

# Sandvik TH430

## Technical Specification



### APPLICATIONS

The Sandvik TH430 is a true 30 metric tonne articulated mine dump truck that will fit in a 4 x 4 m envelope. The TH430 is equipped with a standard, fully enclosed, vibration isolated, air conditioned cabin for maximum operator safety and comfort. The TH430 is an ideal choice for:

- Ramp or level production haulage in medium sized mines.
- Mine development projects in medium and large mines.
- Tunneling projects with restricted headroom.
- Three pass loading with the Sandvik LH410.

### Capacities

Payload capacity	30 000 kg	66 140 lb
Dump box	14,5 m <sup>3</sup>	19 yd <sup>3</sup>
Dump box range	14,5–18 m <sup>3</sup>	19–23,5 yd <sup>3</sup>

### Main dimensions

Total length	10 260 mm	398"
Maximum width	2 950 mm	116"
Height	2 630 mm	103"
Height of the box	2 360 mm	101"
Dump height	5 420 mm	226"

### Dump Box Motion Times & Movements

Discharging time	14 sec
Dumping angle	61 °

### Speeds Forward (Level / Loaded)

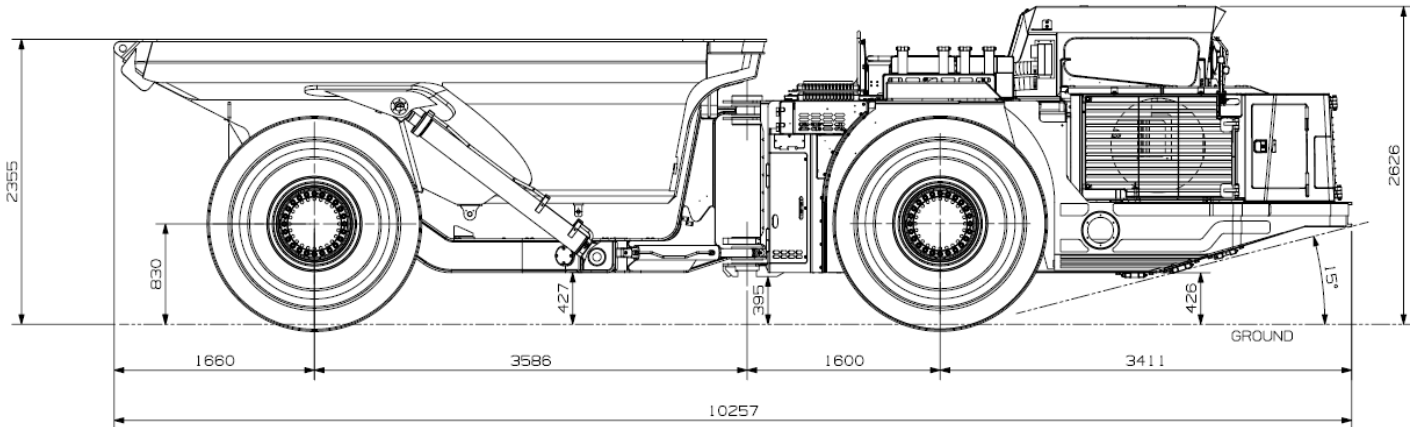
1st gear	6,6 km/h	4,1 mph
2nd gear	11,7 km/h	7,3 mph
3rd gear	20,5 km/h	12,7 mph
4th gear	36,6 km/h	22,7 mph

Sandvik Mining and Construction Reserves the right to change this specification without further notice.

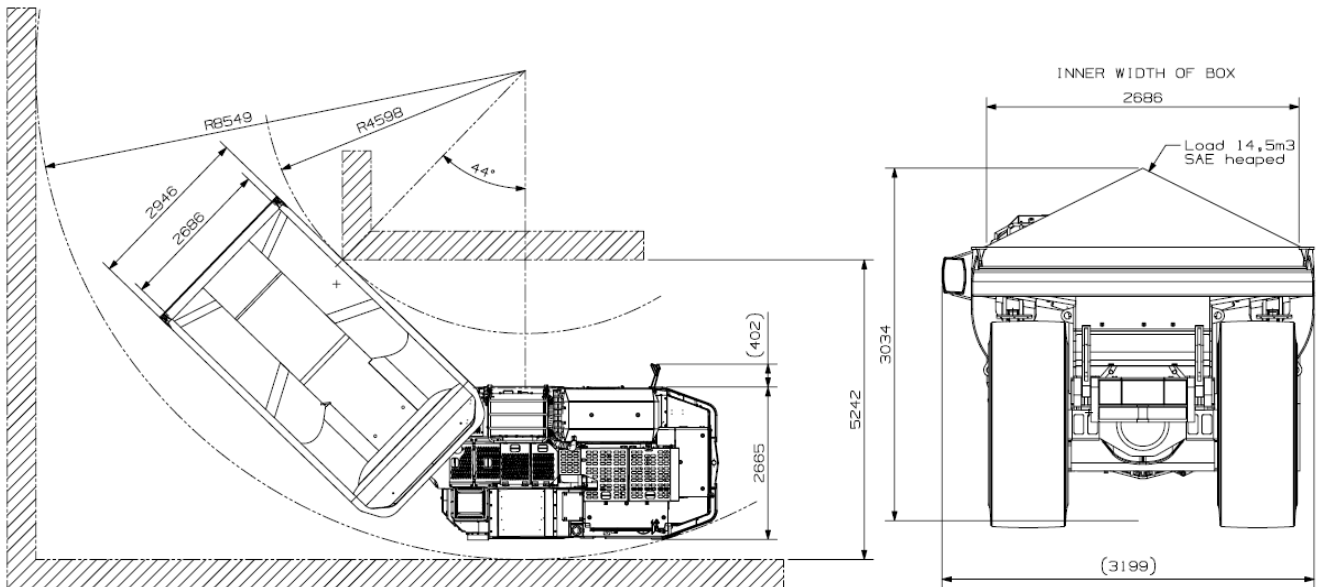
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## DIMENSIONS (SIDE VIEW)



