



Max. power

522Kw(700hp)

Rated payload

55 tonnes (60 US tons)

Heaped Capacity

35 m³(46 yd³)

SRT55 Off-Highway Truck



SRT

SHANGHAI SANY MINING EQUIPMENT CO., LTD

General information of SRT55 truck

Function features

- Off-highway truck engine used in severe operating conditions meets strict emission standards.
- Electronic control transmission with soft shift feature and hydraulic retarding function.
- Nitrogen/oil cylinders with self-adapting, variable rate features at empty/loaded keep the vehicle maintain good resistance to impact.
- High strength, wear resistant body
- PLC control system and CAN bus technique
- Minimum turning radius: 9540mm

Operator environment

- Wide, spacious cab with excellent all-around visibility
- Cab over engine design greatly reduces blind area and makes the view wider
- Ergonomically designed cab makes operator feel more comfortable
- Air suspension seat dampens vibration effectively
- Pressurized cab design isolates the operator from noise and dust
- Visible reverse system, more safe
- Standard ROPS/FOPS

Easy maintenance

- Centralized greasing
- Centralized arrangement of filters
- Centralized display and self-diagnose instruments are easy to operate, monitor and service.
- Global position system (GPS) can carry out remote control and real time monitor troubles of the vehicle.



High reliability

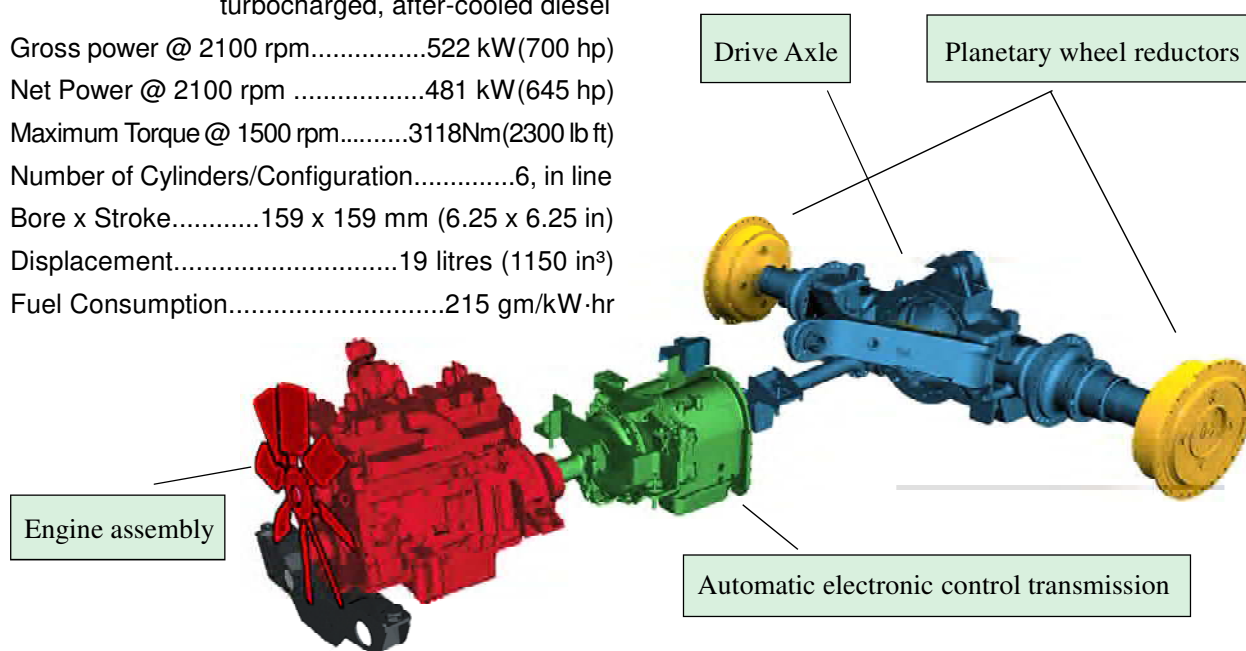
- Fully hydraulic brake system has secondary brakes and emergency brakes
- High-rigidity frame employs right processes and materials which improve the flexibility and fatigue life
- PLC control system which uses digital signals to communicate has reliable data transmission, short response time and better anti-interference ability
- Dry disc front brake and oil cooled disc rear brake
- Reliable hydraulic system



