



YANMAR

COMPACT WHEEL LOADER

V120



Operating weight	7 000 kg
Engine power	74,4 kW (101 CV)
Bucket capacity	1,2 - 1,8 m ³
Lifting force	71 kN
Breakout force at bucket edge	59 kN

Versatility & effectiveness in the most different contexts



STRAIGHT AND RIGID ARTICULATION

For better reliability, for better stability. The wheels forward and backward follow the same way. No damage to the lawns, or pavements. Short turning radius and optimal positioning of pallet forks.



PARALLEL KINEMATICS

Thanks to its parallel kinematic system, the V120 takes loads quickly and precisely without having to constantly adapt the load angle.



HYDRAULIC QUICK-HITCH SYSTEM

The quick-hitch system allows the accessories to be easily changed from the cabin with two controls



MOTOR

Complies with EU Phase III B / EPA Tier 4 final standards, guaranteeing reduced fuel consumption and emissions. The cross-mounted motor allows easy access for maintenance and counterweight.





QUALITY OF COMPONENTS

Components developed in Europe and renowned for their excellent quality. The design and performance of the components make it possible to carry out heavy construction tasks and ensure a long service life.



EASY TO USE

The front axle is pivoted in an electrically proportional manner. Various additional functions are integrated directly to movements with exceptional precision.



CAB

Designed to ensure maximum comfort and productivity for the operator, the booths are equipped with a damping system for noise and vibration. They are ROPS / FOPS certified.



REAR AXLE OSCILLATING

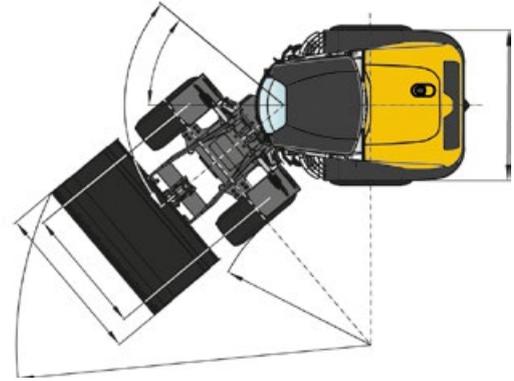
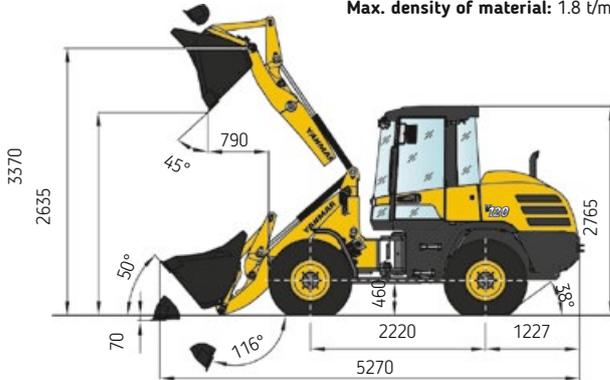
Improved operator comfort, increased machine stability, longer life. The stability of the machine is optimized when using the bucket and forks.

DIMENSIONS



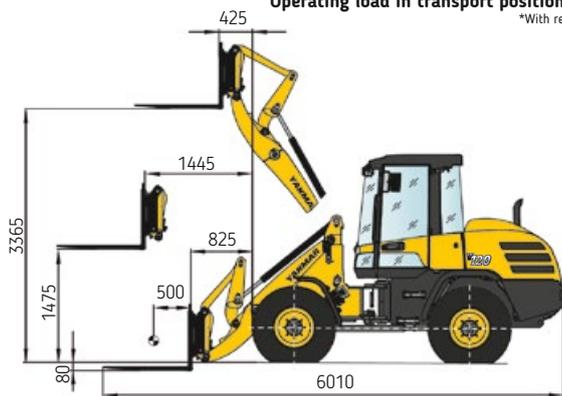
GENERAL-PURPOSE BUCKET

Capacity in compliance with ISO 7546: 1.20 m³
Max. density of material: 1.8 t/m³



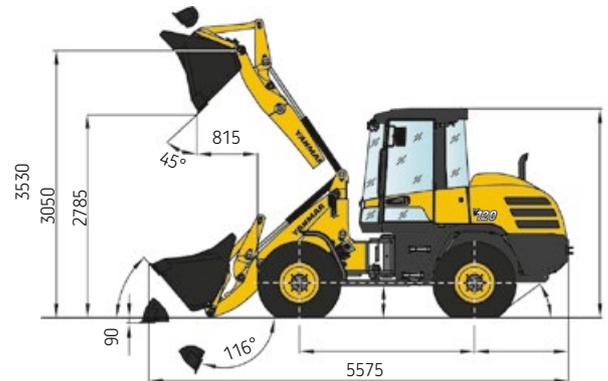
FORK LIFT ATTACHMENT

Operating load over total lift range: 2900 (3100*) kg
Operating load in transport position: 3500* kg
*With rear axle weights



