

Sandvik TH320

Technical Specification



APPLICATIONS

The Sandvik TH320 is a narrow 20 metric tonne hauler that fits in a 3 x 3 metre heading. Available with a standard forward facing, open operators compartment or an optional forward facing, fully enclosed and air conditioned cab, the TH320 offers superior comfort without compromising visibility. The TH320 is well suited for:

- Ramp or level production haulage in small to medium sized mines.
- Small tunnelling projects
- Tight backfill haulage with the optional ejector box.
- Three pass loading with the Sandvik LH307.

Capacities

Payload capacity	20 000 kg
Standard box volume	10,3 m ³

Main dimensions

Total length	9 093 mm
Total width	2 210 mm
Height of safety canopy	2 438 mm
Height of dump box	2 286 mm
Dump height	4 547 mm

Dump Box Motion Times & Movements

Discharging time	14,0 sec
Dumping angle	65 °

Speeds Forward & Reverse (Level / Loaded)

1st gear	6,6 km/h
2nd gear	11,9 km/h
3rd gear	20,6 km/h
4th gear	36,5 km/h

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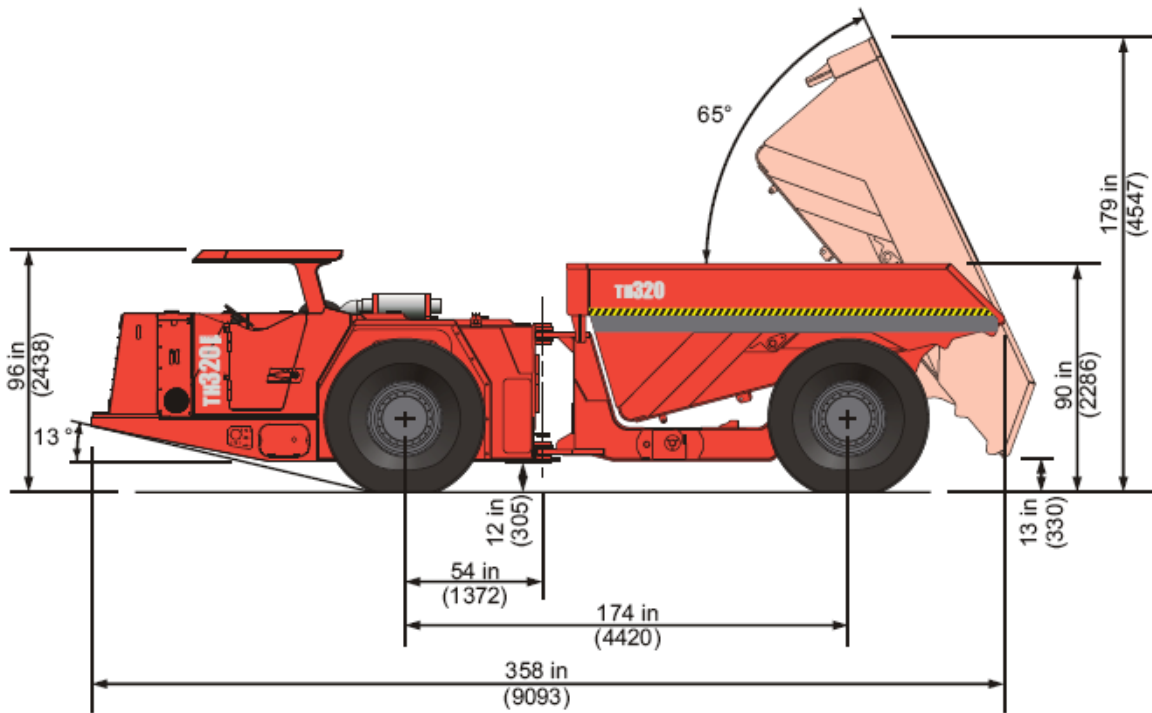