SRT55

Engine

Model.....Cummins QSK 19-C700
Type.....4cycle, direct injection, water-cooled,
turbocharged, after-cooled diesel
Gross power @ 2100 rpm.....522 kW(700 hp)
Net Power @ 2100 rpm481 kW(645 hp)
Maximum Torque @ 1500 rpm.....3118Nm(2300 lb ft)
Number of Cylinders/Configuration.....6, in line
Bore x Stroke.....159 x 159 mm (6.25 x 6.25 in)
Displacement.....19 litres (1150 in³)
Fuel Consumption.....215 gm/kW·hr



Transmission

Allison M6610AR automatic electronic control transmission with Soft Shift feature. Integral TC 682 torque converter, hydraulic retarder and planetary gearing are mounted in the middle of the frame. Six speeds forward, two reverse. Automatic lock-up in all speed ranges. Hydraulic retarder. Body-up shift limiter.

Gear	Forward						Reverse	
	1st	2nd	3rd	4th	5th	6th	R1	R2
Ratio	4.0	2.68	2.01	1.35	1.0	0.67	5.15	3.46
Km/h	9.9	14.6	19.5	29.1	39.3	57.5	6.6	11.8
mile/h	6.1	9.1	12.1	18.1	24.4	35.7	4.1	7.3

Drive Axle

Heavy duty axle with full floating axle shafts, single reduction spiral bevel gear differential and planetary reduction at each wheel. High strength cast steel welded construction.

Ratios: Differential.....3.73:1
Planetary.....5.80:1
Total Reduction.....21.63:1

Suspension

Front: MacPherson type independent suspension with self-adapting, variable rate, nitrogen/oil cylinders at empty/loaded. The linkage arrangement keeps the vehicle maintain good resistance to impact.

Rear: Rigid suspension consists of self-adapting, variable rate, nitrogen/oil cylinders, A-frame linkage, lateral stabilizer bar and rear axle.

Maximum strut stroke:

Front.....300 mm (11.8 in)

Rear.....186 mm (7.3 in)

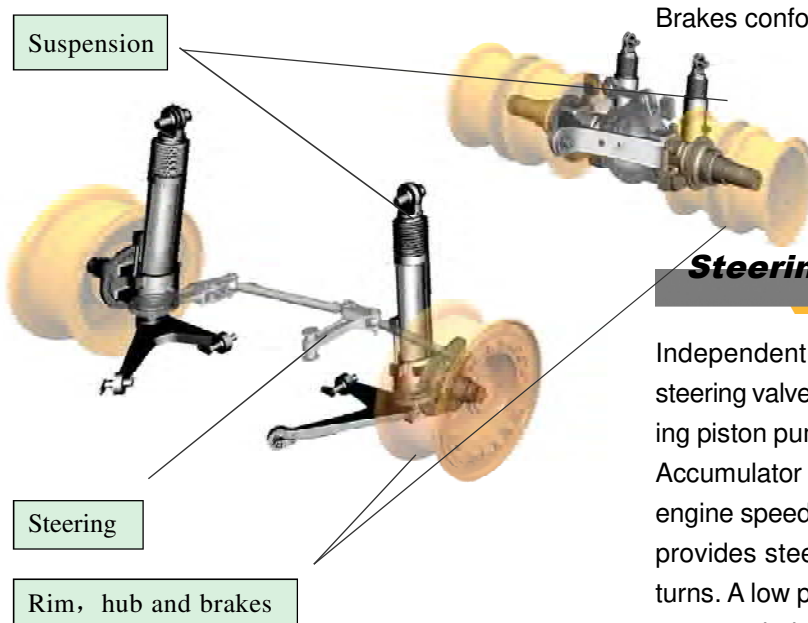
Maximum rear axle oscillation..... $\pm 7^\circ$

Wheels, rims and hubs

Tire type.....24.00-35/(36/42PR)E-4

Rim width17in

Under certain working conditions, t-km/h (ton-mile/h) capabilities of standard tires could be exceeded. Consult tire manufacturers for optimum tire selection.



