



PREMIERE

MADE IN
RUSSIA

WHEEL LOADER TL150



EQUIPMENT OF YOUR SUCCESS

TL150 WHEEL LOADER

Launching of the new TL150 has become a major event of 2017.

As usual, a top priority of our company is development of innovative construction & road-building and specialty equipment.

TL150 offers a wide range of competitive advantages and a distinctive exterior. The machine has been tailored to meet the Russian operational circumstances and is ready for use in different spheres of the industrial, civil, road or utility construction.

We offer our customers a ready-to-use solution together with the bundled technical support to achieve the top performance.

Easy-to-transport

- ▶ total height 3.15 m (transportation by any truck transport)
- ▶ total width 2.5 m (can travel on public roads)

Dumping into high-sided tanks

- ▶ dump height 3.15 m
- ▶ bucket pivot height 4.19 m



Versatility

- ▶ possibility to install a wide range of work attachments



Comfortable cab

- ▶ roomy & spacious
- ▶ all-round visibility
- ▶ finger-tip control

Standard cab features

- ▶ LCD display
- ▶ rear-view camera
- ▶ climate control

High performance

- ▶ standard 3m³ capacity bucket
- ▶ short cycle time

SPECIFICATIONS

Weight	14.5 t
Engine power	140 kW
Operating load	5 t

Different versions for different climates:

— standard — for mid-latitudes at temperatures of – 40 to +50 °C;

— tropical — for tropical humid or dry climates.

Service interval — 500 km/h.

— 3-year warranty (or 3,000 engine hours).

Fuel efficiency

- ▶ advanced inline engine, YaMZ530

Effective cooling system

- ▶ bundled radiator of the engine and hydraulics
- ▶ automatic fan drive

Easy start at low temperature

- ▶ engine preheater

- ▶ hood with tilting rear panel, opening side wind shutters give access to the cab air filter

Operations in confined areas

- ▶ turning radius 5.43 m

CABIN

All-round visibility, ROPS and FOPS, heating and ventilation.

Cab features:

- ▶ panoramic front & rear glasses
- ▶ pantograph windshield wiper with washer for full cleaning of the front glass
- ▶ sliding window in the right & left doors
- ▶ electric rear-view mirrors
- ▶ front & rear lights
- ▶ shock mounts
- ▶ work lights
- ▶ beacons on universal brackets
- ▶ headlights
- ▶ rear lamps
- ▶ rear-view camera



COMFORTABLE WORK PLACE



Features:

- ▶ multifunction display (parameters: fuel consumption, engine rpm, engine temperature, oil pressure, battery charge level, engine hours, rear-view cam image)
- ▶ size-conscious seat with handy adjustment controls to ensure operator's comfort and individual adaptation of the work place
- ▶ climate control (air filter, air conditioner, heater)
- ▶ stereo system with FM radio and USB
- ▶ cigarette lighter



Controls:

- ▶ joystick to control work attachments
- ▶ climate control panel
- ▶ heater control panel
- ▶ electronic accelerator pedal
- ▶ brake pedal with transmission cut-off
- ▶ steering column which can be height & angle adjusted



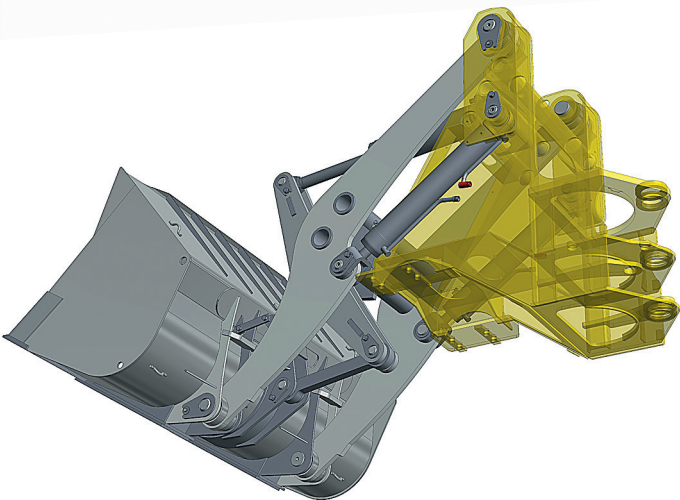
WORK ATTACHMENTS FOR DIFFERENT JOBS

TL150 wheel loader is a high-performance machine which confidently shows required efficiency in different operational circumstances through built-in reliability, short cycle time and mobility.