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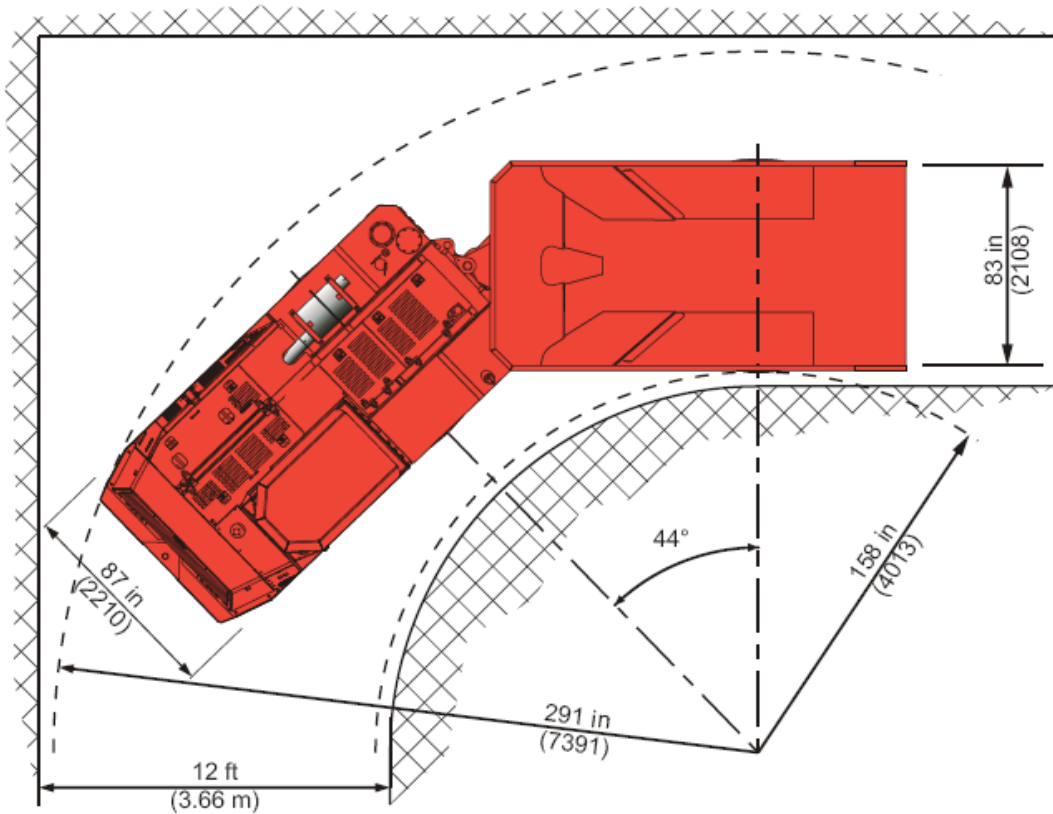
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DIMENSIONS (SIDE VIEW)



DIMENSIONS (TOP VIEW)



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POWER TRAIN

Engine

Diesel engine	Mercedes OM 926 LA, Tier 3
Output	240 kW (322 HP) @ 2200 rpm
Torque	1300 Nm (959 lb.ft.) @ 1300 - 1600 rpm
Number of cylinders	In line 6
Displacement	7.2 litres (439 in ³)
Cooling system	Liquid cooled
Combustion principle	Direct injected, turbo charged, after-cooled
Air filtration	Donaldson, dry type
Electric system	24 V
Exhaust system	Catalytic purifier with silencer
Average Fuel Consumption	35.8 l/h (9.47US gal/h)
Fuel Tank Capacity	341 l (90 US gal)

Converter

Dana C8000 series	Single stage, 0.895 offset ratio with manual lock-up
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Transmission

Dana 6000 series	4-speed forward and reverse
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Axles

Front axle	Dana 19D, standard differential, oscillating ± 7°
Rear axle	Dana 19D standard differential, fixed.