Brakes

Service Brakes – Fully hydraulic brake system. Engine PTO mounted pressure compensating piston pump provides hydraulic pressure for brakes and steering. Separate circuits for front and rear wheels. Each circuit incorporates a nitrogen/hydraulic accumulator which stores energy for instant braking.

Front: Dry disc brake

Disc diameter.....710 mm (28 in)

Pad area, total.....1400 cm² (217 in²)

Rear: Oil-cooled, disc brake, completely sealed from dirt and water.

Braking surface, total.....4900 cm² (7308 in²)

Parking Brake – Rear brakes applied by spring loaded piston on disc pack, hydraulically released.

Retarder – two levers separately control the rear disc brakes and hydraulic retarder in transmission.

Secondary Brake – Park push button solenoid control applies service and parking brakes. Automatically applies when engine is switched off. Parking brake applies should system pressure fall below a pre-determined level. Brakes conform to ISO 3450, SAE J 1473.

Steering

Independent hydraulic steering with closed-center steering valve, accumulator and pressure compensating piston pump.

Accumulator provides uniform steering regardless of engine speed. In the event of loss of engine power, it provides steering of approximately two lock-to-lock turns. A low pressure indicator light warns of system pressure below 115bar (1660 lbf/in²).

Steering conforms to ISO 5010, SAE J1473.

Minimum turning radius.....9540mm

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Cab

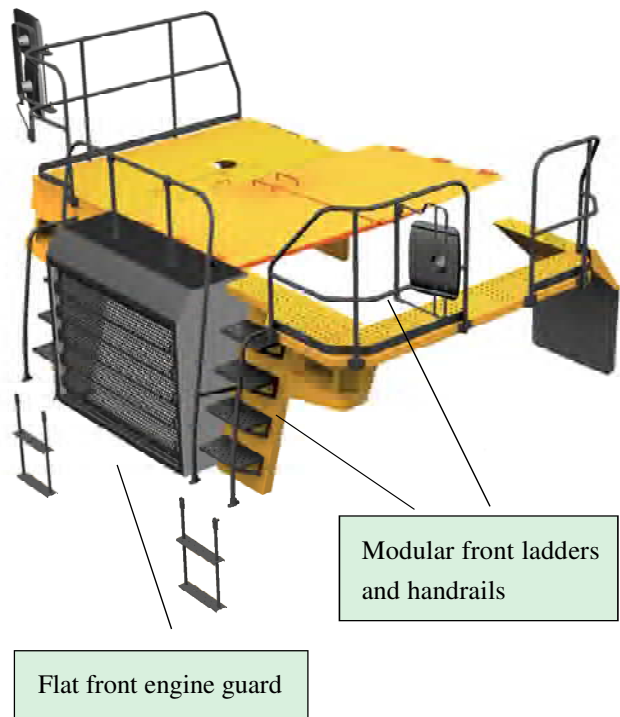
Large area of windscreen gives operator an all-around visibility. Acoustic lining material provides quiet operator space. Special pressurized cabin design isolates the operator from dust. Air suspension seat reduces vibration efficiently.

ROPS/FOPS meet the requirements of ISO 3471 and the interior dimensions are designed according to ISO 3411.



Platform assembly

SRT series cab-over-engine trucks have smaller blind area and wider view compared with cab-behind-engine ones. Modular front ladders and handrails greatly improve processing and economic properties and reliability.



Electrical system

The reliable electrical system is of advanced structure and high degree of integration. All the electrical units are new products at home and abroad. PLC control system and CAN bus which use digital signals to communicate have reliable data transmission, short response time, better anti-interference ability as well as less wiring harness, easy and quick installation. Centralized display and self-diagnose instruments are easy to operate, monitor and service.

