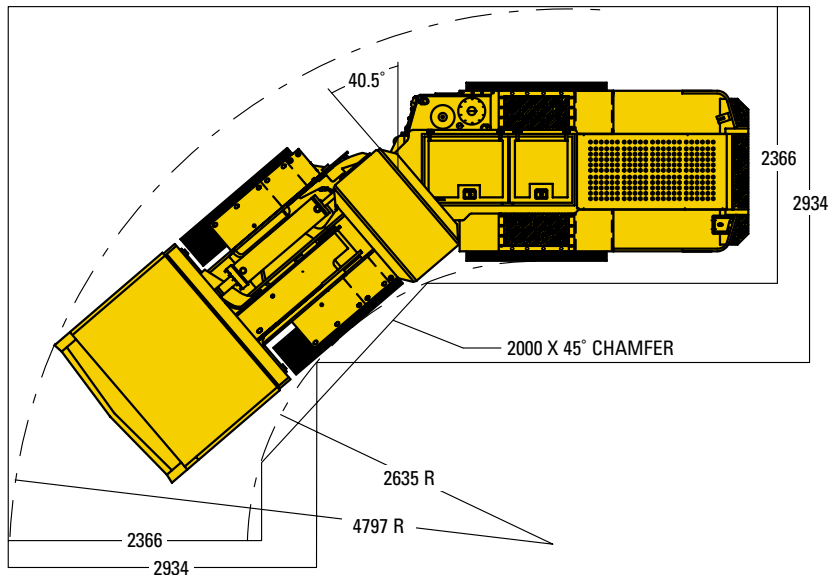
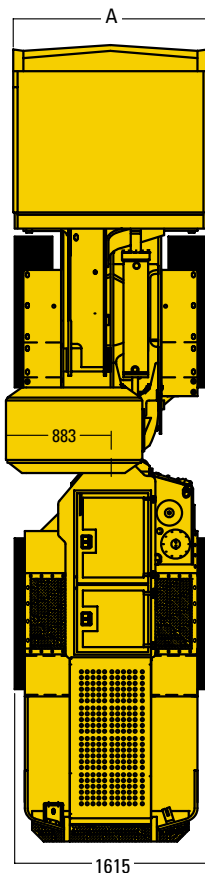
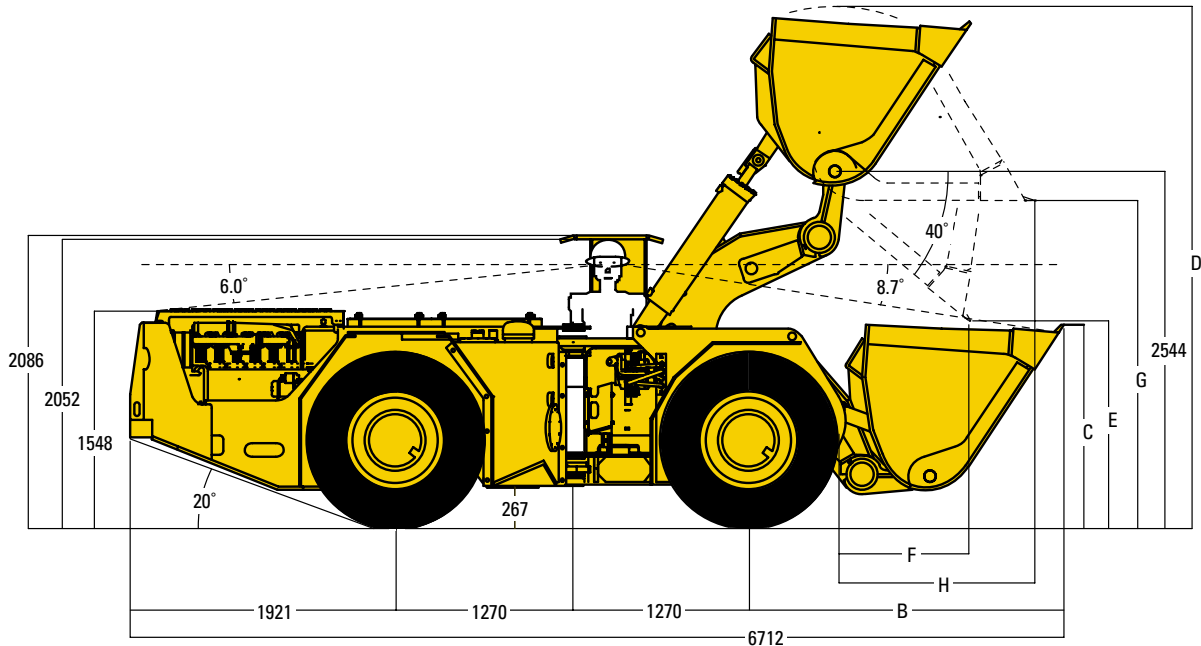


ST-2D

Atlas Copco Wagner Inc.