Tires

Tire size	18.00R25 E4
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VEHICLE WEIGHTS

Operating weights

Total operating weight	26 500 kg
Front axle	19 550 kg
Rear axle	6 950 kg

Loaded weights

Total loaded weight	46 500 kg
Front axle	22 450 kg
Rear axle	24 050 kg

STANDARD OPERATORS COMPARTMENT

ROPS/FOPS certified canopy

FRAME

Rear and front frame	Welded steel box construction
Central hinge	Full plate, clevis type with spherical bearings

Hydraulic tank

Hydraulic oil tank approx. capacity	378 l
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STEERING HYDRAULICS

Full hydraulic power steering, centre articulated with double acting steering cylinders. Open centre system with a gear pump and wheel steer control.

Turning Radius

Turning angle	44°
Inner	4 013 mm
Outer	7 391 mm

Main Components

Hydraulic pump	Gear
Control valve	Pilot operated
Steering cylinders	114,3 mm bore X 63,5 mm rod

DUMP BOX HYDRAULICS

Full hydraulic open-centre system with one gear pump. Oil flows to the dump box hydraulic system from the pump when the steering system is not in use. Push button dump box control.

Main Components

Hydraulic pump	Gear pump
Control valve	Pilot operated
Dump cylinders	Telescopic, 159 mm bore X 133 mm first sleeve X 108 mm second sleeve

BRAKES

Service brakes are spring applied, hydraulically released, liquid cooled multi-disc brakes (LCB) on all wheels. Service brakes also function as an emergency brake, when the emergency brake system is engaged.

Main Components

Pressure accumulator	Piston type with charging valve
Brake pedal valve	Modulated

ELECTRICAL EQUIPMENT

Alternator	24 V, 175 A, min
Batteries	2 x 12 V, 950 CCA
Starter	24 V, Heavy Duty
Lights	
• Driving lights	4pcs front, 2pcs rear

STANDARD MANUALS

Instructions Manual	
- 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 STANDARD EQUIPMENT

Electric shift
Central hydraulic pressure test points
Automatic central lubrication
SAE ORS hose fittings
Ansul hand held fire extinguisher 20 lb (not for units with cabin)
Ansul hand held fire extinguisher 10 lb (standard with cabin)
Flashing beacon

OPTIONAL EQUIPMENT

Alternative Options

- Enclosed ROPS/FOPS, forward facing operator's compartment with air conditioning and wheel type steering control
- Ejector box with automatic hydraulic tail gate

Alternative boxes

Material density (t/m ³)	1,7	1,4
Volume (m ³)	12,0	13,8
Width(mm)	2 210	2 590
Ejector box	9,6 m ³	

Additional Options

- Cabin heater, incl. A/C for enclosed cabin option
- Reversing camera
- Manual fire suppression system - Ansul 6 nozzles, 1 tank
- Automatic fire suppression system - Ansul Checkfire II 6 nozzles, 1 tank
- Exhaust brake system
- Emergency steering system (EC regulations)
- Cover grills for lamps
- Wiggins fuel fill system
- Spare rim
- Extra CD-ROM manuals
- Extra paper manuals

