

SANDVIK

SANDVIK LH307 PROVEN AND RELIABLE



PROVEN, RELIABLE AND PRODUCTIVE

DESIGNED FOR THE UNDERGROUND

Sandvik LH307 is a proven and reliable workhorse for narrow-vein mining applications, specifically designed for underground conditions. With its robust structure, compact size and fit-for-purpose components, the loader is tailored to meet the productivity targets in challenging environments. Even though its track record dates back to the good old Toro 006, today, the Sandvik LH307 is equipped with advanced functionalities, connectivity and smart technology.

FAST BUCKET FILLING

The loader smart boom geometry and the z-link design are optimized to provide highest in class breakout forces for fast bucket filling and handling of oversized rocks. The powerful boom and bucket hydraulics combined with smart geometry enable the use of both lift and tilt functions simultaneous when penetrating the muck pile, making one-pass bucket filling easy and contributing to high fill factors. The automatic bucket shaking enables shorter dumping times, whereas the high lift height makes truck loading easier.

HIGH TRAMMING SPEEDS

The compact Sandvik LH307 with its high power to weight ratio provides the highest in class tramming speeds for shorter cycle times and higher productivity. The advanced powertrain technology includes a proven transmission with automatic gear shifting. Durable axles use limited slip differentials to maintain traction, and spring applied hydraulic release brakes for safer braking. The loader top speed can also be limited to improve safety in narrow tunnels and rough roads.

FUEL EFFICIENT TIER 3 ENGINE FOR HIGH ALTITUDES

As standard, the Sandvik LH307 is equipped with a robust 160 kW Tier 3 engine with catalytic purifier and muffler, delivering long engine lifetime in underground conditions. This fuel-efficient Volvo Penta engine is also calibrated for use in high altitude conditions to maintain performance, low emissions and reliability.

BEST IN CLASS MSHA AND CANMET VENTILATION RATES WITH TIER 4 F ENGINE

The Sandvik LH307 is also available with a Tier 4 final engine, delivering best in class MSHA and CANMET ventilation rates with ultra-low Sulphur diesel fuel. The exhaust after treatment system of the Tier 4 final engine consists of a selective catalytic reduction system (SCR) using diesel exhaust fluid to reduce emissions of nitrogen oxides.



LOW COST OF OWNERSHIP

STRONG RESISTANCE TO SHOCK LOADS

Sandvik LH307 welded steel box structures used in the frame and boom provide strong resistance to shock loads and are optimized to reduce stresses as well as extend frame lifetime. Computer designed frames using Finite Element Analysis (FEA) are made of high strength structural steel for superior strength to weight ratio.

SIMPLE AND RELIABLE HYDRAULICS

The proven hydraulic system with fixed displacement pumps provides pressure and flow for greater efficiency, enabling increased tractive effort during loading. The hydraulic system is simple and reliable, contributing to ease of maintenance and lower cost of ownership. An electric filling pump for hydraulic oil is available as an option to quickly fill the hydraulic tank through a filter ensuring clean oil to protect the hydraulic system components.

EXTENSIVE STEEL PIPING

Separate side-mounted brake, hydraulic and transmission cooling provide increased performance in hot conditions. A more efficient cooling circuit results in lower oil temperatures, reducing stress on the system, extending component lifetimes, and minimizing oil leaks. Extensive use of hydraulic steel piping throughout Sandvik LH307 delivers longer lifetime and easier maintenance access than traditional hydraulic hoses.

LOWER BUCKET MAINTENANCE COSTS AND REDUCED DOWNTIME

SHARK™ Ground Engaging Tools (G.E.T.) are available on a wide range of bucket sizes, optimized for loader productivity and extended bucket service life. Available as either mechanical or weld on systems, G.E.T. solutions provide lower overall bucket maintenance costs and reduced downtime.



SAFETY AND COMFORT

ROPS and FOPS certified

Sandvik LH307 is available with an open canopy or closed cabin, both ROPS and FOPS certified and protecting the operator in case of rolling over or falling objects. The sealed and pressurized cabin is air-conditioned and uses dust and noise resistant upholstery materials, has laminated safety glass windows, three-point contact handles, anti-slip steps and an emergency exit. The cabin and canopy are mounted on bushings to reduce whole body vibration. The cabin door includes a door lock and latch mechanism with an interlock switch which automatically applies brakes and inactivates boom, bucket and steering when the door is opened. Further, neutral brake is a standard feature in the Sandvik LH307.

Smooth ride over rough terrain

The optional ride control system on the Sandvik LH307 dampens the boom and bucket movements by a nitrogen filled accumulator in the hydraulic boom circuit, providing a smoother ride over rough ground and less spillage. The ride control also includes a boom floating functionality, which comes handy for road cleaning: this function allows the bucket to smoothly follow the road surface when driving with an empty bucket.

Adjustable armrests and low frequency suspension seat

This loader is fitted with an adjustable low frequency suspension seat with two-point seat belt as standard. Padded arm rests and adjustable joysticks can be configured to suit the operator. The electro-hydraulic joystick controls for steering and boom movements eliminate hydraulic hoses inside the operator's compartment and reduce potential hydraulic hazards.

