

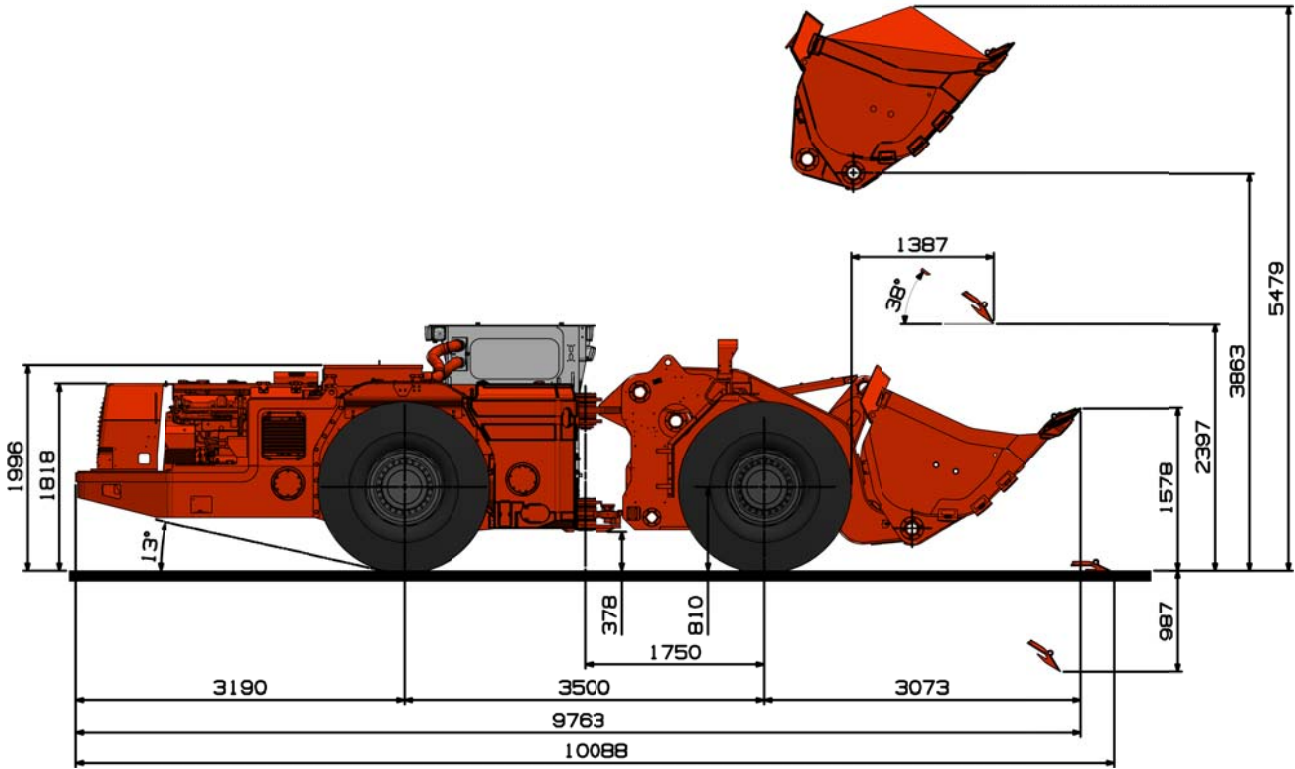
SANDVIK LH410 UNDERGROUND LOADER

TECHNICAL SPECIFICATION

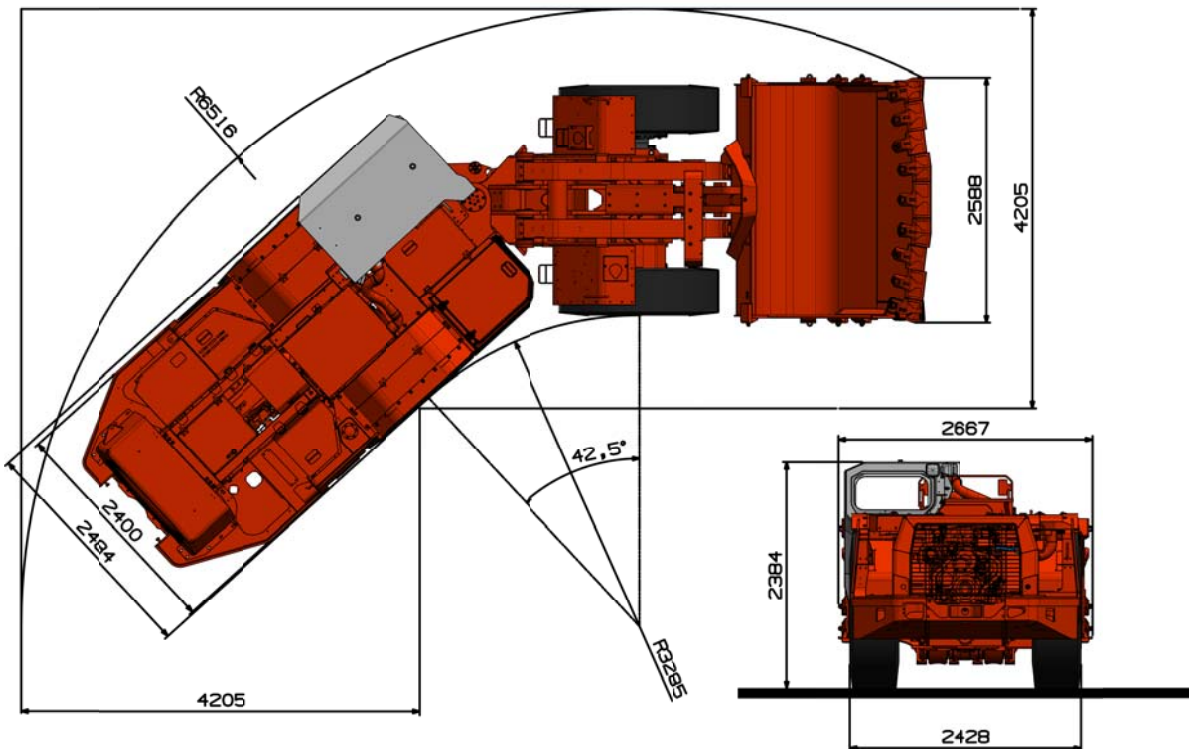


The Sandvik LH410 represents state of the art performance in difficult applications, enhanced operator ergonomics and several built-in safety features. High breakout forces, compact and lightweight unique design together with reliable structure ensures economical and reliable productivity. LH410 features a high lift boom enabling fast and accurate three-pass loading into the Sandvik TH430 truck.

DIMENSIONS (SIDE VIEW)



DIMENSIONS (TOP VIEW)



CAPACITIES

Tramming capacity	10 000 kg	22 000 lb
Breakout force, lift	18 800 kg	41 400 lb
Breakout force, tilt	16 600 kg	36 600 lb
Tipping load	23 400 kg	51 600 lb
Standard bucket, Shark	4.0 m ³	5.2 yd ³

MAIN DIMENSIONS

Total length	10 088 mm	397"
Maximum width	2 588 mm	102"
Height with canopy	2 384 mm	94"

OPERATING WEIGHTS

Total operating weight	28 500 kg	62 830 lb
Front axle	12 850 kg	28 330 lb
Rear axle	15 650 kg	34 500 lb

LOADED WEIGHTS

Total loaded weight	38 500 kg	84 880 lb
Front axle	28 250 kg	62 280 lb
Rear axle	10 250 kg	22 600 lb

BUCKET MOTION TIMES

Raising time	6.7 sec	
Lowering time	4.3 sec	
Dumping time	2.7 sec	

SPEEDS FORWARD & REVERSE (LEVEL / LOADED)

1st gear	5.3 km/h	3.3 mph
2nd gear	9.7 km/h	6.0 mph
3rd gear	16.3 km/h	10.1 mph
4th gear	28.6 km/h	17.8 mph

ENGINE

Diesel engine	Volvo TADVE941 (Not for sale in the EU)
Output	220 kW (295hp) @ 2100 rpm
