

ROAD CONSTRUCTION EQUIPMENT & SPECIALTY MACHINES

BACKHOE LOADERS







BACKHOE LOADERS

www.umg-sdm.com

VERSATILITY IN MOTION

HOUSING & COMMUNITY SERVICES

TRANSPORT INFRASTRUCTURE

ELECTRIC POWER INDUSTRY

IRON & STEEL INDUSTRY

MINING & PROCESSING

OIL & GAS

ROAD CONSTRUCTION

COMMERCIAL, CIVIL & INDUSTRIAL CONSTRUCTION

LUMBER INDUSTRY

AGRIBUSINESS

LOADING & UNLOADING OF LOOSE, BULK & NONSTANDARD MATERIALS

UMG

DIGGING OF FOUNDATION PITS & TRENCHES

LEVELLING, GRADING

DEMOLITION OF BUILDINGS, PILING, POLING

DRILLING HOLES FOR TREE PLANTING, TREE STUMPING

Crushing, breaking of reinforced concrete structures & rocks

Transportation of loose and bulk building materials $oldsymbol{\epsilon}$ soil

LANDSCAPING



VERSATILITY

The highly productive machines are used for efficient works at any industrial site: in the areas of housing & community services, road & civil construction, agriculture, repair & maintenance operations.

RELIABILITY

The open circuit hydraulic system with tandem gear pump ensures high reliability and productivity.

The rigid metal chassis and work equipment elements are designed for intensive operations. Wide wings with "soft" shock-absorbing mounting prevent crippling of the wing in case of a shock impulses resulting from impact with an obstacle.

The welded steel tanks - fuel and hydraulic - are more resistant than the plastic ones in case of an impact against obstacles.

The hood of the powertrain has one-piece design – it has no removable panels or other elements that may be exposed to deformation or loss.

The fully tilting hood offers easy access to the engine compartment from both sides.

OFFROAD CAPABILITIES

The perfect offroad features are ensured by allroad tires and high ground clearance under the axle housing, stabilizer legs and swing frame. The front axle balance suspension with bigger oscillation angle ensures good stability and contact patch.

MANEUVERABILITY

The backhoes demonstrate perfect steering and maneuverability on a construction site due to ultra small turning circle: TLB 825 - 8.4 m, TLB 935 - 7.44 m.

PRODUCTIVITY

Control of work functions is exercised through a section valve with direct lever engagement. For precision excavation works or transfer of high torque to the transmission, the hydraulic pressure relief function is used when the fluid from one pump is fully discharged to the tank. The backhoe loaders get equipped with reliable diesel engines from Perkins – turbocharged 1104C-44T with 4 cylinders that complies with Tier 2. The engine ensures a high torque in a wide range of speeds. The torque margin is 29%.

SAFETY

The spacious FOPS/ROPS cab.

The backhoe boom transport lock with activation from the cab will hold the boom assembly during maintenance operations.

The rear axle service brakes from Carraro (Italy) have brake disks covered with Kevlar. These wear-resistant disks have a long service life and do not require adjustment.

TLB 935

The all-wheel steering system enables choosing from three modes:

- "standard" –front-wheel steering only;
- "in trail" active four-wheel steering. It is used when maneuverability is critical, and the operator needs to reduce the turning radius;
- "crab steering" it operates by steering all wheels in the same direction and at the same angle.

The Carraro Servo Power Synchro transmission with servo control, electro-hydraulic actuation of the synchronizer for the speed shift and Powershift Forward-Reverse Shuttling.

TLB 825

The 2WD mode enables saving of fuel and transmission service life during fast travelling on paved roads. The 4WD mode ensures good offroad performance and enables smooth travelling on weak surfaces.

The synchronized 4-speed SynchroShuttle gearbox enables shifting while in motion and change the driving direction.



Ergonomic pedal to control the breaker and telescopic stick. It substantially reduces the operator's fatigue.



Tilt steering column. Ergonomic steering wheel that does not require significant efforts from the operator when maneuvering. The wheel has a wheel spinner to help make steering with one hand less difficult & faster.



Comfortable adjustable high-back operator's seat with armrests, headrest and retractable seat belt.



The upper parts of the doors can be fully opened and locked for better ventilation.



Double-pin boom lock for securing the backhoe boom for transport. This function does not require exit of the operator since it is remotely activated from the operator's cab.



The one-piece rear window opens easily and can be locked open making a rain canopy and ensuring comfortable environment during a warm period.