Touch screen color display

The 5.7" color display with clear symbols and touch screen has all the needed information and alarms on one display, giving the operator more time to keep eyes on the road. The Sandvik Intelligent Control System monitors and warns the operator before failures occur, preventing severe damage and loss of production. The user interface is available in 17 different languages.

Improved visibility

Adjustable high-power LED lights are standard configuration in every Sandvik LH307. The lights can be equipped with additional cover grills to provide protection against hits and rocks. All-around operator visibility can be further improved with a monitoring camera system including front and rear cameras. An additional cabin heater element for the air conditioning is available for cold conditions.





DATA AND CONNECTIVITY

Equipped with Sandvik Intelligent Control System as standard, Sandvik LH307 answers to today's demands for data and connectivity.

Knowledge box™

The Knowledge Box™ onboard Sandvik LH307 transfers monitoring data through a Wi-Fi connection to the My Sandvik internet portal for visualization of fleet health, productivity and utilization. Transferred data can also be used by OptiMine®, an analytics and process optimization suite to improve mining process efficiency.

OptiMine®

OptiMine® is the most comprehensive solution for optimizing underground hard rock mining production and processes. It integrates all assets and people - including Sandvik and non-Sandvik equipment - delivering descriptive and predictive insights to improve operations. OptiMine® is interoperable and able to connect to any system and technology, including Newtrax IoT devices, providing a real-time view of mining operations. It is an open and scalable modular suite that gives you flexibility to expand and work with a full range of equipment, systems and networks.

Line of sight radion remote control

The Sandvik LH307 can be equipped with a line of sight radio remote control system, available with a direct can-bus connection to the Sandvik Intelligent Control System, or as an analogue readiness. An additional video camera system is available for improved visibility when loading by radio remote control. A recovery kit option releases equipment brakes to retrieve the equipment from under unsupported roof, in case it is required.