Torque	1400 Nm @ 1200 rpm
Number of cylinders	In-line 6
Displacement	9,36 l (571 cu in)
Cooling system	Water cooled
Combustion principle	4-stroke, turbo with intercooler
Air filtration	Dry type
Electric system	24 V
Emissions	Tier II, Euro Stage 2
Exhaust system	Double wall exhaust pipe with catalytic purifier / muffler
Fuel Tank Capacity	310 l (80 gal)

CONVERTER

Dana C5472	With lock-up
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TRANSMISSION

Dana RT33425	Power shift transmission with modulation, four gears forward and reverse, automatic gear control
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AXLES

Front axle	Kessler D102, spring applied hydraulic operated brakes, limited Slip differential, fixed
Rear axle	Kessler D102, spring applied hydraulic operated brakes, limited slip differential, oscillating ±8° (oscillation with roller bearings)

TIRES

Tire size	18,00x25 L5S
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Tires are application approved. Brand and type subject to availability

STANDARD OPERATORS COMPARTMENT

ROPS/FOPS certified safety canopy

FRAME

Rear and front frame Welded steel construction

Central hinge Adjustable upper bearing

Rear tanks are bolted to frame, hydraulic tank and cabin base are both bolted and welded to frame

STEERING HYDRAULICS

Hydraulically operated, centre-point articulation, power steering with two double acting cylinders. Steering controlled by electric joystick. Interlock protection.