## DIMENSIONS (TOP AND REAR VIEW)



## POWER TRAIN

### Engine

Diesel engine	Volvo TAD1342VE Tier 2
Output	310 kW (416hp) @ 2 100 rpm
Torque	2 005 Nm (1 477 lb ft) @ 1 260 rpm
Number of cylinders	In-line 6
Displacement	12,8 l
Cooling system	Liquid cooled
Combustion principle	Direct injected, turbo charged, after-cooled
Air filtration	Dry type
Electric system	24 V
Exhaust system	Catalytic purifier with silencer
Average Fuel Consumption	47 l/h (12,4 US gal/h)
Fuel Tank Capacity	430 l (120 US gal)

### Converter

Dana C8000 series	Single stage, 0.895:1 offset ratio with manual lock-up
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### Transmission

Dana 6000 series	4-speed forward and reverse with automatic electric shift
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### Axles

Front axle	Kessler D91, standard differential, oscillating $\pm 9^\circ$
Rear axle	Kessler D91, standard differential, fixed.

### Tires

Tire size	26.5R25 E4**
Brand and type subject to availability	

## VEHICLE WEIGHTS

### Operating weights

Total operating weight	28 830 kg	63 560 lb
Front axle	21 523 kg	47 450 lb
Rear axle	7 307 kg	16 109 lb

### Loaded weights

Total loaded weight	58 830 kg	129 698 lb
Front axle	29 436 kg	64 895 lb
Rear axle	29 394 kg	64 803 lb

## STANDARD OPERATORS COMPARTMENT

ISO certified ROPS/FOPS cabin with air conditioning	
Height	2626 mm (103 in)

## FRAME

Rear and front frame	Welded steel construction
Central hinge	Box constructed, adjustable lower bearing

### Hydraulic tank

Hydraulic oil tank approx. capacity	265 l (70 US gal)
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## STEERING HYDRAULICS

Fully hydraulic, center articulated, power steering with two double acting cylinders. Closed centre system with a load sensing piston pump and pilot operated orbital wheel steering.

### Turning Radius

Turning angle		$\pm 44^\circ$
Inner	4 692 mm	185"
Outer	8 506 mm	335"

## Main Components

Hydraulic pump	Variable displacement piston pump
Control valve	Pilot operated
Cylinders	100 mm bore X 70 mm rod

## DUMP BOX HYDRAULICS

Full hydraulic system, equipped with variable displacement piston pump. Oil flow to box hydraulic system from the steering hydraulics. Oil flow from the brake circuit pump is divided to the brake system and the oil cooler motor.

## Main Components

Hydraulic pump	Variable displacement piston pump
Control valve	Solenid operated
Cylinders	2 x 140 mm bore x 90 mm rod

## BRAKES

Service brakes are spring applied, hydraulically released, liquid cooled multi-disc brakes (LCB) 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.

## Main Components

Pressure accumulator	Piston type with charging valve
Brake pedal valve	
Brake valve	Modulated

## ELECTRICAL EQUIPMENT

Alternator	24 V 150 A, min
Batteries	2 x 12 V, 950 CCA
Starter	24 V, Heavy Duty
Lights	Driving, working, parking, breaking and direction
Signals	Flashing beacon
Instrumentation	5,7 in LCD display

## SAFETY AND ERGONOMICS

ROPS/FOPS certified operators compartment
Seat belt
Lockable main switch
Back-up alarm, audible (CEN)
External shutdown, 2 pcs in rear
Decals in EU-languages
Low frequency suspension seat
Adjustable armrests

## 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

Central hydraulic pressure test points
VCM electronic control system
ORFS hose fittings
Double wall exhaust system
Automatic central lubrication
Cyclone pre-filter for A/C device
Fire extinguisher, 12 kg (CEN)
Flashing beacon
Reversing camera
Wheel chocks and brackets

## OPTIONAL EQUIPMENT

### Alternative Options

- Volvo TAD1362VE, (315kW), Euro Stage 3B / Tier 4i
- 2445 mm enclosed cabin height