GRADE PERFORMANCE

Mercedes OM 926 LA, Tier 3
Calculated with 2% rolling resistance
With lock-up

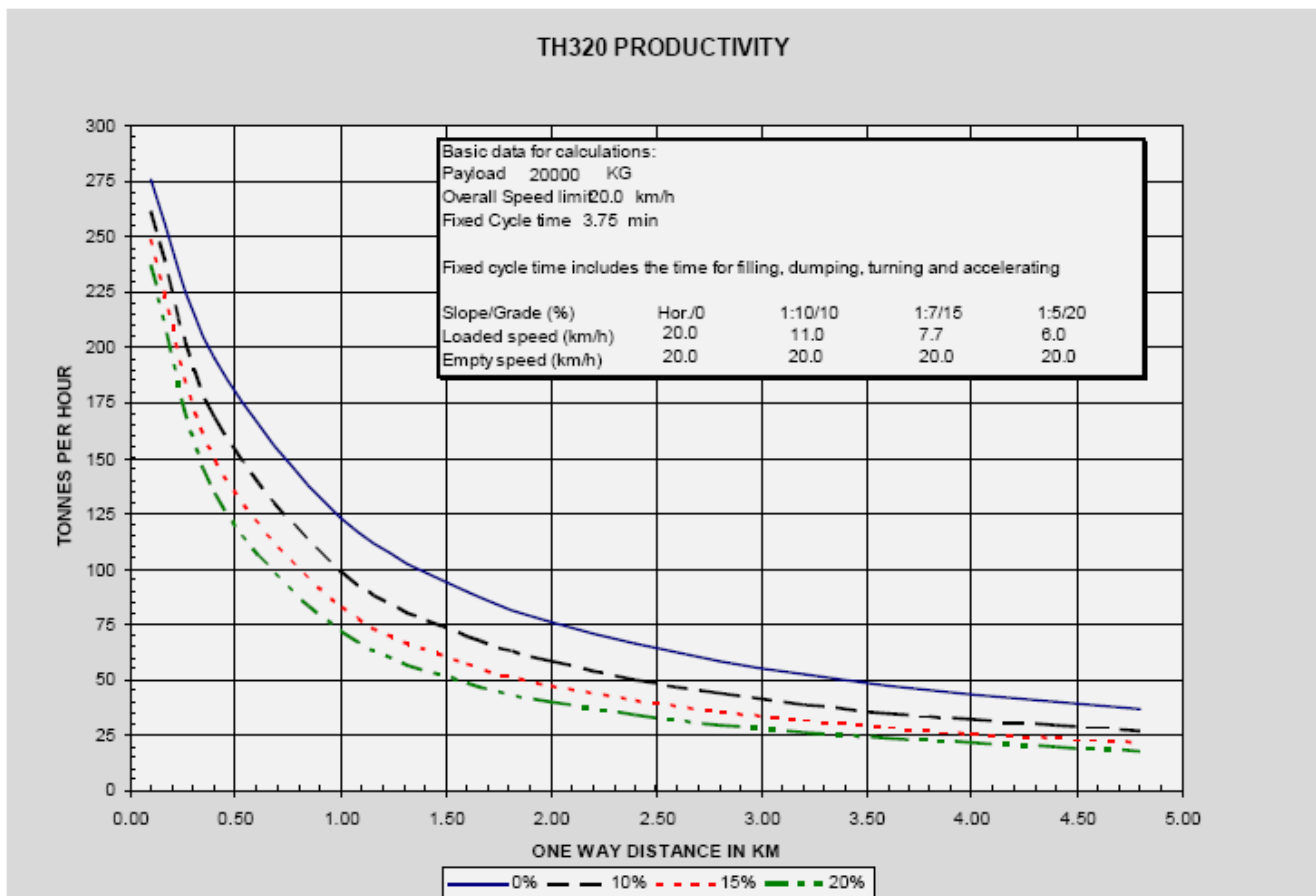
Empty

Percent grade	0	5	10	15	20
1 st gear (km/h)	6,6	6,5	6,5	6,4	6,3
2 nd gear (km/h)	11,9	11,6	11,2	11,1	11,0
3 rd gear (km/h)	20,7	20,2	19,5	15,7	11,5
4 th gear (km/h)	37,7	35,0	20,1		

Loaded

Percent grade	0	5	10	15	20
1 st gear (km/h)	6,6	6,5	6,3	6,3	6,0
2 nd gear (km/h)	11,9	11,5	11,0	7,7	6,0
3 rd gear (km/h)	20,6	19,5	11,0		
4 th gear (km/h)	36,5				

PRODUCTIVITY CURVE



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TRACTIVE EFFORT CURVE (METRIC UNITS)