Main valve	Rexroth
Pilot control valve	Rexroth
Steering cylinders	2 pcs, 125 mm (4.9")

TURNING RADIUS

Turning angle	±42,5 °
Inner	3 283 mm
Outer	6 519 mm

BUCKET HYDRAULICS

Joystick bucket and boom control (electric), equipped with piston pump that delivers oil to the bucket hydraulic main valve. The oil flow from steering hydraulic pump is directed to bucket hydraulics when steering is not used.

Boom system	Z-link
Lift cylinders	2 pcs ø 160 mm (6.3")
Dump cylinder	1 pc ø 200 mm (7.9")
Pilot control valve	Parker
Main valve	Parker
Pump for bucket hydraulics	Piston type
Steering and servo hydraulic pumps	Piston type
Fittings	ORFS
Hydraulic oil tank	appr.240 l (63 gal)

Oil cooler for hydraulic and transmission oil, capability up to 52°C ambient temperature.

BRAKES

Service brakes are spring applied hydraulically released (SAHR) multi-disc brakes on all wheels with two separate circuits for the front and rear axles. Service brakes also function as an emergency brake, when the emergency brake system is engaged.

Pressure accumulator	Piston type with charging valve
Brake valve	Foot operated pedal, fully modulated
Pressure accumulator	Piston type with charging valve
Brake hydraulic tank	appr.75 l (20 gal)
Automatic Brake Activation	ABA

ELECTRICAL EQUIPMENT

Alternator	100 A
Batteries	2x 12 V
Starter	24 V
Driving and working lights	2 pcs in front 65 W 2 pcs in rear 65 W
Parking lights	2 pcs in front (LED lights) 2 pcs in rear (LED lights)
Brake lights	
Control system	5.7" display, 5 modules, inbuilt system diagnostics

OTHER STANDARD EQUIPMENT

Automatic central lubrication
Cyclone pre-filter for A/C device
Fire extinguisher, 12 kg (CEN)
Flashing beacon
Neutral brake
Wheel chocks and brackets

STANDARD MANUALS

Operator's Manual	Hard copy, EU-languages
Maintenance Manual	Hard copy, EU-languages
Parts Manual	Hard copy, English
Service and Repair Manual	Hard copy, English
ToolMan CD (2 pcs)	Electronic, in pdf format, includes all the above manuals

OTHER OPTIONS**Replaces standard equipment**

Engine Mercedes-Benz OM926LA, 220 kW (295hp), Euro Stage 3, (no converter lock-up available) (Not for sale in the EU & Japan)

Engine Volvo TAD872VE, 210 kW / (280 hp) / 2200r/min, Torque 1237 Nm / 1350 rpm
Euro Stage 4 / Tier 4f (for EU & Japan)

Safety cabin, ROPS/FOPS, height 2 385 mm (94"), A/C, electrical steering & bucket control

LED driving lights (2 in front, 2 in rear)

Side tipping bucket, 4,6 m³ (6,0yd³)

Ejector bucket size 4,6 m³ (6,0yd³), width 2770 mm (109"), HB500/400

Available bucket range 4.0-6.5 m³ (5.2-8.5 yd³)

ADDITIONAL OPTIONS

Cover grills for lamps

Gear limit

Spare rim (18.00-25)

Boom suspension (ride control)

Driving direction lights (red / green)

Cabin heater

Jump start

Emergency steering (CEN)

Fire supp. system ANSUL, 2 tanks, 8 nozzles (CEN) incl. auto engine shut down

Fire supp. system ANSUL, 2 tanks, 8 nozzles (CEN), CHECKFIRE incl. auto engine shut down

Fire suppression system Sandvik FS1000 with auto engine shutdown

RRC HBC CAN, complete

RRC interface HBC

RRC recovery kit (brake release by radio signal), hook included

Sandvik Integrated Scale for load weighing

Monitoring camera system

Wiggins fill set (hydr., transm., eng. oil)

Wiggins fuel fill system

Tyre Pressure Monitoring System

CatBase spare part manual

LinkOne electronic spare part manual

Pressure accumulator certificates

Accordance with CE-norms (CEN)

