

Technical Data



Engine

Liebherr Diesel engine	D 9508 A7 Emission regulations according to 97/68/EC, 2004/26/EC Stage V, EPA/CARB Tier 4f
Rated power (net) ISO 9249 SAE J1349	310 kW / 422 HP 310 kW / 416 HP
Maximum power (net) ISO 9249 SAE J1349	360 kW / 490 HP 360 kW / 483 HP
Rated speed	1,600 rpm
Displacement	16.2 l / 988 in ³
Design	8 cylinder V-engine, water-cooled, turbocharged, air-to-air intercooler
Injection system	Direct fuel injection, Common Rail, electronic control
Lubrication	Pressurised lube system, engine lubrication guaranteed for inclinations up to 35° (lateral slope) and up to 45° (longitudinal slope)
Operating voltage	24 V
Alternator	140 A
Starter	7.8 kW / 11 HP
Batteries	4 x 95 Ah / 12 V
Air cleaner	Dry-type air cleaner with pre-cleaner, main and safety elements, control light in the operator's cab
Cooling system	Combi radiator, comprising radiators for water and charge air. Hydrostatic fan drive



Hydraulics

Hydraulic system	Load sensing (demand-controlled)
Pump type	Swash plate piston pump
Pump flow max.	352 l/min. / 92.9 gpm
Pressure limitation	280 bar / 4,061 psi
Control valve	2 segments, expandable to 4
Filter system	Return filter with magnetic rod in the hydraulic tank
Control	Single joystick for all blade functions



Travel Drive, Control

Transmission system	Infinitely variable hydrostatic travel drive, independent drive for each track
Travel speed * Speed range 1 (reverse): Speed range 2 (reverse): Speed range 3 (reverse):	Continuously variable 0 - 4.0 km/h / 2.5 mph (4.5 km/h / 2.8 mph) 0 - 6.0 km/h / 3.7 mph (8.0 km/h / 4.9 mph) 0 - 10.5 km/h / 6.8 mph (10.5 km/h / 6.8 mph) * Travel speed ranges can be set on the travel joystick (memory function)
Electronic control	The electronic system automatically adjusts travel speed and drawbar pull to match changing load conditions
Steering	Hydrostatic
Service brake	Hydrostatic (self-locking), wear-free
Parking brake	Multi-disk brake, wear-free, automatically applied with neutral joystick position
Cooling system	Hydraulic oil cooler integrated in combi radiator, hydrostatic fan drive
Filter system	Micro cartridge filters in replenishing circuit
Final drive	Combination spur gear with planetary gear, double-sealed (duo cone seals), temperature controlled
Control	Proportional single joystick for all travel and steering functions. Optional: detented Joystick



Operator's Cab

Cab	Resiliently mounted cab with positive pressure ventilation, can be tilted with hand pump 40° to the rear. With integrated ROPS Rollover Protective Structure (EN ISO 3471) and FOPS Falling Objects Protective Structure (EN ISO 3449)
Operator's seat	Air-suspended comfort seat, fully adjustable
Monitoring	Touch screen: display of current machine information, automatic monitoring of operating conditions. Individual setting of machine parameters
Vibration emission Hand / arm vibrations Whole-body vibrations	< 2.5 m/s ² , according with ISO 5349-1:2001 0.24 - 1.31 m/s ² , complies with technical report ISO/TR 25398:2006
Measuring inaccuracy	According with standard EN 12096:1997

Undercarriage

Design	Undercarriage with bogie suspension
Mounting	Via separate pivot shafts and equalizer bar
Track chains	Lubricated, single-grouser shoes, tensioning via a steel spring and grease tensioner
Links, each side	43
Track rollers, each side	8
Carrier rollers, each side	1
Sprocket segments, each side	5
Track shoes, standard	610 mm / 24"
Track shoes, optional	710 mm / 28" 762 mm / 30"
Track shoe type	SESS (Super Extrem Service Shoes)

Sound Levels

Operator sound exposure ISO 6396	
L _{pA} (in the cab)	79 dB(A)
Exterior sound pressure 2000/14/EC	
L _{WA} (to the environment)	114 dB(A)