The bucket design provides for a high rear wall to prevent spillage when dumping into a dump truck with high sides.

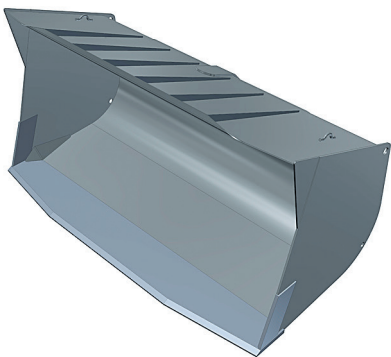
The wheel loader can be equipped with different types of work tools such as loading bucket (4.2 m³), rock bucket, bulldozer blade etc.



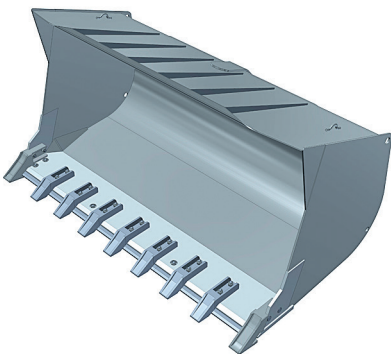
The main work tool is the bucket hinged to the boom. The hydro cylinders ensure lifting or lowering of the boom, while the levers ensure rotation of the boom to grab efficiently the loose cargo and adjust the bucket angle when lifting or dumping.

Loading equipment with Z-type bucket drive.

Hinges of the work tools are unified. Spacing bushings minimize the clearances and ensure axial fixation of joints. Seals ensure protection of exposed wear surfaces from dirt.



Loading bucket



Rock bucket



Bulldozer blade

RELIABILITY & PERFORMANCE

TRANSMISSION

Both axles leading & permanent-drive.

The front axle has a rigid fastening to the front frame. The rear axle is hinged to the frame and can rotate $\pm 15^\circ$ to ensure constant wheel contact.

Axle construction

The final drive and differential (optional) in the central gear, the final planetary drive and service brakes –in the wheel reduction gear. Open-type locking –free differentials.

The service brake system ensures effective slowing down of the loader bucket-full. The peculiarity of the system is that when you tap the brake pedal the hydraulic transmission gets off (switches to the intermediate position). The torque gets over from the gearbox drive to the hydraulic pumps' drive. That substantially increases tear-out & digging forces, and as a result reduces the cycle.

Service brakes – oil-immersed disc-type, maintenance free. The hydraulic system ensures an energy level required to slow down after engine cut-off.

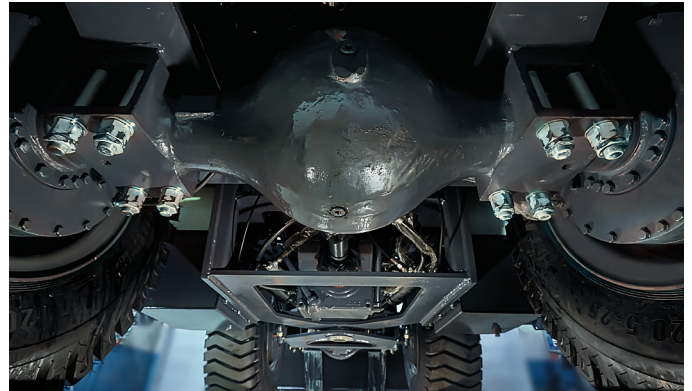
Hydraulic transmission with hydraulic converter:

- ▶ changes the speed of rotation and torque in the range wider than the engine can do.
- ▶ ensures reverse movement
- ▶ lengthy engine cutoff from the axles at startup or idle run

The hydraulic transmission 4WG180 includes a hydraulic converter, planetary gearbox, and parking brake. Transmits torque to the front & rear axles. Manual gear change, 4 forward gears and 3 reverse gears.