VOLVO TADVE941, 220 KW

Calculated with 2% rolling resistance

Converter lock-up engaged

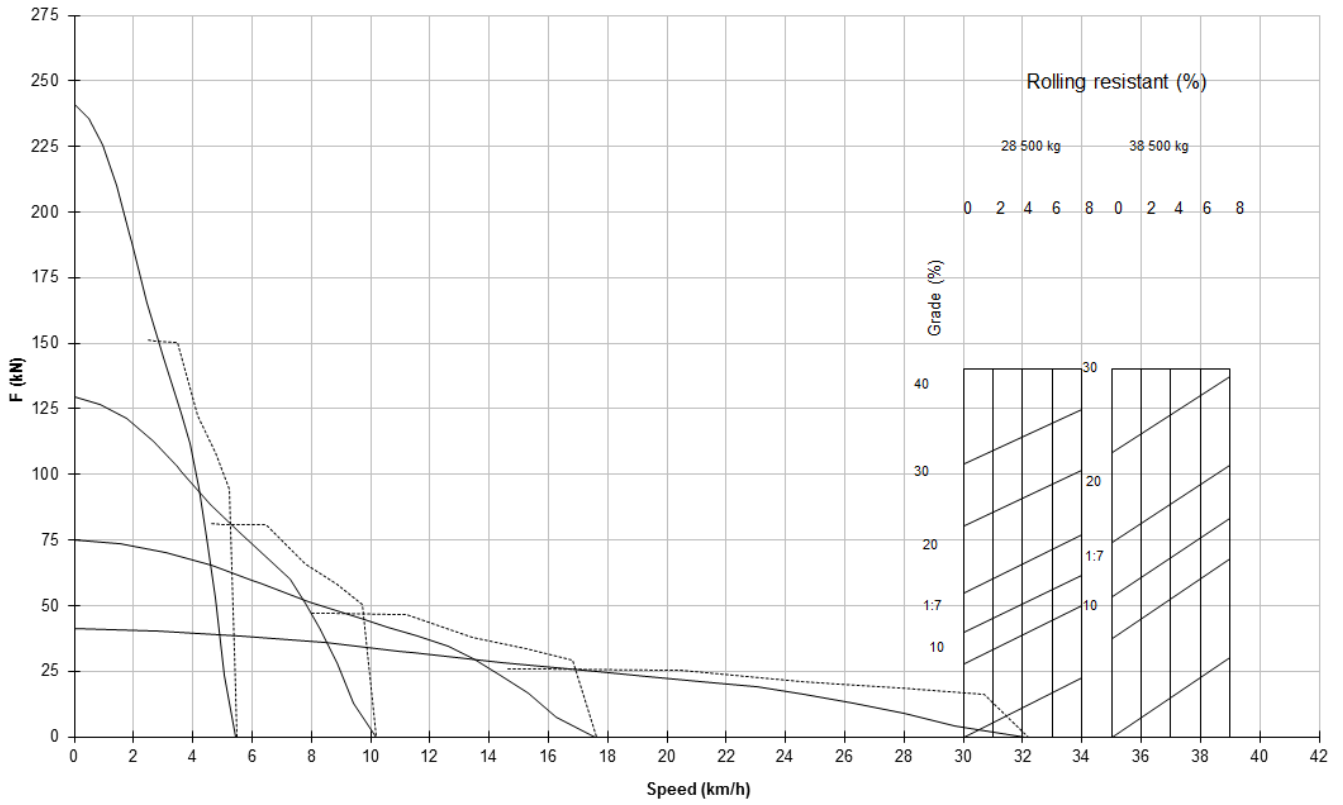
Empty Percent grade	0	2.0	4.0	6.0	8.0	10.0	12.5	14.3	17
Ratio					1:12	1:10	1:8	1:7	
1st gear (km/h)	5.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.3
2nd gear (km/h)	10.1	10.1	10.0	10.0	9.9	9.9	9.8	9.8	9.5
3rd gear (km/h)	17.5	17.3	17.2	17.0	16.8	15.4	12.9	11.6	7.7
4th gear (km/h)	31.7	31.2	29.9	23.3					

Loaded Percent grade	0	2.0	4.0	6.0	8.0	10.0	12.5	14.3	17
Ratio					1:12	1:10	1:8	1:7	
1st gear (km/h)	5.5	5.4	5.4	5.4	5.4	5.4	5.3	5.3	5.3
2nd gear (km/h)	10.1	10.1	10.0	9.9	9.8	9.8	9.3	8.5	7.4
3rd gear (km/h)	17.4	17.2	17.0	16.5	13.6	11.6			
4th gear (km/h)	31.5	30.8	23.0						

TRACTIVE EFFORT CURVE

LH410

Volvo TAD 941 220 kW/2100 rpm



PRODUCTIVE CURVE

LH410
PRODUCTIVITY CURVE