MULTI-PURPOSE BUCKET

Capacity in compliance with ISO 7546: 1.05 m³
Max. density of material: 1.6 t/m³



BUCKET TYPE

	Contents	Density	Width	Dump height
General-purpose bucket, quick-attach system (QAS), teeth	1,20 m ³	1,8 t/m ³	2100 mm	2750 mm
General-purpose bucket, QAS, bolt-on cutting edge	1,20 m ³	1,8 t/m ³	2100 mm	2710 mm
Earth bucket, QAS, teeth	1,35 m ³	1,6 t/m ³	2100 mm	2700 mm
Earth bucket, QAS, bolt-on cutting edge	1,35 m ³	1,6 t/m ³	2100 mm	2660 mm
Light-material bucket, bolt-on cutting edge	1,55 m ³	1,2 t/m ³	2100 mm	2610 mm
Light-material bucket, bolt-on cutting edge	1,80 m ³	0,8 t/m ³	2200 mm	2550 mm
Multi-purpose bucket, QAS	1,05 m ³	1,6 t/m ³	2100 mm	2785 mm
Side-dump bucket, QAS, without teeth	0,85 m ³	1,8 t/m ³	2100 mm	2665 mm
High-tip bucket, QAS, without teeth	1,20 m ³	1,2 t/m ³	2100 mm	3970 mm
High-tip bucket, QAS, without teeth	1,80 m ³	0,6 t/m ³	2200 mm	4030 mm
Quarry bucket, QAS	0,95 m ³	2,15 t/m ³	2100 mm	2780 mm
Compost bucket	1,20 m ³	1,2 t/m ³	2100 mm	2750 mm

EXAMPLES OF MATERIAL DENSITIES

Granite, basalt, sand (damp), gravel (damp), slate: 1.8 - 2.2 t/m³ - Topsoil, clay, mineral coal: 1.1 - 1.6 t/m³
Sandstone, gypsum, limestone, soil (damp), sand (dry), gravel (dry): 1.5 - 1.8 t/m³ - Wood chips (dry), compost, coke: 0.2 - 1.0 t/m³

PROVISIONAL

SPECIFICATIONS

[OPERATING DATA, STANDARD EQUIPMENT]

Operating weight (ISO 6016)	7 100 kg
Tipping load, straight at full reach (ISO 14397-1)	5 000 kg
Tipping load, articulated at full reach (ISO 14397-1)	4 400 kg
Total length, bucket on ground	5 480 mm
Total width	2 100 mm
Turning radius at outside bucket edge	4 680 mm
Wheelbase	2 290 mm
Total height (top of cab)	2 780 mm

[ENGINE]

Manufacturer, model	Deutz, TCD 3,6 L4
Type	4-cylinder turbo diesel engine with intercooler, EU Stage IV / Tier 4 Final
Combustion	4-stroke cycle, Common Rail injection
Displacement	3 600 cm ³
Net power rating at 2200 rpm (ISO 9249)	74,4 kW (101 CV)
Cooling system	Water

[ELECTRICAL SYSTEM]

Nominal voltage	12 V
Lighting system in compliance with German and European standards	

[POWER TRANSMISSION]

Hydrostatic drive, closed circuit, independent from loader hydraulics. Perfected driving automatics, automatic adjustment of drawbar pull and speed. Hydraulic motor power shift providing two speed ranges. Infinitely variable speed control forward and reverse. 4-wheel drive from reduction gear on rear axle via cardan shaft to front axle. Brake inching pedal.

2 speed ranges:	"Low"	0-6 km/h
	"High"	0-20 km/h
4 speed ranges (high-speed version optional):	"Low"	0-6 / 0-19 km/h
	"High"	0-11 / 0-36 km/h

[AXLES]

Front: Rigid planetary final drive axle, center-mounted drum brake. Limited slip-type differential 45%.

Rear: Oscillating (with cushioning) planetary final drive axle, with integrated reduction gear. Limited slip-type differential 45%.

Angle of oscillation $\pm 8^\circ$

[BRAKES]

Service brake:	Hydraulically actuated center-mounted drum brake, acting on all 4 wheels via 4-wheel drive.
Auxiliary brake:	Hydrostatic through closed-circuit travel drive
Parking brake:	Mechanically actuated center-mounted drum brake on front axle.

[TIRES]

Standard	406/70 R 20 SPT 9 Dunlop
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SPECIFICATIONS

[STEERING]

Articulated, 2 steering cylinders with final positioning damping on both sides, fully hydraulic through. Load-Sensing priority valve, quick and easy steering even at engine idle-running speed.

Total steering angle	80°
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[FLUID CAPACITIES]

Fuel tank	110 l
Ad Blue tank	10 l
Hydraulic system (incl. tank)	93 l

[HYDRAULIC SYSTEM]

Pump capacity	78 l/min
Working pressure	250 bar

Control unit: Proportional hydraulic valve with 3 control circuits, supplying work functions "Lift / Lower", "Dump / Tilt-back with high-speed control" and "3rd control circuit (1st additional control circuit)". Simultaneous, independent control of all movements.