The hydraulic transmission input shaft has:

- ▶ Tandem gear-wheel pump to actuate the hydraulic system of the work attachments, steering control system and service brakes.
- ▶ Parking brake drum. Brake mechanism – shoe brake, open-circuited, hand-driven. Actuated through a lever in the cab.



Hydraulic transmission



Drive axle

POWERTRAIN

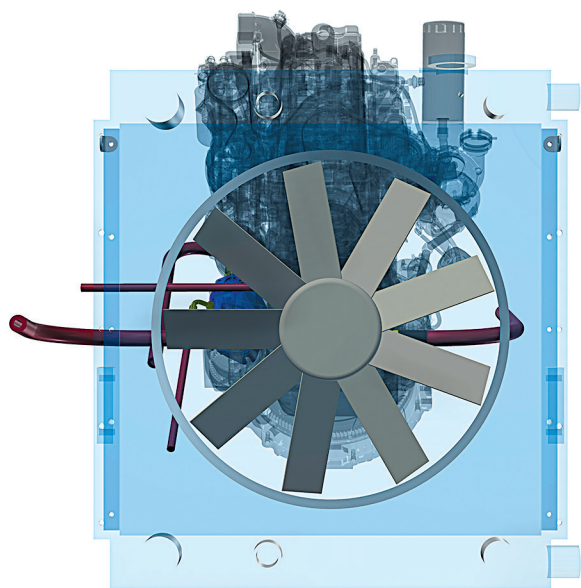


Advanced Russian-made engine, YaMZ530

- ▶ Fuel efficient
- ▶ Low level of noise or vibration
- ▶ Easy cold start
- ▶ Power boost

Displacement	4,43 L
Net power rating	140 kW
Nominal speed	2300 rpm
Minimum idling rpm	800+50 rpm
Cylinders	4
Fuel rate	213,5 g/kW.hr

SMART FAN DRIVE COOLING SYSTEM



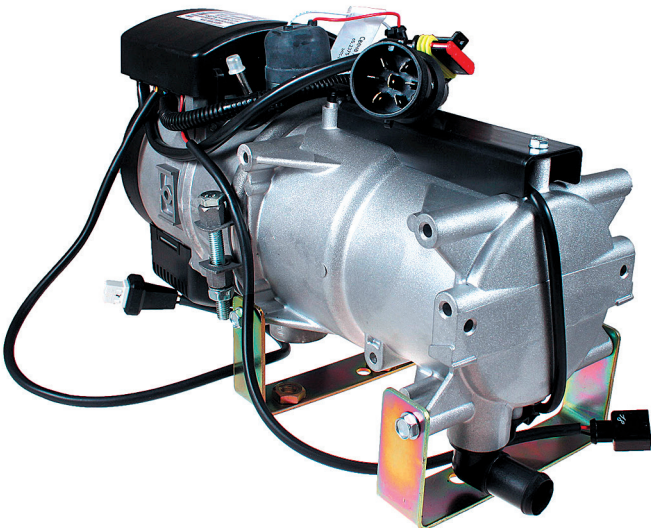
Independent fan drive system includes:

- ▶ controlled axial piston pump
- ▶ hydraulic fan drive motor
- ▶ electronic control unit reading data from temperature sensors of the hydraulic transmission and coolant
- ▶ integrated unit of radiators of the engine and hydraulic system together with the diffuser, fan and hydraulic drive motor

Benefits:

- ▶ improved heat-release efficiency
- ▶ reduced fan noise
- ▶ economical efficiency
- ▶ system self-test and emergency mode

To start the engine in cold seasons the wheel loader has diesel preheater Teplostar TS14-mini with the capacity of 14 kW.



MAINTENANCE

Easy access to the cab and points of daily maintenance.

Loader hood with tilting rear panel. Opening side shutters give access to the cab air filter.



The wheel loader design ensures safety during operations or maintenance. Three points of foothold and bearing when getting to the cab.

To reduce the labor content associated with maintenance the wheel loader has centralized lubrication of the attachments.