### Alternative boxes

Max density (t/m <sup>3</sup> )	1,8	2,0	2,2	2,3
Volume (m <sup>3</sup> )	18	16	14,5	14,0
Width (mm)	2850	2950	2950	Ejector

### Additional Options

- Accordance with CE-norms (CEN)
- Cover grills for lamps
- Control system tool kit
- Driving direction lights (red/green)
- Electrical retarder TELMA
- Emergency steering (CEN)
- Fire suppression system ANSUL, 2 tanks, 8 nozzles (CEN) incl. auto engine shutdown
- Fire suppression sytem ANSUL, 2 tanks, 8 nozzles (CEN), CHECKFIRE, incl. auto engine shutdown
- Fire suppression system Sandvik FS1000 with auto engine shutdown
- Jump start
- Gear limit
- Cold climate package
  - cabin heater
  - cabin window defroster
  - side mirrors with defrost system
- CatBase spare part manua
- LinkOne spare part manual
- Spare rim (26.5R25)
- Tyre Pressure Monitoring system
- Wiggins fuel fill system
- Wiggins fill set (hydr., transm., eng. oil)

**GRADE PERFORMANCE**

Volvo TAD1342VE, Tier2  
Calculated with 2% rolling resistance  
With lock-up

**Empty**

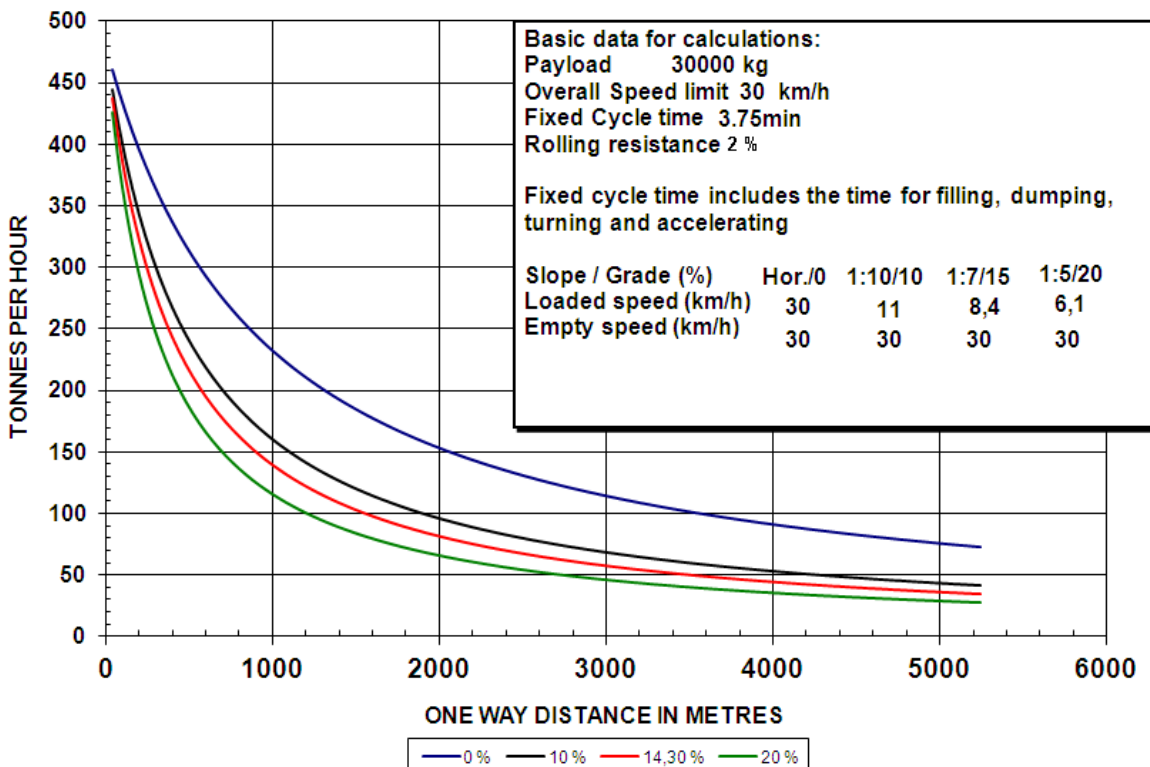
Percent grade	0	5	10	15	20
1 <sup>st</sup> gear (km/h)	6,6	6,6	6,5	6,5	6,4
2 <sup>nd</sup> gear (km/h)	11,8	11,7	11,5	11,4	11,3
3 <sup>rd</sup> gear (km/h)	20,7	20,3	19,9	16,7	
4 <sup>th</sup> gear (km/h)	37,2	35,7			

**Loaded**

Percent grade	0	5	10	15	20
1 <sup>st</sup> gear (km/h)	6,6	6,5	6,4	6,3	6,1
2 <sup>nd</sup> gear (km/h)	11,7	11,5	11,0	8,4	
3 <sup>rd</sup> gear (km/h)	20,5	19,0			
4 <sup>th</sup> gear (km/h)	36,6				

**PRODUCTIVITY CURVE**

TH430  
**PRODUCTIVITY CURVE**



**TRACTIVE EFFORT CURVE**