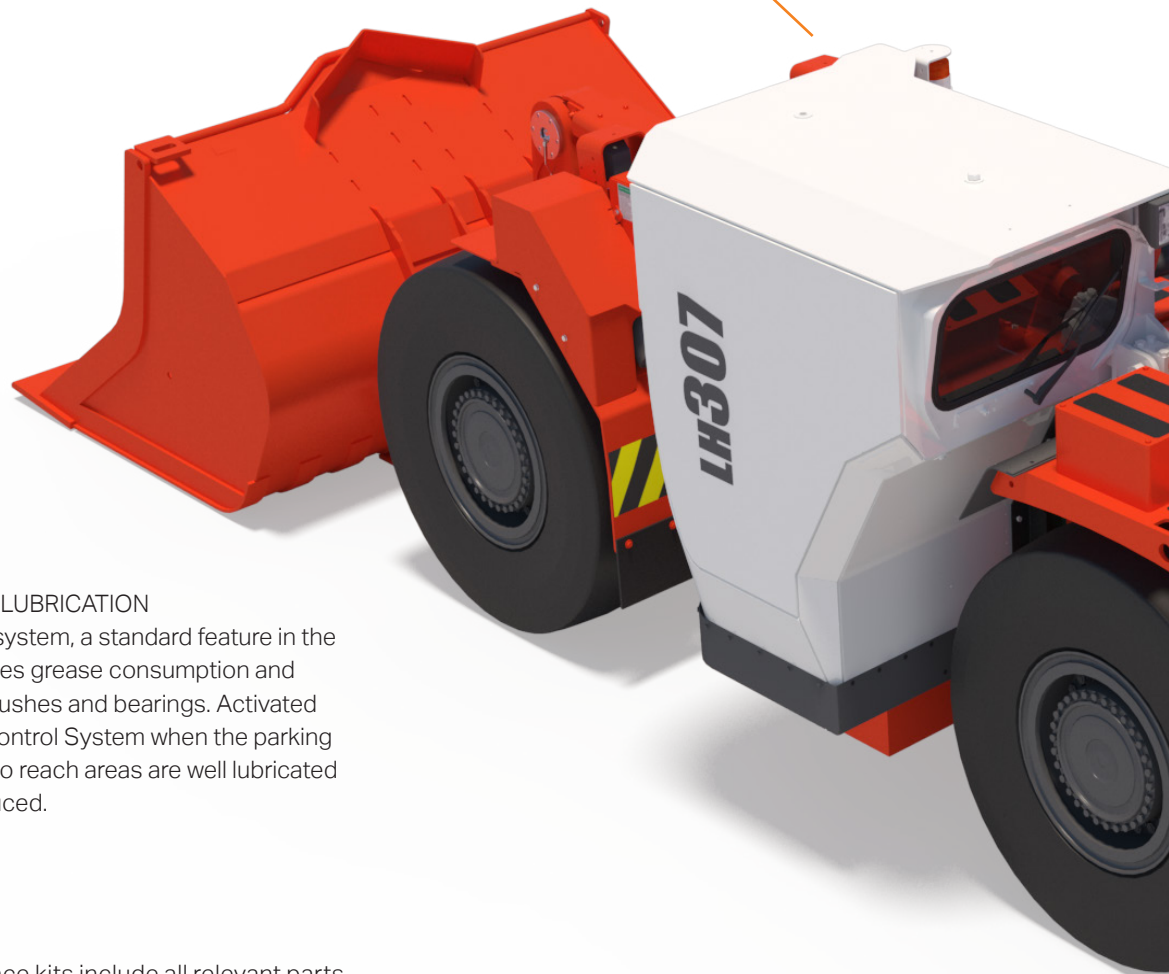
Proximity Detection System interface

A Proximity Detection System (PDS) interface option is also available on Sandvik LH307 for mines to interface with their site PDS system. The PDS interface offers easy installation and connection to the Sandvik Intelligent Control System with the capability to slow down and stop the loader on the signal from the PDS system.

EASE OF MAINTENANCE & SERVICEABILITY

SANDVIK INTELLIGENT CONTROL SYSTEM

To minimize the need to move around the machine or use special tools, the 5.7" touch screen color display in the operator's compartment provides service information, easy system diagnostics and alarm log files. An automatic brake test with diagnostics and logging can also be performed from the display.



AUTOMATIC CENTRAL LUBRICATION

The central lubrication system, a standard feature in the Sandvik LH307, optimizes grease consumption and extends the life of the bushes and bearings. Activated by Sandvik Intelligent Control System when the parking brake is released, hard to reach areas are well lubricated and service time is reduced.

MAINTENANCE KITS

Tailor-made maintenance kits include all relevant parts and other materials for planned maintenance.

Sandvik Performance Fluids preserve the machine's high performance. Smooth operation throughout its lifetime can be ensured with Sandvik Long-Life Engine, Transmission and Hydraulic Oils, which are available in different viscosity grades.

SAFETY ONBOARD

All required daily checks can be done from the ground level. Energy isolation can be achieved with a lockable main switch, and standard onboard wheel chocks can be used to ensure the machine remains stationary.

Maintenance access to the top of the machine includes three-point contact handles and anti-slip steps. Optionally available safety rails on the rear of the machine reduce risks of falling.

HOT SIDE – COLD SIDE

The loader rear frame design follows the basic hot and cold side design principles, where heat and ignition sources have been separated as well as practicable.

The cold side includes ground level access to the engine fuel filters. An efficient Power Core engine filter is housed well within the frame for impact protection and it utilizes an ejector valve system for increased filter lifetime. The fuel tank is sized to ensure continuous operation for a full working shift.

ECLIPSE™ FIRE SUPPRESSION SYSTEM

Fire safety is backed up by the Eclipse™ fire suppression system from Sandvik, available as an option.

WIGGINS FOR FUEL AND OILS

An optional fast filling system for fuel and oils increases equipment availability by reducing fueling time by up to 80% as well as eliminating fuel and oil spills.

SWING-OUT RADIATOR FANS

Easy-to-clean engine cooler with swing-out fans allows effective cleaning from both sides of the radiator core. The heavy-duty aluminum cooler is designed to perform in high ambient temperatures.



SANDVIK 365 PARTS & SERVICES

PROUDLY KEEPING YOU ON TRACK!

Sandvik 365 Parts & Services offer a variety of possibilities to enhance your loader's performance. As an OEM, we provide the best-suited choices to preserve your machine's high performance throughout its lifetime. These consist of highly skilled service specialists supporting you 365 days a year, all using Sandvik Genuine parts and components complemented by a range of robust tools. In addition, you get to enjoy the benefits of advanced digital services and a global infrastructure dedicated to keeping your Sandvik fleet on track.

BENEFIT FROM OUR 365 SOLUTIONS

Our Sandvik 365 Parts & Service solutions will enable your equipment to function safely at peak condition and allow you to achieve the most demanding production targets. Our aftermarket portfolio attends all possible needs throughout your equipment's lifecycle, ranging from the most basic and traditional offerings to the most sophisticated ones.

YOUR EQUIPMENT UPTIME IS OUR FOCUS – SANDVIK 365 COMPONENT SOLUTIONS

We have all your key components available to you under our various commercial offerings to suit your needs. Whether you have an ad-hoc failure or you are planning your maintenance in advance – we can assist, manage your components to maximize your uptime.

MAXIMIZE YOUR PRODUCT LIFETIME WITH SANDVIK 365 RE-BUILD SOLUTIONS

One of the most effective ways to optimize equipment lifecycle lies in the quality and range of the Sandvik Rebuild Solutions. Planning and executing rebuilds at optimal intervals helps you keeping your equipment's operating cost and productivity on track. A rebuild by the manufacturer can optimize your total cost of ownership (TCO) and increase the level of predictability around our fleet lifecycle.

CHOOSE FROM OUR RANGE OF SERVICE AGREEMENTS

With Sandvik Service Agreements, you can improve productivity and minimize unplanned downtime by making use of our expertise, systems and processes. They can be adapted to the specific level of support you require – helping you proactively manage your fleet and avoid any unexpected surprises.