SPECIFICATIONS

OPERATING WEIGHT

Base model, kg	14 500
With additional attachments, kg	16 500

ENGINE

Series	YaMZ 530
Type	Diesel
Displacement, L	4,43
Net power rating, kW (hp)	140 (190)
Rated engine speed, rpm	2300
Minimum idling rpm	800+50

PERFORMANCE

Work cycle time (sec) incl.:	10
Boom raise (with rated bucket payload)	5,4
Dumping	1,3
Boom down	3,3

HYDRAULIC SYSTEM

Implement hydraulic system, MPa	20,0
Steering pressure, MPa	17,0

ELECTRICAL SYSTEM

Nominal voltage, V	24
Batteries: Type	6CT-110
Number	2

FLUID CAPACITIES

Fuel tank, L	180
Engine coolant circulating	40
heating system, L	12
Hydraulic system of hydro mechanical transmission, L	40
Axle drive, kg	16
Wheel gearing (each), kg	5
Loader hydraulic system, L	200

CONTROLS

Transmission control	Electrohydraulic
YnBrakes: Service Parking	Hydraulic Mechanic
Attachments & frame articulationоворотом	Hydraulic

CHASSIS

Frame	Articulated
Max articulation angle	Not less than ± 40°
Front suspension	Rigidly mounted
Rear suspension	Hinged
Axles	Driving
Wide-section tires	20,5–25
Tire pressure, MPa	0,27 ± 0,03