Hydraulic cylinders: 1 lifting cylinder, 1 tilt cylinder, all dual-action

The thermostatically controlled oil circuit ensures that the oil temperature is promptly reached and avoids overheating. Return filter installed in hydraulic tank allows for eco-friendly replacement of filter elements.

Control for 3rd control circuit, electro-proportional, oil flow limitation via machine function display, continuous operation. Installation on loader frame incl. couplings.

Hydraulically switchable float position by overdriving the pressure point "Lower" on the joystick, electrically switchable continuous operation function.

Single, four-way control lever (joystick) with integrated direction-of-travel switch and switch for additional control circuit.

[LOADER FRAME]

Loader installation featuring true parallel linkage and integrated mechanical (optionally hydraulic) quick-hitch system.

General-purpose bucket (ISO 7546)	1,20 m ³
Lift capacity at ground level (ISO 14397-2)	71 kN
Breakout force at bucket edge (ISO 14397-2)	59 kN

[FORK LIFT ATTACHMENT]

Operating load over the total lift and steering range	2 900 (3 100*) kg
Operating load in transport position, approx. 300 mm above ground level, total steering range	3 500 kg
Width of fork carrier	1 240 mm
Length pallet forks (140x50 mm)	1 120 mm
Stability factor	1,25
Operating load determined on level ground = 80 % of tipping load, articulated	

[CAB]

Rubber-mounted full-vision steel cab, ROPS* (EN ISO 3471) and FOPS** (EN ISO 3449) certified.

Cab featuring two doors, electric windshield intermittent wipers and washer (front and rear), tinted panoramic safety glass, sliding window on left-hand side.

Driver's seat MSG85 (standard version) with hydraulic cushioning and lap belt, weight-adjustable, in compliance with ISO 7096 and ISO 6683.

Cab heating with 3-speed heater fan (choice fresh air/recirculating air) and windshield defroster, front and rear.

Air conditioning and radio pre-installation, steering wheel with height and tilt adjustment. 2 working floodlights, front.

Sound power level LWA	101 dB (A)
Sound pressure level LpA	74 dB (A)
Effective values of acceleration for whole body	less than 0.5 m/s ²
Effective values of acceleration for hand-arm	less than 2.5 m/s ²

*With rear axle weights / **FOPS-approved only with skylight guard (optional) / FOPS solo con rejilla para ventana (opcional) / Sound level values measured in compliance with Directive 2000/14/EC and EN474 / Vibration values in compliance with Directive 2006/42/EC and EN474



OPTIONAL EQUIPMENT

[OPTIONS]

TIRES

405/70 R 20 EM 01 Mitas | 400/70 R 20 IT530 Goodyear | 380/75 R 20 XZSL Michelin | 16/70-20 EM E 91-2 Dunlop | 420/75 R 20 XMCL Michelin | 405/70 R 20 MPT E-70 Conti | Non-standard tires available on request

FRONT ATTACHMENTS

General-purpose bucket*: 1,20 m³ | Earth bucket*: 1,35 m³ | Light-material bucket*: 1,55 / 1,80 m³ | Side-dump bucket*: 0,85m³ | High-tip bucket*: 1,20 / 1,80 m³ | Multi-purpose bucket*: 1,05 m³ | Quarry bucket: 0,95 m³ | Compost bucket: 1,20 m³ | Front ripper with 4 prongs | Fork lift attachment: Fork carrier, 1240 mm wide | Load hook, attachable on fork arms | Load hook, integrated in quick-hitch system | Crane jib with rigid arm | Crane jib, telescopic (mechanical) | Snow blade

DRIVER'S STAND

Operator's seat MSG 85 (comfort version), hydraulic damping, extra-high backrest, weight-adjustable, lap belt | Air-cushioned operator's seat MSG 95 (premium version) with orthopedic lumbar support, extra-high backrest, adjustable armrests, seat and backrest heating

HYDRAULIC SYSTEM

4th control circuit, Fingertip' control, (electro-proportional control) and installation on lift frame incl. couplings and continuous operation e.g. for attachments with 2 hydr. functions | 4th control circuit, High-Flow, 116 l/min, 180 bar, (electro-proportional control) and installation on lift frame incl. couplings | 4th control circuit, single-acting, Fingertip' control, (electro-proportional control) with pressureless return and installation at rear-end | Hydraulic outlet for front hand-held hammer, with flow divider | Open return, on lift frame | Ride control system

CAB

FOPS-skylight guard | Yellow beacon | Right-hand door with sliding window | Engine-independent diesel heater with timer | Working floodlight, rear | Air-conditioning

OTHER OPTIONAL EQUIPMENT

High-speed version 36 kph | Manual throttle, transmission deactivated | Filling with biodegradable hydraulic oil, esterbased, BIO-E-HYD-HEES | Anti-theft device (immobilizer) | Electrical tank refilling pump Rear axle weights | Pilot-controlled hose-rupture valves for lift and tilt cylinders | Central lubrication system | Back-up alarm for reverse travel | Battery disconnecter | Further optional equipment available on request

*Optionally with bolt-on cutting edge

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