3.6 TONNE CAPACITY SCOOPTRAM® LHD

technical specifications and performance data



NOTE: Dimensions shown in millimeters. Turn dimensions are based on standard configuration. Overall dimensions will vary according to bucket width. Vertical dimensions are based on an unloaded vehicle tire radius of 610mm (24 in.)



ST-2D

technical specifications

CAPACITY — SAE

	kg	(lbs)
Tramming Capacity	3600	(8,000)
Static Tipping Capacity	9862	(21,737)
Breakout Force, Hydraulic	9060	(19,930)
Breakout Force, Mechanical	5936	(13,090)

Boom Speeds: (Seconds)

Raising	3.7
Lowering	3.0

Bucket Speeds: (Seconds)

Dump	6.4
Roll Back	5.3

VEHICLE SPEEDS

See Vehicle Grade Performance Chart

ENGINE (STANDARD)

Deutz Diesel	F6L-912W
MSHA Power Rating @ 2,300 rpm	63 kW (85 hp)
Maximum Torque @ 1,500 rpm	292 Nm (215 ft. lbs.)
Number of Cylinders	6, In Line
Displacement	5.6 L (345 in ³)
Cooling	Air
MSHA Part 7 Ventilation	
Vent Rate	127m ³ /min (4,500 cfm)
Particulate Index	142m ³ /min (5,000 cfm)

EXHAUST SYSTEM

Catalytic Purifier Plus Exhaust Silencer

ELECTRICAL SYSTEM

System Voltage 24 Volt Starting, 24 Volt Accessories

TRANSMISSION

Modulated Power Shift, 4 Speeds
 Forward/Reverse
 Spicer R28000 Series

TORQUE CONVERTER

Single Stage
 Spicer C-270 Series

AXLES

Spiral Bevel Differential, Full Floating, Planetary
 Wheel End Drive
 Spicer 14D2149

BRAKES

Service LCB
 Hydraulically Applied Spring Released;
 Fully Enclosed Wet Discs at Each Wheel End
 Parking and Emergency
 Spring Applied Hydraulically Released;
 Fully Enclosed Multiple Wet Discs,
 Built Into Transmission

TIRES

Tube Type, Nylon, Smooth Tread Design
 for Underground Mine Service, on Demountable Rims
 Tire Size, Front and Rear 12.00 x 24, 16 Ply, L-5S

STEERING

Articulated Hydraulic Power Steering,
 Pilot-Operated, Monostick Control
 Turning Angle 81° (40.5° Each Way)
 System Pressure 13.1 MPa (1,900 psi)

HYDRAULIC SYSTEM

Dump and Hoist Control Dual Lever
 Cylinders Double Acting, Chrome-Plated Stems
 Cylinder Diameter
 Steer Cylinder (1) 127 mm (5.0 in.)
 Hoist Cylinder (1) 178 mm (7.0 in.)
 Dump Cylinder (1) 178 mm (7.0 in.)
 Pumps Heavy Duty Gear Type
 Dump/Hoist 91 + 91 L/min (48 gpm @2,300 rpm)
 Steering 91 L/min (24 gpm @2,300 rpm)
 Filtration Suction Line: 25 Micron
 Dump/Hoist System Pressure 11.4 MPa (1,650 psi)

TANK CAPACITIES

	liters	(gallons)
Fuel	148	(39)
Hydraulic	144	(38)

OSCILLATION

Rear Axle, Bronze/Ball Bushing
 Degree of Oscillation Total 16° (8° Each Side)

OPERATOR'S ARRANGEMENT

Side Seated Operator for Bi-Directional Operation &
 Maximum Visibility and with MSHA - FOPS Certified Canopy

OPERATING WEIGHT (APPROXIMATE)

	kg	(lbs)
Empty	11540	(25,444)