GAIN PRODUCTIVITY THROUGH CONNECTIVITY

365 My Sandvik Digital Service solutions will provide you with visualization of fleet utilization, productivity, safety and health on 24/7 basis. The digital service dashboards can be accessed through the My Sandvik customer portal, where you can subscribe to My Sandvik Insight or Productivity. This way, My Sandvik Digital Service Solutions enable you to minimize unplanned downtime and set exact targets for improvement.



TECHNICAL SPECIFICATION

SANDVIK LH307

Sandvik LH307 is a 6.7 tonne loader developed specifically for narrow-vein underground mines. The loader comes with a Stage III A / Tier 3 fuel efficient Volvo engine with Canmet and MSHA approvals as standard, providing long engine lifetime. Other available engines include a Tier 4f / Stage IV low-emission engine from Volvo for use with Ultra Low Sulphur Diesel fuel.

To improve operator safety and comfort, Sandvik LH307 can be equipped with a closed, air conditioned cabin. For improved safety of maintenance work, safety rails are available as an option. Camera systems and Proximity Detection System Interface are available for monitoring the loader immediate vicinity.

Sandvik LH307 is equipped as standard with Sandvik Intelligent Control System and My Sandvik Digital Services Knowledge Box™ on-board hardware. The control system monitors the equipment productivity and health.

Bucket sizes vary from 3 m³ to 3.7 m³, including bare lip and SHARK™ G.E.T. buckets. The G.E.T. solutions optimize loader productivity and extend bucket service life.

CAPACITIES

| | |
|-----------------------|--------------------|
| Tramming capacity | 6 700 kg |
| Break out force, lift | 13 665 kg |
| Break out force, tilt | 11 320 kg |
| Standard bucket | 3.0 m ³ |

SPEEDS FORWARD & REVERSE (LEVEL/LOADED) WITH ENGINE VOLVO TAD850VE

| | |
|----------|-----------|
| 1st gear | 4.5 km/h |
| 2nd gear | 9.0 km/h |
| 3rd gear | 15.0 km/h |
| 4th gear | 24.7 km/h |

BUCKET MOTION TIMES

| | |
|---------------|---------|
| Raising time | 6.5 sec |
| Lowering time | 3.8 sec |
| Dumping time | 2.0 sec |

OPERATING WEIGHTS

| | |
|------------------------|-----------|
| Total operating weight | 18 020 kg |
| Front axle | 7 950 kg |
| Rear axle | 10 070 kg |

LOADED WEIGHTS

| | |
|---------------------|-----------|
| Total loaded weight | 24 720 kg |
| Front axle | 18 050 kg |
| Rear axle | 6 670 kg |



OPERATIONAL CONDITIONS AND LIMITS

| | |
|-----------------------------|---|
| Environmental temperature | From -20°C to +50°C |
| Standard operating altitude | With engine Volvo TAD850VE from -1500 m to +3000 m at 25°C without rated power derate |

REQUIREMENTS AND COMPLIANCE

Compliance with 2006/95/EC Low voltage directive

Compliance with 2004/108/EC Electromagnetic compatibility directive

Design based on EN 1889-1. Machines for underground mines. Mobile machines working underground. Safety. Part 1: Rubber tyred vehicles.

Design based on MDG 15. Guideline for mobile and transportable equipment for use in mines. (Equipment for Australia, achieved with relevant options)

Electrical system based on IEC 60204-1. Safety of machinery – Electrical equipment of machines – Part 1: General requirements

CONTAINS FLUORINATED GREENHOUSE GASES (closed cabin option)

Refrigerant R134a under pressure max 38 bar/550 PSI:

Filled weight: 1,5 kg

CO₂e: 2,145 tons

GWP: 1430

Information based on the F Gas Regulation (EU) No 517/2016

POWER TRAIN

ENGINE

| | |
|--|--|
| Diesel engine | Volvo TAD850VE |
| Output | 160 kW @ 2200 rpm |
| Torque | 1060 Nm @ 1200 rpm |
| Engine brake | No |
| Number of cylinders | In-line 6 |
| Displacement | 7.70 l |
| Cooling system | Liquid cooled |
| Combustion principle | 4-stroke, turbo with intercooler |
| Air Filtration | Two stage filtration, dry type |
| Electric system | 24 V |
| Emissions | Euro Stage III A |
| Ventilation rate (Ultra low sulphur diesel) | CANMET 5.66 m ³ /s MSHA 7,500 CFM |
| Particulate index (Ultra low sulphur diesel) | MSHA 9,500 CFM |
| Exhaust system | Catalytic purifier and muffler with Proventia thermal insulation system exhaust pipe |
| Estimated average fuel consumption at 40 % load | 19 l/h |
| Fuel tank refill capacity | 220 l |

CONVERTER

Dana C273

TRANSMISSION

| | |
|---|--|
| Power shift transmission with modulation. | Dana RT32421, four gears forward and reverse |
|---|--|

AXLES

| | |
|------------|--|
| Front axle | Kessler D91, Spring applied hydraulically released brakes, limited slip differential |
| Rear axle | Kessler D91, Spring applied hydraulically released brakes, limited slip differential |

TIRES

Tire size (Tires are application approved. Brand and type subject to availability.) 17.5 x 25 L5S 20 ply

HYDRAULICS

Door interlock for brakes and boom, bucket, and steering hydraulics

Oil cooler for hydraulic and transmission oil

ORFS Fittings

MSHA approved hoses

Hydraulic oil tank capacity 230 l

Sight glass for oil level, 2 pcs

STEERING HYDRAULICS

Full hydraulic, centre-point articulation, power steering with two double acting cylinders. Steering lock.