SPECIFICATIONS	TLB 825	TLB 935			
Weight, t	8.03	8.8			
Drivetrain arrangement	4x4x2	4x4x4			
Ground clearance under stabilizer legs / swing frame, mm	n/a	400 / 530			
Wheel steering	2 WS	2WS, 4WS, crab			
ENGINE		2113, 1113, 3133			
Model (environmental class)	Perkins 1104D-44TA (Tier2)	Perkins 1104D-44TA (Tier2)			
Cylinders, units	4	4			
Displacement, L	4.4	4.4			
Power, kW	68.5	74.5			
SERVICE REFILL CAPACITITES					
Fuel tank, L	120	120			
Hydraulic tank, L	90	90			
HYDRAULIC SYSTEM	90	90			
Type	Open center	Open center			
Max displacement, L/min	142 (80+62)	142 (80+62)			
·		22.5			
Operating pressure, MPa AXLES		22.5 			
Front axle	Drive steer independent syle	Drive steer independent syle			
Rear axle	Drive-steer, independent axle	Drive-steer, independent axle			
WHEELS & TIRES	Drive nonsteered, rigid axle	Drive nonsteered, rigid axle			
Standard tires, front axle	12.5X18-12 PR	16.9x24			
Standard tires, rear axle	16.9X28-12 PR	16.9x24			
Wheelbase, mm	2,135	2,135			
Min turning radius without brakes, mm	8.4	7.44			
Transmission	Synchro Shuttle	ΓMT SPS (Servo Power Synchro)			
Max travel speed, kmph	40	39.5			
LOADER BUCKET		00.0			
Dumping height, mm	2,708	2,906			
Max breakout force, bucket hydraulic cylinder, kN	47.56	65			
Max breakout force, lift arm hydraulic cylinder, kN	43.45	55			
Bucket capacity, m ³	1.0	1.2			
BACKHOE					
Boom	Straight	Curved			
Stick	Telescopic	Telescopic			
Bucket, m³	0.18	0.25			
Max digging depth, mm	5,782	5,642			
Max digging reach, mm	7,017	6,960			
Max bucket digging force, kN	52.60	66.6			
Max stick digging force, kN	26.44	42			
Digging side shift, mm	1,286	1,178			
DIMENSIONS 1,176					
Length, mm	5,920	6,135			
Width, mm	2,340	2,386			
Overall height to top of cab, mm	2,810	2,863			
Overall height to top of cab, filliff	2,010	2,003			

LOADER PERFORMANCE



SPECIFICATIONS	TLB 825	TLB 935
Bucket 7 in 1, m ³	1.0	1.2
Dumping height, mm	2,741	2,876
Max reach at full height, mm	829	1,120
Height to hinge pin, mm	3,583	3,633

The loader (inhouse design and manufacture) is made of super-strong metal and has unique payload, high breakout force and dumping height.

The robust high-end loader lift arm together with the innovative bucket gear ensure long failure-free performance and low maintenance costs. The "float position" function enables easy spreading & leveling of materials on site or loading the bucket on flat surface, e.g., during snow removal. The self-leveling system ensures less losses of materials during its transportation on rough surface to help enhance your productivity.

Multipurpose bucket 7-in-1:

- Earthworks
- Loading
- Bulldozer operations
- Scraper operations
- Spreading and leveling
- Loading operations by clamshell bucket
- Craning

BACKHOE PERFORMANCE



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Digging reach, mm	7,017	6,960
Digging depth, mm	5,782	5,642
Digging force, kN	52.60	66.6

Due to the design of the backhoe (inhouse design and manufacture) the machine can handle any works in confined areas of the most dense cities without any reshuffles thus saving your time and fuel.

The boom design, curved for TLB 935 and straight for TLB 825, ensures easy performance over obstacles without touching them; it reduces the distance to a truck during loading thus reducing the machine cycle time.

The telescopic stick made of super-strong metal ensures reduced cycle time and high suction for quick and precise filling of the bucket. The retractable inner section enables having a bigger digger reach.

The inhouse-manufacture buckets have improved geometry and are made of superstrong metal that ensure improved protection from impact shocks and abrasive stresses.

ATTACHMENTS (OPTIONAL)

QUICK COUPLER



The automatic version changes a bucket right from the cab. Mounting of buckets from other suppliers. A mechanical version is also HYDRAULIC BREAKER



Max hit energy 1,100 J. 550-1,100 strokes per minute. A full range of heads. **AUGER**



Augers with offset bearings are also available.
Diameter range from 150 mm to 900 mm.
Max output 95 L/min (for both models).

FORKS



Safe load at 500 mm. Load center 2,500 kg. Class 2B 100 mm x 40 mm. Weight 228 kg.

STANDARD EQUIPMENT

Engine Perkins

available.

Torque Converter Servo Power Synchro transmission Carraro

Axles Carraro with service disk brakes

Tandem gear pump Casappa

Directional valves Valvoil

FRONT LOADER

Multifunction bucket 7 in 1, capacity 1 m³ for TLB 825 and 1.2 m³ for TLB 935

Hydro-mechanical self-levelling system

Directional valves Valvoil

EXCAVATOR

Telescopic stick

Digging axis offset

Bucket with the capacity of 0.18 $\rm m^3$ for TLB 825 and 0.25 $\rm m^3$ for TLB 935

Retractable stabilizer legs

Hydraulic circuit for the breaker

ALL-GLASS CAB

Two doors

Opening rear window

Opening door windows

Two back-view mirrors - right and left

Two day running lights

Two front and two rear work lights

Flashing beacon

INTERIOR & CONTROLS

Speedometer

Heater

Fully adjustable high-back turning seat with arm-rests, head-rest and safety belt

Distribution of air flows in the cab, air cowls

Tow pedals to control service brakes

Tilt steering column

Servo control lever to change directions of movement

Mechanical levers to control the loader and backhoe

Sun visor

Audio system

Storage compartment

Interior cab light

Control interlock



MADE IN RUSSIA

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