ST-2D

vehicle grade performance

DEUTZ F6L-912W 63 kW (85 hp) — Loaded

Percent Grade	Grade	1st Gear		2nd Gear		3rd Gear		4th Gear	
		kph	mph	kph	mph	kph	mph	kph	mph
0.0%		3.3	2.1	6.7	4.2	11.2	7.0	18.9	11.7
2.0%		3.2	2.0	6.5	4.0	10.6	6.6	16.6	10.3
4.0%		3.2	2.0	6.3	3.9	10.1	6.3	12.0	7.5
6.0%		3.1	1.9	6.1	3.8	9.2	5.7	8.4	5.2
8.3%	1 : 12	3.0	1.9	5.9	3.7	7.6	4.7	5.2	3.2
10.0%	1 : 10	3.0	1.9	5.8	3.6	6.4	4.0	2.6	1.6
12.5%	1 : 8	2.9	1.8	5.3	3.3	5.1	3.1		
14.3%	1 : 7	2.9	1.8	4.9	3.1	4.2	2.6		
16.0%		2.9	1.8	4.5	2.8	3.5	2.2		
18.0%		2.8	1.8	4.0	2.5	2.6	1.6		
20.0%	1 : 5	2.8	1.7	3.6	2.2	1.7	1.0		
25.0%		2.7	1.7	2.7	1.7				
30.0%		2.5	1.6	2.0	1.2				

DEUTZ F6L-912W 63 kW (85 hp) — Empty

Percent Grade	Grade	1st Gear		2nd Gear		3rd Gear		4th Gear	
		kph	mph	kph	mph	kph	mph	kph	mph
0.0%		3.4	2.1	6.9	4.3	11.4	7.1	19.5	12.1
2.0%		3.3	2.1	6.6	4.1	10.9	6.8	18.2	11.3
4.0%		3.2	2.0	6.5	4.0	10.5	6.5	15.8	9.8
6.0%		3.2	2.0	6.3	3.9	10.1	6.3	12.3	7.7
8.3%	1 : 12	3.1	1.9	6.1	3.8	9.5	5.9		
10.0%	1 : 10	3.1	1.9	6.0	3.7	8.6	5.3		
12.5%	1 : 8	3.0	1.9	5.8	3.6	7.2	4.5		
14.3%	1 : 7	3.0	1.9	5.7	3.6	6.3	3.9		
16.0%		3.1	1.8	5.6	3.5				
18.0%		2.9	1.8	5.2	3.2				
20.0%	1 : 5	2.9	1.8	4.9	3.0				
25.0%		2.8	1.8	4.0	2.5				
30.0%		2.8	1.7	3.2	2.0				

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



The face of innovation

ST-2D bucket dimensions

STD

MATERIAL DENSITY			1.5	1.6	1.7	1.9	2.1	2.4	2.8
		tonnes/m ³ lbs/yds ³	2538	2707	2876	3215	3553	4061	4720
STANDARD BUCKETS									
Bucket Volume (Nominal Heaped)	m ³		2.5	2.3	2.1	1.9	1.7	1.5	1.3
	yd ³		3.3	3.0	2.8	2.5	2.3	2.0	1.7
Bucket Width (A)	mm		1651	1651	1651	1651	1651	1549	1651
	inches		65	65	65	65	65	61	65
TRAM POSITION									
Axle Centerline to Bucket Tip (B)	mm		2443	2407	2344	2251	2191	2191	2025
Ground to Bucket Tip (C)	mm		1510	1462	1381	1443	1368	1368	1285
RAISED POSITION									
Back Height (D)	mm		3889	3845	3814	3732	3676	3676	3478
40° Dump Angle									
Reach (F)	mm		1023	977	898	890	814	814	666
Bucket Tip Height (E)	mm		1339	1378	1444	1467	1523	1523	1621
30° Dump Angle									
Reach (F)	mm		1216	1156	1074	1070	978	978	815
Bucket Tip Height (E)	mm		1548	1570	1630	1661	1693	1693	1764
E-O-D® (EJECT-O-DUMP) BUCKETS									
Bucket Volume (Nominal Heaped)	m ³		1.9			1.7	1.5		
	yd ³		2.5			2.3	2.0		
Bucket Width (A)	mm		1651			1651	1549		
	inches		65			65	61		
TRAM POSITION									
Axle Centerline to Bucket Tip (B)	mm		2331			2307	2307		
Ground to Bucket Tip (C)	mm		1555			1525	1525		
RAISED POSITION									
Back Height (D)	mm		3909			3782	3782		
Level Bucket-Eject Position									
Reach (H)	mm		1496			1450	1450		
Bucket Tip Height (G)	mm		2327			2282	2282		

Atlas Copco Wagner Inc.

Working Harder and Smarter

P.O. Box 20307 • Portland, Oregon 97294-0307 • USA • Telephone (503) 255-2863 • Facsimile (503) 251-3014

©2000 Atlas Copco Wagner Inc. SAHR, Rock Tough, Teletram, E-O-D, Scooptram, Scoopy, and Strongback are registered trademarks of Atlas Copco Wagner Inc. Atlas Copco is a registered trademark of Atlas Copco AB. Other brands and symbols are trademarks of their respective companies. We reserve the right to change specifications and designs without prior notice.