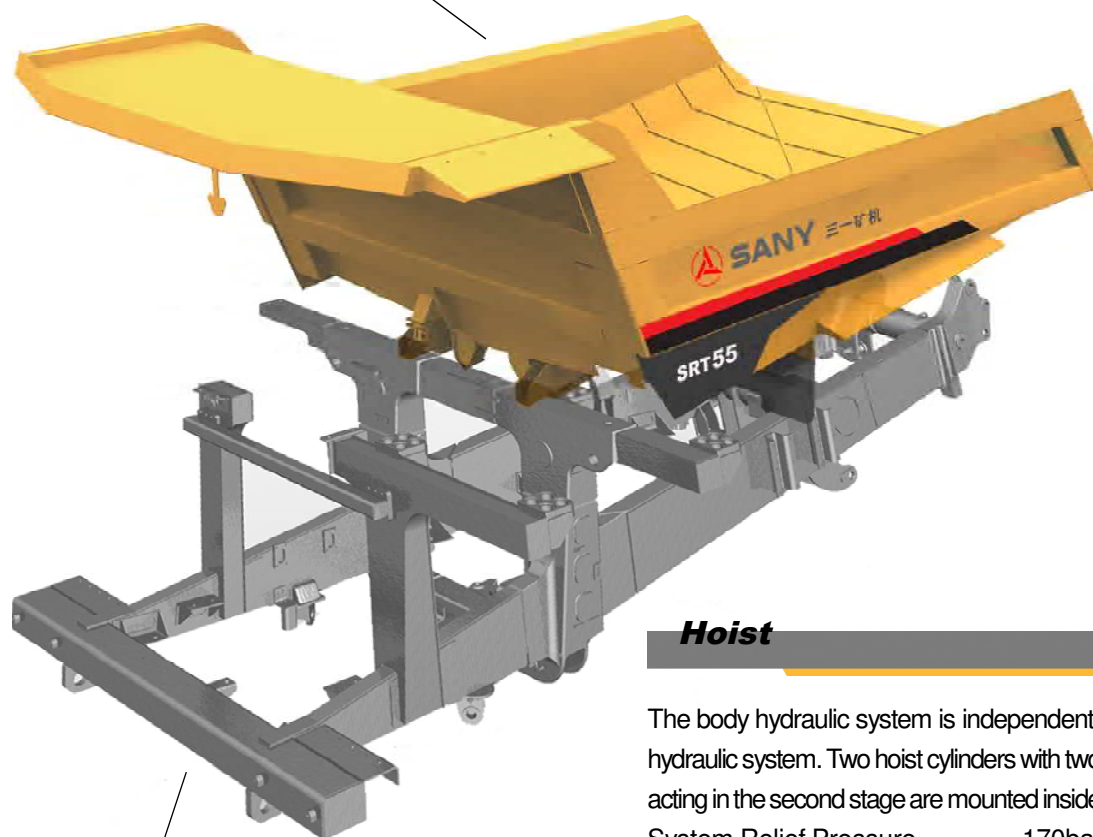
Global position system (GPS) which can carry out remote control real time monitors troubles of the vehicle, controls customer end and provides convenient daily check and service.



Frame

High rigidity frame of full box section design. It has torsional frame rails, integral front bumper and closed-loop crossmember. Mild steel used on the main frame and high strength cast steel used in areas of stress concentration provide structural flexibility and fatigue life.

High strength wear resistant body



High strength frame

Body

High strength wear resistant body. Longitudinal "V" type floor with integral transverse box-section stiffeners. Box-section ribs and stiffeners provide superior strength and impact support in the floor, sidewall, front wall, and top rail areas. The body is exhaust heated and rests on resilient impact absorption pads that are removable.

Body wear plates are steel plates of excellent wear resistance and high hardness and strength.