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

Steering main valve Open center type

Steering hydraulic cylinders 100 mm, 2 pcs

Steering pump Gear type

Steering and servo hydraulic pumps Gear type

BUCKET HYDRAULICS

The oil flow from steering hydraulic pump is directed to bucket hydraulics when steering is not used.

Joystick bucket and boom control (electro-hydraulic), equipped with gear pump that delivers oil to the bucket hydraulic main valve.

Boom system Z-link

Lift cylinders 140 mm, 2 pcs

Dump cylinder 200 mm, 1 pc

Main valve Open center type

Pump for bucket hydraulics Gear type

BRAKES

Service brakes are spring applied; hydraulically operated multidisc wet brakes on all wheels. Two independent circuits: one for the front and one for the rear axle. Service brakes also function as an emergency and parking brake. Brake system performance complies with requirements of EN ISO 3450, AS2958.1 and SABS 1589

Neutral brake

Automatic brake activation system, ABA

Emergency brake release pump, electric, 2.2 kW

OPERATOR'S COMPARTMENT

CABIN (Cabin option replaces the standard canopy)

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|--|
| ROPS certification according to EN ISO 3471 |
| FOPS certification according to EN ISO 3449 |
| Sealed, air conditioned, over pressurized, noise suppressed closed cabin |
| Sound absorbent material to reduce noise |
| Laminated glass windows |
| Cabin mounted on rubber mounts to the frame to reduce vibrations |
| Air conditioning unit located outside the cabin to reduce noise inside the cabin |

CANOPY (Standard)

| |
|---|
| ROPS certification according to EN ISO 3471 |
| FOPS certification according to EN ISO 3449 |
| Adjustable joysticks |
| No high pressure hoses in the operator's compartment |
| Inclinometers to indicate operating angle |
| Emergency exit |
| Floor washable with water to reduce dust |
| Three-point contact access system with replaceable and colour coded handles and steps |
| 12 V output for communication radio connection |
| Remote circuit breaker switch |

CONTROL SYSTEM, DASHBOARD AND DISPLAYS

| |
|--|
| Sandvik Intelligent Control System |
| Critical warnings and alarms displayed as text and with light |
| Instrument panel including 5.7" display with adjustable contrast and brightness and illuminated switches |
| My Sandvik Digital Services Knowledge Box™ on-board hardware |

OPERATOR'S SEAT

| | |
|---|----------------------------|
| Low frequency suspension | In canopy and cabin models |
| Height adjustment | In canopy and cabin models |
| Adjustment according to the operator's weight | In canopy and cabin models |
| Padded and adjustable arm rests | In canopy and cabin models |
| Two-point seat belt | In canopy and cabin models |
| Fore-aft isolation | With cabin option only |
| Adjustable lumbar support | With cabin option only |
| Selectable damping | With cabin option only |

MEASURED VIBRATION LEVEL

Whole body vibration was determined while operating the loader in a simulated working cycle consisting of loading, unloading and driving with and without load. The value is determined applying standards EN 1032 and ISO 2631-1.

| | |
|--|------|
| Maximum r.m.s.value a_w [m/s ²] | 0,99 |
| VDV _w over 15 min period [m/s ^{1.75}] | 9,37 |

MEASURED SOUND LEVEL

The sound pressure level and sound power level at the operator's compartment (open canopy) have been determined in stationary conditions on high idle and at full load, with engine Volvo TAD850VE.

| | |
|--|--------|
| Sound pressure level L_{pA} [dB re 20 μ Pa] | 94 dB |
| Sound power level L_{WA} [dB re 1 p W] | 115 dB |

FRAME

REAR AND FRONT FRAME

| |
|--|
| Welded structure, high strength steel |
| Central hinge with adjustable upper bearing |
| Rear tanks, hydraulic tanks and cabin base welded to frame |
| Automatic central lubrication |

ILLUMINATION

Illuminance E_{av} with 4 pieces of 50 W LED at a distance of 20 m in front of the loader:

| | |
|----------|----------|
| E_{av} | 16,39 lx |
|----------|----------|

Illuminance E_{av} with 4 pieces of 50 W LED at a distance of 20 m behind the loader:

| | |
|----------|----------|
| E_{av} | 62,08 lx |
|----------|----------|

Sandvik LH307 is compliant with South African Mine health and safety act 29 of 1996, because average light intensity in the direction of travel is more than 10 lux at a distance of 20 m.

