# **Scooptram ST4**

**Underground loader with 4 tonne load capacity** 





# Powerful underground loader for narrow mines

The Scooptram ST4 is an ideal choice for applications varying from development to production in small and narrow vein mines as well as in utility jobs. It also performs outstandingly even in high-altitude environments. With a tramming capacity of 4-tonnes, the Scooptram ST4 delivers excellent performance in safety, productivity and reliability.

## Main benefits

**Safety first** The new Scooptram ST4 is packed with essential safety features, including a certified FOPS/ROPS canopy, seat interlock system, boom uplock mechanism, and a reliable reverse alarm, all designed to protect operators and ensure safe underground operations.

**High productivity** The powerful and robust drivetrain gives the outstanding traction effort and enables high productivity whether operating at sea level or in demanding high-altitude environments.

**High reliability** The Scooptram ST4 adopts mature technical solutions and carefully selects high-quality, high-performance components. Especially with its newly upgraded and strengthened transmission system, it ensures long machine availability, convenient maintainability, and an expected life-cycle for customers.

Audio-visual reverse alarm

Brake release tow hook

Radio Remote Control (RRC)

The Scooptram ST4's automatic lubrication system ensures consistent greasing of key components, reducing service intervals and maximizing uptime in demanding underground environments.



The 4-in-1 cooling system provides higher performance with better airflow and efficiency.



Radio Remote Control (RRC) for line-ofsight operations, offers an effective way of working inside stopes and areas exposed to risks of falling rock. When personal safety cannot be guaranteed, RRC enables an operation to take place from a safe distance.



SAHR bakes - safest brake system in the mining industry

ST4

# Power and efficiency in a compact design

Experience a boost in operational efficiency with the new engineered drivetrain system. Scooptram ST4 delivers up to two times faster bucket fill, powered by enhanced tractive effort from an upgraded engine and transmission. The result is a 25% boost in overall productivity, thanks to quicker cycle times, higher travel speed, and superior load handling.



#### + Designed for safe operations

The Scooptram ST4 prioritizes operator safety with fail-safe SAHR brakes, FOPS/ROPS-certified cabin, and automatic seat interlock. Emergency stops, neutral brake apply, and remote control operation ensure safe handling in hazardous environments. With advanced steering backup and secure maintenance locks, ST4 delivers confidence and control in every underground mission.



#### + Durability underground

The Scooptram ST4 features upgraded, durable frame structures. Its powerful drivetrain combines a Cummins engine, Dana transmission and axles, a strengthened cardan shaft, and a high-efficiency 4-in-1 radiator, ensuring reliable, high-performance operation in demanding underground conditions.



#### Lower emissions

The Scooptram ST4 comes standard with a fuel-efficient stage IIIA / Tier 3 engine, approved by Canmet and MSHA for safe underground use and long service life. For operations requiring lower emissions, an optional Tier 4 Final / Stage V engine is available, compatible with ultra low sulfur diesel fuel.

# A comprehensive service offering

Even the best equipment needs to be serviced regularly to make sure it sustains peak performance. An Epiroc service solution offers peace of mind, maximizing availability and performance throughout the lifetime of your equipment. We focus on safety, productivity and reliability.

By combining genuine parts and an Epiroc service from our certified technicians, we safeguard your productivity – wherever you are.



### Technical specifications

#### **Specifications**

Capacities	
Tamming capacity*	4 000 kg
Breakout force, hydraulic	9 595 kg
Breakout force, mechanical	7 965 kg
*Tramming capacity with EOD bucket 3 200 kg.	
Motion times	
Boom raising	3.1 sec
Boom lowering	4.4 sec
Dumping	4 sec
Weights (Standard empty vehicle)	
Approximate weight	13 860 kg
Axle load, front end	5 720 kg
Axle load, rear end	8 140 kg

