/min | 61 (36+25) L/min | 66 (24+42) L/min | 66 (24+42) L/min |
| Maximum pressure | 200 bar | 200 bar | 200 bar | 200 bar |
| Oil tank capacity | 24 L | 24 L | 24 L | 44 L |
| Hydraulic controls | 12 function electro-hydraulic proportional and servo-controlled joystick | | | |
| Front hydraulic outlets | | | | |
| PTO auxiliary hydraulics (High Flow) | 3 flat-face quick-release couplings, 3/4" inlet and outlet, 3/8" drainage | | | |
| Secondary auxiliary hydraulics | 2 flat-face quick-release couplings 3/8" | | | |
| Rear hydraulic outlets (optional) | | | | |
| Auxiliary hydraulics | 2 flat-face quick-release couplings 3/8" | | | |
| Electrical system | | | | |
| Battery | 12 V / 70 Ah – battery master switch as standard | | | |
| Alternator | 40 A | 40 A | 40 A | 40 A |
| Electrical outlet | 12 V DC socket on lift boom, for electric controls and actuators power | | | |
| Optional | Front and rear work lights – Road legal light kit with rotating beacon | | | |
| Safety devices | | | | |
| Safety sensors | EEC European Standard / ISO – Load anti-spill sensor device – Machine anti-overturning sensor device | | | |
| ROPS (version) | 4-post, rigid, with transparent polycarbonate roof | | | |
| ROPS (version) | 2-post, foldable | | | |
| Cab (optional) | | | | |
| Cab features | Ventilation and heating system – On-road use equipment – 2 front and 2 rear work lights – front wiper – courtesy light – 12 V socket (cigarette lighter receptacle) – stereo speakers with connection for an MP3 player. Air conditioning (optional) | | | |
| Weight and measures (with rigid 4-post ROPS) | | | | |
| Unloaded weight | 1.190 kg | 1.360 kg | 1.440 kg | 1.670 kg |
| Length / Width / Height | 255 x 111 x 207 cm | 255 x 111 x 207 cm | 255 x 126 x 211 cm | 255 x 126 x 211 cm |

* for the operative load capacity refer to the load diagram



GTM - GSM
15,5-16 hp



GTR
16-20 hp



GTS
20-22 hp



GT
28 hp



TURBO Z
23 hp



TURBOGRASS
22-23 hp



PG - SR
22-28 hp



TURBO 1-1W-2-4
28-44 hp



TURBOLOADER
22-36 hp