ELECTRICAL EQUIPMENT

MAIN COMPONENTS

| | |
|--|--|
| Alternator | 28 V, 110 A |
| Batteries | 2 x 12 V, 145 Ah |
| Starter | 5.5 kW, 24 V |
| Driving and working lights | LED lights: 2 pcs in front, 2 pcs in rear, 2 pcs in canopy |
| Parking, brake and indicator (blinkers) lights | LED lights: 2 pcs in front, 2 pcs in rear |
| Control system | 5,7 " color display, 5 modules, inbuilt system diagnostics |
| Reverse alarm | |
| Flashing beacon | |

INCLUDED SAFETY FEATURES

FIRE SAFETY

| |
|---|
| Portable fire extinguisher, 12 kg |
| Hot side - cold side design |
| Isolation of combustibles and ignition sources |
| Heat insulation on exhaust manifold, turbo, and isolated exhaust pipe |

ENERGY ISOLATION

| |
|--|
| Lockable main switch, ground level access |
| Emergency stop push buttons according to EN ISO 13850 |
| Pressure release in the radiator cap |
| Automatic discharge for pressure accumulators (brake system and pilot circuit) |
| Frame articulation locking device |
| Mechanical boom locking device |
| Wheel chocks and brackets |

DOCUMENTATION

STANDARD MANUALS

| | |
|---------------------------|--|
| Operator's Manual | English and other EU languages |
| Maintenance Manual | English and other EU languages |
| Parts Manual | English |
| Service and Repair Manual | English |
| ToolMan | 2 x USB stick in pdf format, includes all the manuals |
| Decals | English, Finnish, Swedish, Spanish, Russian, French, Polish, Portuguese, Turkish, German, Bulgarian, Estonian, Chinese |

OPTIONS

| |
|--|
| Safety cabin, 2-point seatbelt, corner light, ROPS/FOPS and A/C unit, height 2250 mm |
| Disabled 4th gear |
| Radio remote control HBC, CAN |
| Radio remote control interface HBC, analogue, not with automation |
| Video camera system for radio remote control |
| Recovery kit (brake release by radio signal) |
| Proximity Detection System Interface |
| Driving direction lights (red / green) |
| Safety rails |
| ANSUL Twin fire suppression system, with or without CHECKFIRE |
| Eclipse™ Fire suppression system with auto shutdown, Sustain or Extreme agent delivered separately |
| Emergency steering |
| Electrical gear shift control |
| Jump start interface |
| Monitoring camera system |
| Additional cabin heater element for air conditioning |
| Cover grills for lamps |
| Spare rim 14.00-25/1.5 (for tyres 17.5R25) |
| Boom suspension (ride control) |
| Electrical filling pump for hydraulic oil |
| Wiggins quick filling set for fuel and oils (hydraulic, engine and transmission) |
| Wiggins fuel fill system |
| Arctic package 120V (preheater for hydr. oil tank and engine block) |
| Arctic package 230V (preheater for hydr. oil tank and engine block) |
| Harsh condition package |
| Accordance with KA requirements for Chinese market |
| CRN pressure accumulators for Canadian market |

OPTIONAL ENGINE

| | |
|---------------|-------------------|
| Diesel engine | Volvo TAD572VE |
| Output | 160 kW @ 2300 rpm |
| Engine brake | No |
| Emissions | Euro Stage IV |

OPTIONAL ENGINE

| | |
|--|------------------------------------|
| Diesel engine | Volvo TAD572VE |
| Output | 160 kW @ 2300 rpm |
| Engine brake | No |
| Emissions | Tier 4 Final |
| Ventilation rate (Ultra low sulphur diesel and AdBlue) | CANMET 1.32 m³/s MSHA 7,000 CFM |
| Particulate index (Ultra low sulphur fuel, AdBlue) | MSHA 1,000 CFM |

AVAILABLE BUCKETS

| TYPE | VOLUME | WIDTH | MAX. MATERIAL DENSITY |
|-------------------|--------------------|---------|------------------------|
| G.E.T. (standard) | 3.0 m ³ | 2153 mm | 2200 kg/m ³ |
| Bare Lip. | 3.0 m ³ | 2100 mm | 2300 kg/m ³ |
| G.E.T. | 3.3 m ³ | 2153 mm | 2000 kg/m ³ |
| Bare Lip | 3.3 m ³ | 2100 mm | 2050 kg/m ³ |
| G.E.T | 3.7 m ³ | 2153 mm | 1700 kg/m ³ |
| Bare Lip | 3.7 m ³ | 2100 mm | 1800 kg/m ³ |