#### **Engine**

Brand/model	Cummins QSB 4.5, EPA Tier 3/EU Stage IIIA	Cummins QSB 4.5, EPA Tier 4f/EU Stage V
Power rating at 2 200 rpm	97 kW / 130 hp	99 kW / 133 hp
MSHA Part 7 ventilation rate	_	155.7 m³/min
MSHA Part 7 particulate index	_	14.1 m³/min

Standard: Water cooling, Catalytic purifier plus exhaust silencer

#### Fuel

Fuel tank capacity: 150 L
Fuel filtration, primary, including heater and water trap: 7 µm

Epiroc Scooptram loaders are compatible with HV0100

#### **Transmission**

Modulated power shift, with 4 speeds forward and reverse
Brand/model: Dana. T14

#### **Axles**

Brand/model: Dana, 14D
Degree of rear axle oscillation: 16" (8" on each side)
Differentials: Front, No spin
Differentials: Rear, standard

#### **Brakes**

Fully enclosed, multiple wet discs at each wheel end
Service/parking/emergency brakes: SAHR
Brake apply after 3 sec in neutral

#### **Tyers**

Tube tyres design for underground mine service\*

\* As applications and conditions vary, Epiroc recommends that the user consults with tyre suppliers to obtain the optimum tyre selection.

#### Operator's compartment

#### Canopy (ISO ROPS and FOPS approved)

Side seated operator for bi-directional operation and maximum visibility  $% \left( \frac{1}{2}\right) =\left( \frac{1}{2}\right) \left( \frac{$ 

Ergonomic operator seat with seat belt

External sound level according to ISO 6393 LwA 121 dB(A)

Sound level in canopy according to ISO 6394 LpA 102 dB(A)

Whole body vibration value 0.5-2.0 m/s² according to EN 14253 and ISO 2631-1

#### Hydraulic system

Heavy duty gear typ	pe pumps	
System pressure: 12	2.4 MPa	
Hydraulic tank capa	acity: 176 litres	
Filtration, suction lin	ne: 10 µm	
Steer cylinder: chro	me plated stem, 1 × 125 mm	diameter
Hoist cylinder: chro	me plated stem, 1 × 180 mm	diameter
Dump gulinder: ehr	omo platod stom 1 100 mp	n diameter

#### Control system

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Engine data display	
Audio-visual reverse alarm	
Hydraulic pilot steering handle	
Single lever dump and hoist control	
Seat interlock	

#### **Electric system**

System voltage: start & accessories, 24 V
Mine duty high output alternator: 140 Amps
Isolating switch lockout
Driving lights LED: 5 x 1 800 lumen 22 W

#### Main frame

Center hinge and boom up lock device
Central manual lubrication
Dump cylinder rod protector

#### **Documentation**

E-copy of the operation, service and maintenance manuals, also Spare Parts Catalogue in English and other languages in Techinfo.

#### **Options**

#### **Brakes**

Brake release retriever tow hook

#### **Tyers**

Time size front and rear 12.00 D24 (clinics)
Tyre size front and rear: 12.00 R24 (slicks)
Tyre size front and rear: 12.00 R24 (treaded)

#### Hydraulic system

Manual hydraulic tank fill pump

#### Control system

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Blue strobe light - power on	
Emergency Steering	
Blockout 3rd and 4th gears	

#### **Electric system**

Detachable service light (required for CE Approved Vehicles)

#### Main frame

EOD bucket

Wheel chocks and chocks brackets
Knockdown construction
Automatic lubrication system with timer
Handheld fire extinguisher
Ansul manually activated fire suppression system with engine shut down
Ansul checkfire automatically activated fire suppression system
Tool box

#### Automation

cooptram radio remote control	
cooptram radio remote Interface	

#### Parts and services

Preventive maintenance kits	
Operator training	

#### Documentation

Spare parts manual-Paper	
Operator manual - Daper	

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### Technical specifications

#### **Grade performance**

Standard con	figuration, Empty bu	ucket											
%	Grade	0	2	4	6	8.3	10	12.5	14.3	16	18	20	25
km/h	1st gear	4.4	4.3	4.1	4.1	4	3.9	3.8	3.8	3.7	3.7	3.6	3.6
	2nd gear	8.5	8.4	8.1	8	7.6	7.4	7.2	7.1	6.9	6.5	6.2	5.6
	3rd gear	14.3	13.9	13.2	12.6	11.6	10.9	9.7	7.7	7.5	6	5.3	
	4th gear	24	22.6	20.2	16.5	12	8.8	5.6					

3% rolling resistance assumed. Actual performance may vary depending on the application.