MAXIMUM DRIVING SPEEDS

Forward, kph	5,2–40
Reverse, kph	5,2–18,5

TURNING RADIUS

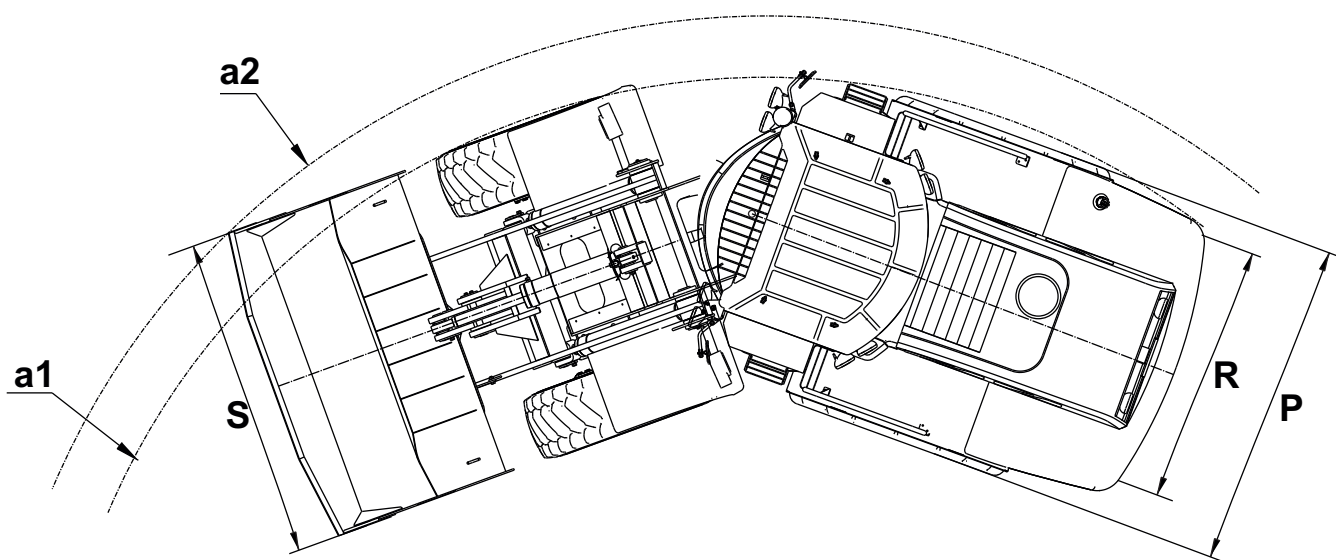
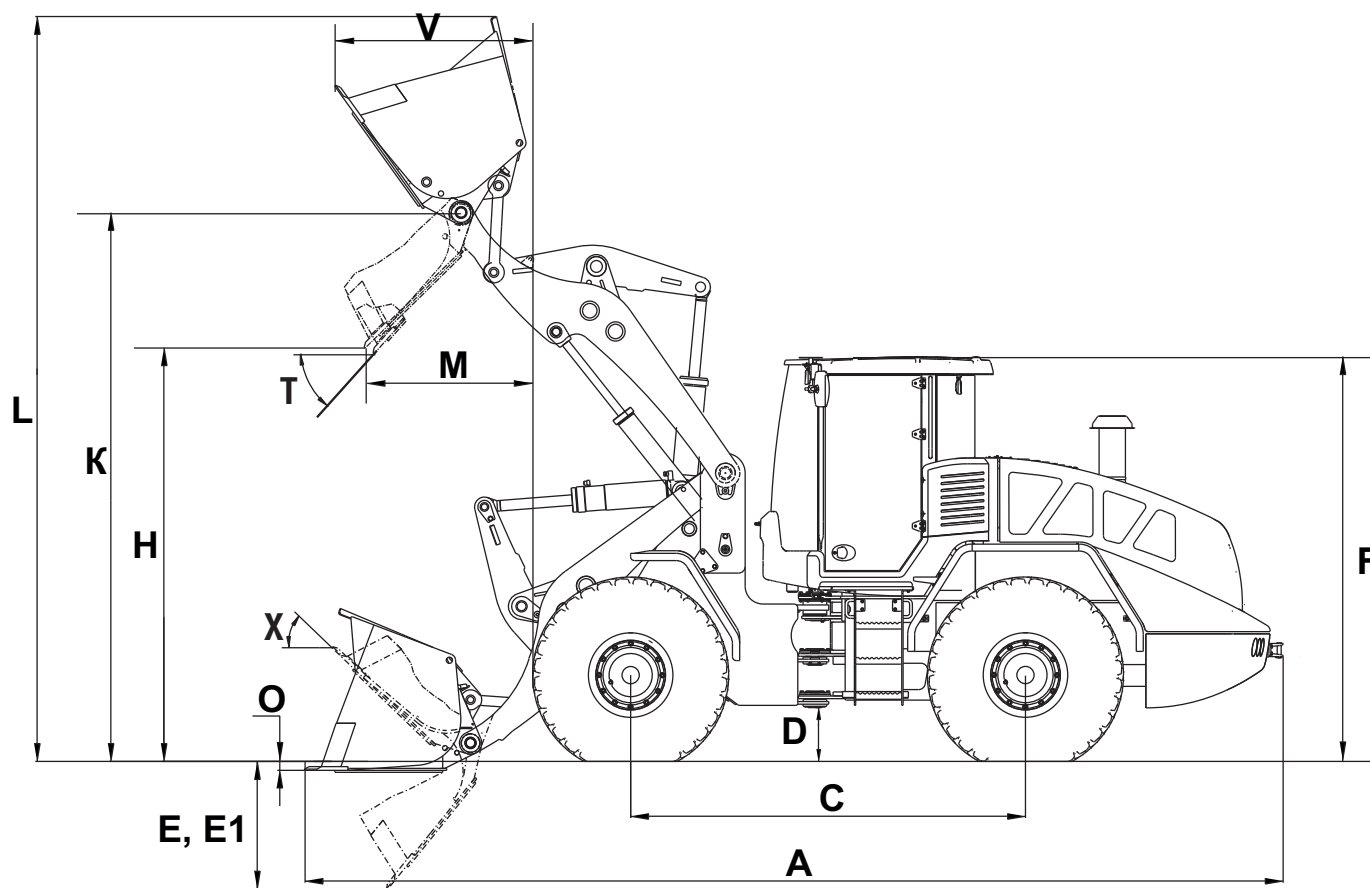
a1 at outside tire edge, m	5,43
a2 at outside bucket edge, m	5,8

GEARS

Forward	4
Reverse	3

OPERATING DATA

E1 Max digging depth, mm	1018
H Dumping clearance, maximum height and 45° dump angle, mm, at least	3150
K Max height of bucket pivot point, mm	4190
L Max operating height, mm	5705
M Reach at maximum height and 45° dump angle, mm, at least	1300
O Max digging depth, mm, at least	57
S Bucket width, mm	2450
T Max dumping angle at maximum dumping height, at least	49°
V Reach of bucket cutting edge, fully raised, mm	1400
X Max tipping angle	44°