GRADE PERFORMANCE

Volvo TAD850VE

Empty

| | | | | | | | | | |
|-----------------|------|------|------|------|------|------|------|------|------|
| Percent grade | 0.0 | 2.0 | 4.0 | 6.0 | 8.0 | 10.0 | 12.5 | 14.3 | 17.0 |
| Ratio | | | | | 1:12 | 1:10 | 1:8 | 1:7 | |
| 1st gear (km/h) | 4.6 | 4.5 | 4.3 | 4.2 | 4.2 | 4.1 | 4.0 | 4.0 | 3.9 |
| 2nd gear (km/h) | 9.2 | 8.7 | 8.5 | 8.3 | 8.1 | 7.9 | 7.7 | 7.5 | 7.1 |
| 3rd gear (km/h) | 15.3 | 14.5 | 14.0 | 13.5 | 12.7 | 11.7 | 9.9 | 8.7 | |
| 4th gear (km/h) | 25.4 | 23.7 | 21.7 | 17.9 | 13.7 | | | | |

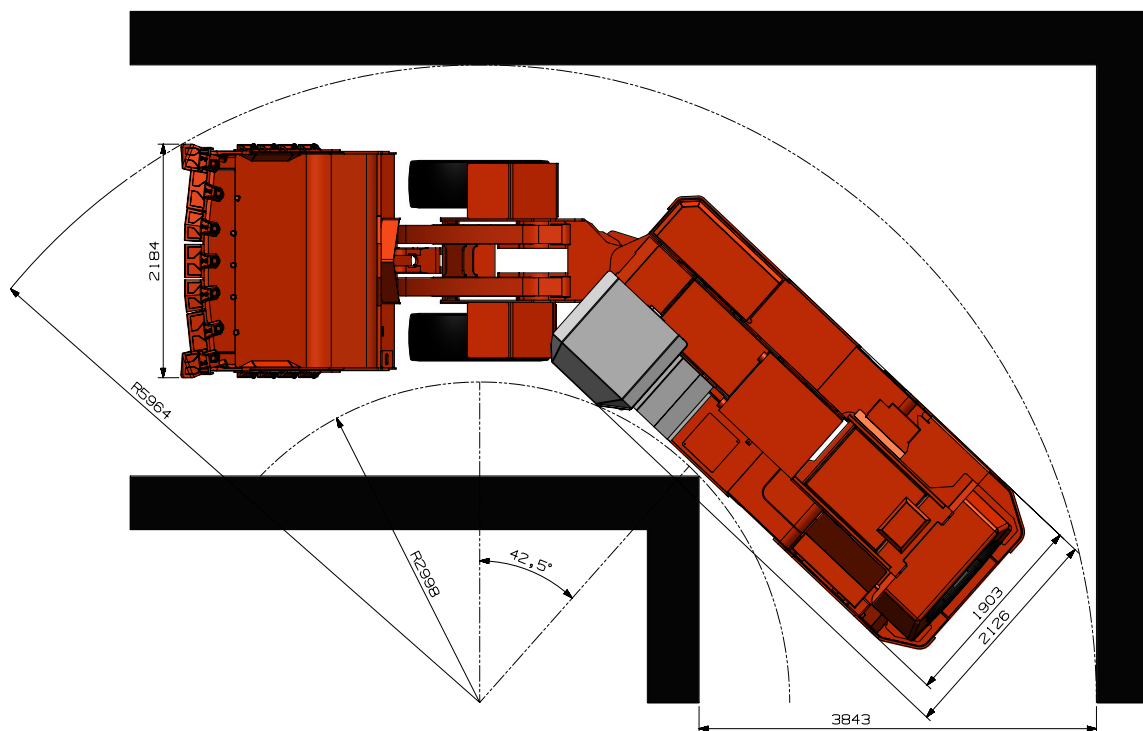
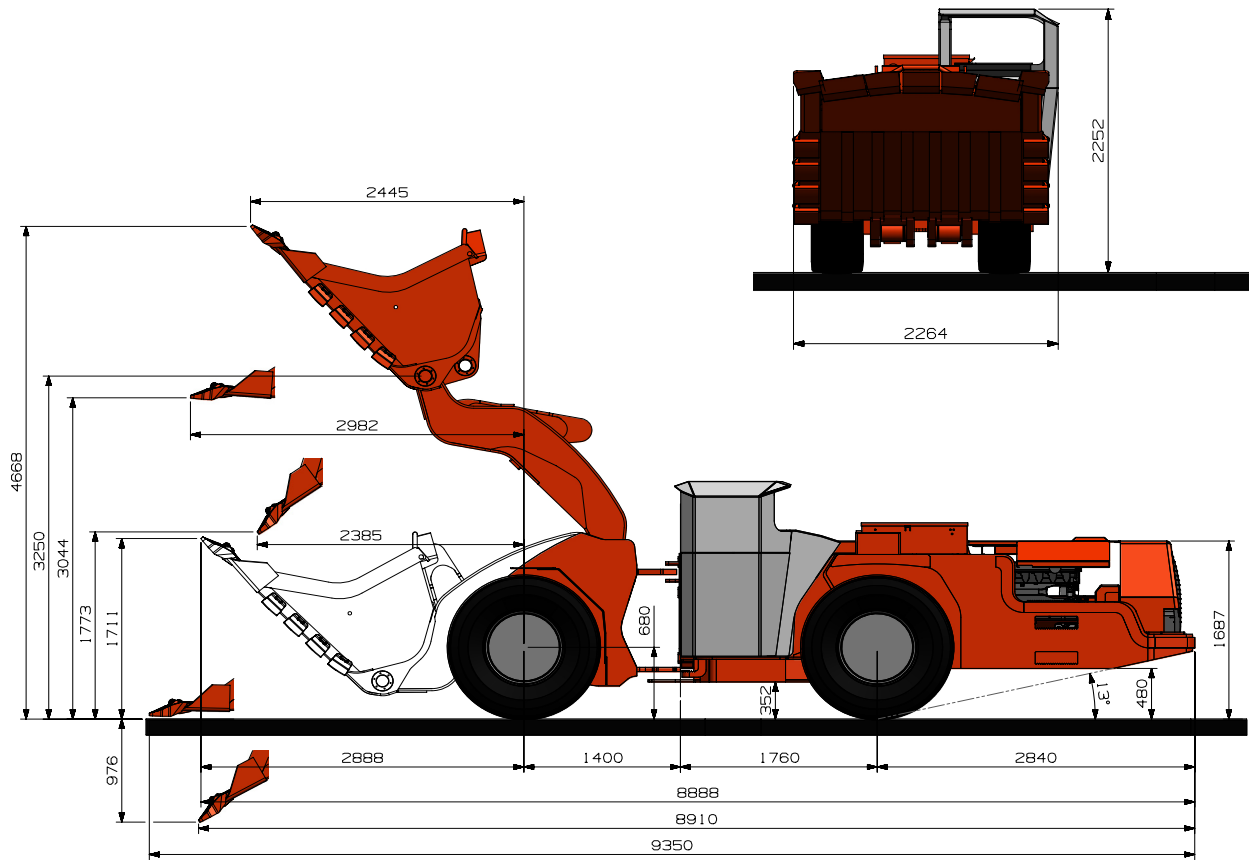
Loaded