#### Standard configuration, Loaded bucket

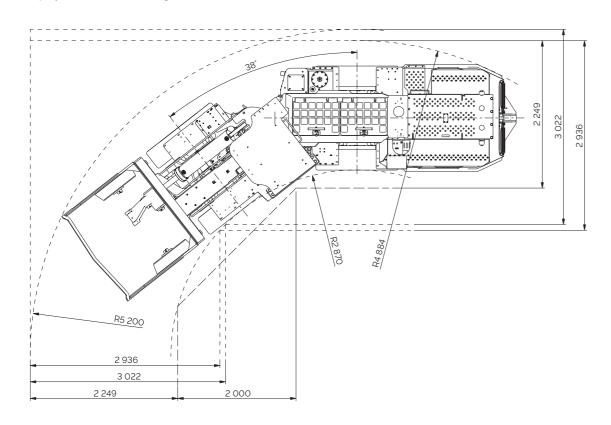
Standard c	onfiguration, Loaded	d											
%	Grade	0	2	4	6	8.3	10	12.5	14.3	16	18	20	25
km/h	1st gear	4.3	4.2	4	3.9	3.9	3.8	3.8	3.7	3.7	3.6	3.5	3.4
	2nd gear	8.3	8.2	8	7.8	7.4	7.2	7	6.9	6.4	5.8	5.5	4
	3rd gear	13.9	13.5	12.7	11.7	10.5	9.3	6.2	5.9	4.7			
	4th gear	23.5	20.7	16.5	11	6.5							
3% rolling re	4th gear 23.5 20.7 10.5 11 0.5 3% rolling resistance assumed. Actual performance may vary depending on the application.												

#### Measurements

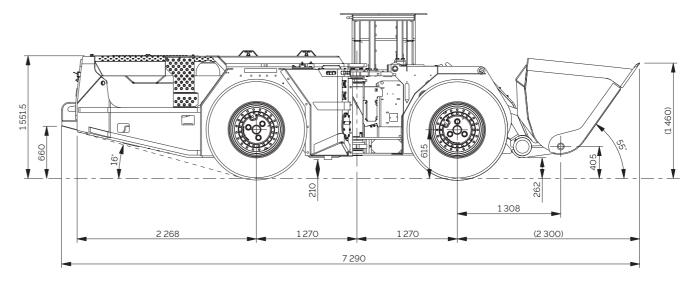
#### **Turning radius**

#### Dimensions

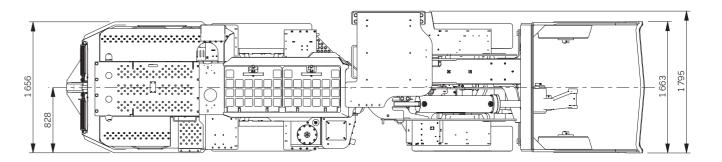
- All dimensions are shown in millimetres
- $\cdot \text{ All dimensions and calculations shown are based on standard vehicle configuration with 25 mm tyre deflection, unloaded} \\$
- Machine displayed with Cummins engine and 1.9 m3 bucket



#### Side view



#### Top view



#### **Bucket data**

		EOD Straight blade								
Volume (m³)	1.5	1.7	1.9	2.1	2.3	2.5	1.2	1.5	1.7	1.9
Material density (t/m³)	2.7	2.4	2.1	1.8	1.6	1.4	3.1	2.3	2	1.6
Width (mm)	1663	1663	1663	1663	1663	1663	1663	1663	1663	1663

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# United in performance. Inspired by innovation.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward.

Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.

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