DIMENSIONS

A Total length, bucket on ground, mm	7500
P Total width, mm	2500
F Total height (top of cab), mm	3150
C Wheelbase, mm	3000
D Clearance, mm	400
R Wheel track, mm	1950





STANDARD EQUIPMENT

Cab <ul style="list-style-type: none">▶ FOPS-ROPS compliance▶ Hydraulic shock absorbing legs▶ 2 doors with glazing and fixation wide-open▶ Air-vent windows with fixation▶ Wipers with washers on front & rear windows▶ 2 rear-view mirrors▶ Box for personal belongings▶ Heater with cab air filter▶ Air conditioner▶ Multifunctional joystick to control attachments▶ Armrest on console▶ Seat distance adjustment vs. steering column▶ Steering wheel with height & tilt adjustment▶ Mechanical seat▶ Possibility of turning wheels with engine & hydraulic pump off▶ Window blower, regulated deflectors▶ Tinted upper segment of the windshield▶ Audio system (stereo + speakers)	<ul style="list-style-type: none">▶ Beacons on cab top▶ LED display▶ Plate holder with illumination▶ Working lights Chassis <ul style="list-style-type: none">▶ Staircases with broadstep on the right & left of cab▶ Grab handles & railings▶ Cardan drive to front axle inside center hinge▶ DRL, turn signals and stop signals▶ Halogen lamps▶ Standard SPTA Features <ul style="list-style-type: none">▶ YaMZ 530 engine▶ Automatic cooling fan (Fan Drive)▶ Rear-view camera▶ Fuel filter separator▶ Independent engine preheater▶ Centralized lube system Attachments <ul style="list-style-type: none">▶ General-purpose bucket (3 m³)
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OPTIONAL EQUIPMENT

Cab <ul style="list-style-type: none">▶ 2 rear-view heated mirrors▶ Air suspension heated seat▶ LED lights Features <ul style="list-style-type: none">▶ Automatic lube system Attachments <ul style="list-style-type: none">▶ Bucket stabilizer▶ Safety valves on hydraulic cylinders of the boom▶ Automatic bucket positioning▶ Additional hydraulic & electric circuits for attachments	<ul style="list-style-type: none">▶ Rock bucket (3m³)▶ General-purpose bucket (2.6m³)▶ Rock bucket (2.6m³)▶ Rock bucket (2.3m³)▶ General-purpose bucket (2.3m³)▶ Light-material bucket (4.2m³)▶ Clamshell grab▶ Fork carrier▶ Forks▶ Bulldozer blade▶ Snow blade▶ Quick-attach system
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FINANCIAL SERVICES

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RM-TEREX CUSTOMER CARE



Support that you expect

- ▶ Online market with full range of spare parts to satisfy requirements of our customers
- ▶ Central warehouse ensures timely supply of original spare parts to service centers of our dealers across Russia, to CIS and non-CIS
- ▶ Training of dealers based on unified programs & techniques ensures high skill levels of dealers' staff

service@rm-terex.com

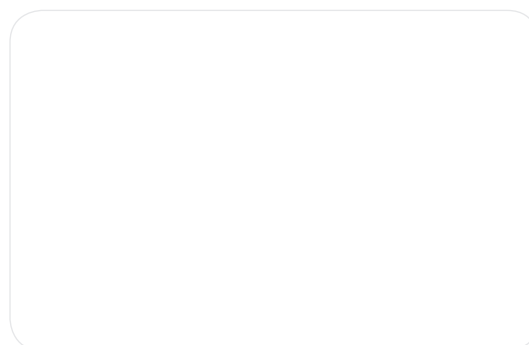
SALES GEOGRAPHY





Phone: +7 (495) 728-49-55
Fax: +7 (495) 728-49-56
E-mail: info@rm-terex.com
www.rm-terex.com

Service & Warranty Support:
service@rm-terex.com



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