| | | | | | | | | | |
|-----------------|------|------|------|------|------|------|------|------|------|
| Percent grade | 0.0 | 2.0 | 4.0 | 6.0 | 8.0 | 10.0 | 12.5 | 14.3 | 17.0 |
| Ratio | | | | | 1:12 | 1:10 | 1:8 | 1:7 | |
| 1st gear (km/h) | 4.5 | 4.4 | 4.2 | 4.1 | 4.1 | 4.0 | 3.9 | 3.9 | 3.8 |
| 2nd gear (km/h) | 9.0 | 8.6 | 8.3 | 8.0 | 7.8 | 7.5 | 6.9 | 6.4 | 5.5 |
| 3rd gear (km/h) | 15.0 | 14.1 | 13.4 | 12.2 | 10.5 | 8.5 | | | |
| 4th gear (km/h) | 24.7 | 22.3 | 17.4 | | | | | | |



DIMENSIONS WITH 3.0 M³ G.E.T. BUCKET (STANDARD)

The dimensions are indicative only



MATCHING PAIR SANDVIK LH307 AND SANDVIK TH320

Sandvik TH320 is a narrow 20 metric tonne truck designed for small and medium-sized hard rock mines, fitting in a 3 x 3 meter heading. Despite the relatively high payload capacity, this underground truck has the same overall width as most 15-ton trucks on the market. As all Sandvik underground mining trucks, it is designed to operate fully loaded and at high speeds on long spiral haulage ways with up to 20% gradients.

Available with a standard forward facing, open operator compartment or with an optional forward facing, fully enclosed and air conditioned cabin, Sandvik TH320 offers comfort without compromising visibility.

Advantages:

- Narrow size enables operation in 3x3 meter headings
- Excellent payload capacity reduces the need for additional trucks
- Efficient LED lights reduce eye fatigue and risk of collision, while long LED lifetime offers lower cost of ownership compared to halogen lights
- Ground-level daily maintenance for safer service
- Optional ejector box for tight backfilling

CAPACITIES

| | |
|---|----------------------------|
| Maximum payload capacity (SAE heaped 2:1) | 20 000 kg |
| Standard dump box | 10.5 m ³ |
| Dump box range | 10.5 - 13.8 m ³ |

SPEEDS (LEVEL/LOADED)

| | |
|----------|-----------|
| 1st gear | 5.1 km/h |
| 2nd gear | 9.0 km/h |
| 3rd gear | 15.7 km/h |
| 4th gear | 27.8 km/h |

DUMP BOX MOTION TIMES & MOVEMENTS

| | |
|------------------|----------|
| Discharging time | 14.0 sec |
| Dumping angle | 65 ° |

OPERATING WEIGHTS *

| | |
|------------------------|-----------|
| Total operating weight | 22 600 kg |
| Front axle | 16 770 kg |
| Rear axle | 5 830 kg |

LOADED WEIGHTS *

| | |
|---------------------|-----------|
| Total loaded weight | 42 600 kg |
| Front axle | 21 100 kg |
| Rear axle | 21 500 kg |

* Unit weight is dependent on the selected options