Thickness: Floor..... 20 mm (0.79 in)

Side..... 10 mm (0.39 in)

Front..... 10 mm (0.39 in)

Capacities: Struck (SAE std)..... 26 m³ (35 yd³)

Heaped 2:1 (SAE std).....35 m³ (46 yd³)

Hoist

The body hydraulic system is independent of the steering hydraulic system. Two hoist cylinders with two-stage, double-acting in the second stage are mounted inside the frame rails.

System Relief Pressure.....170bar (2466 lbf/in²)

Body Hydraulic Pump Flow Rate @ 2100 rpm engine....
336L/min (89 US gal/min)

Body raise time.....13 seconds

Body lower time.....11seconds

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Weights

	Kg	lb
Chassis, with hoists	31,000	68,000
Body, standard	11,000	24,000
Net weight	42,000	92,000
Rated payload	55,000	121,000
Max. gross vehicle weight*	97,000	213,000

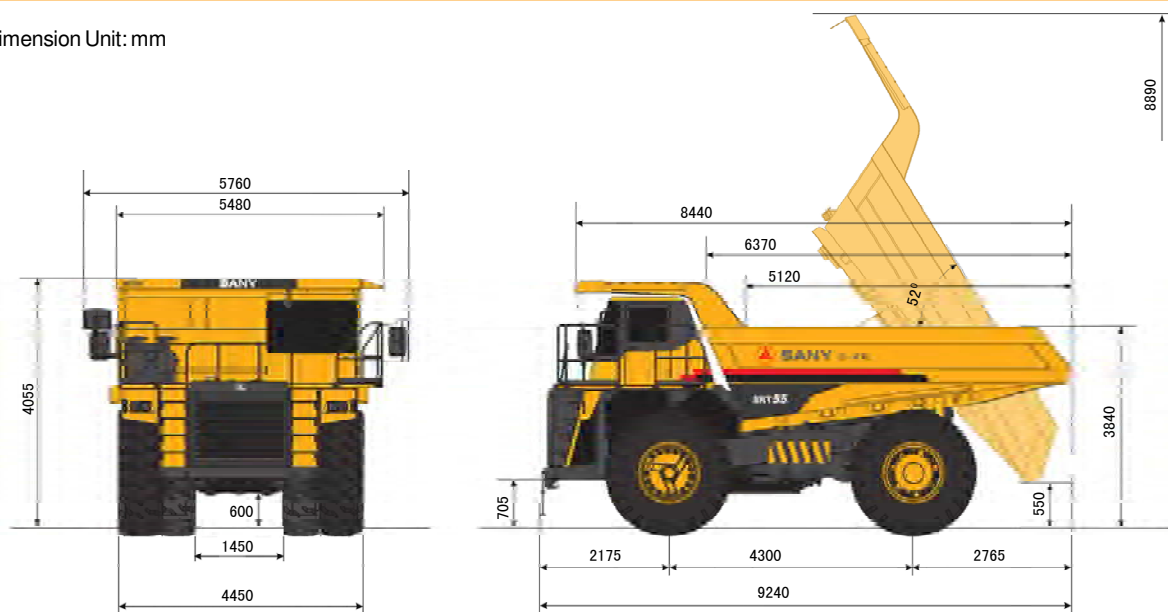
	Kg	lb
Chassis, with hoists	31,000	68,000
Body, heavy duty, rock	13,000	29,000
Net weight	44,000	97,000
Rated payload	53,000	116,000
Max. gross vehicle weight*	97,000	213,000

Service Capacities	L	(US gal)
Engine crankcase and filters	65	(17.2)
Transmission and filters	85	(22.5)
Cooling system	166	(44.0)
Fuel tank	620	(164.3)
Steering and brake hydraulic tank	73	(19.3)
Steering and brake hydraulic system (total)	76	(20.1)
Body and cooling hydraulic tank	239	(63.4)

Service Capacities	L	(US gal)
Body hydraulic and brake cooling system	258	(68.4)
Planetaries (total)	45	(11.9)
Differential	50	(13.3)
Front ride strut (each)	19	(5.0)
Rear ride strut (each)	16	(4.2)
Power take off	4	(1.1)

Machine Dimensions

Dimension Unit: mm



Product specifications are subject to change without notice.

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