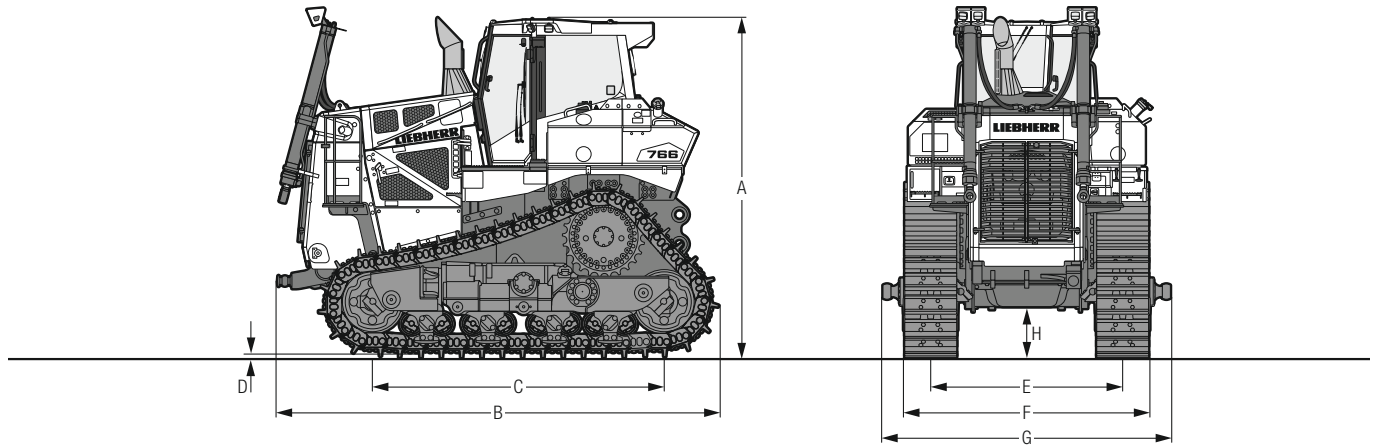
Refill Capacities

Fuel tank	800 l / 175.9 Imp.gal
Diesel Exhaust Fluid (DEF) tank	96 l / 21.1 Imp.gal
Cooling system	98 l / 21.6 Imp.gal
Engine oil, with filter	65 l / 14.3 Imp.gal
Hydraulic tank	270 l / 59.4 Imp.gal
Final drive, each side	36 l / 7.9 Imp.gal

Drawbar Pull

Max.	694 kN / 156,017 lbf
at 1.5 km/h / 0.9 mph	612 kN / 137,583 lbf
at 3.0 km/h / 1.9 mph	318 kN / 71,489 lbf
at 6.0 km/h / 3.7 mph	157 kN / 35,295 lbf
at 9.0 km/h / 5.6 mph	106 kN / 23,829 lbf

Dimensions

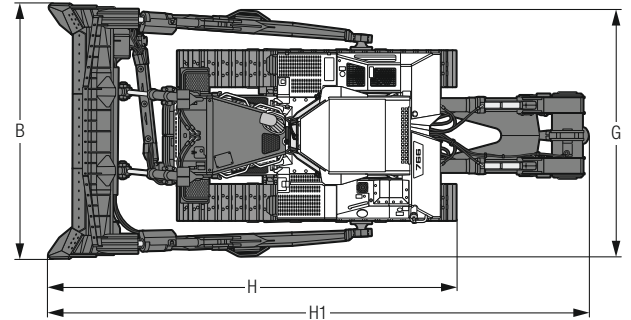
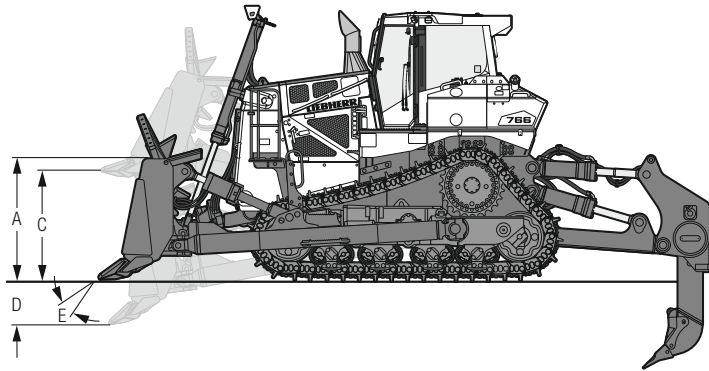


Dimensions

A Height over cab	mm	3,990
	ft in	13'1"
B Overall length without attachments	mm	5,215
	ft in	17'1"
C Length of track on ground	mm	3,448
	ft in	11'3"
D Height of grousers	mm	84
	ft in	0'3"
H Ground clearance	mm	604
	ft in	2'
E Track gauge	mm	2,270
	ft in	7'45"
G Width over trunnions	mm	3,395
	ft in	11'14"
F Track shoes 610 mm / 24"		
Width over tracks	mm / ft in	2,880 / 9'45"
Tractor shipping weight ¹⁾	kg / lb	40,271 / 88,782
F Track shoes 710 mm / 28"		
Width over tracks	mm / ft in	2,980 / 9'78"
Tractor shipping weight ¹⁾	kg / lb	40,790 / 89,926
F Track shoes 762 mm / 30"		
Width over tracks	mm / ft in	3,032 / 9'95"
Tractor shipping weight ¹⁾	kg / lb	41,078 / 90,561

¹⁾ Including coolant and lubricants, 20% fuel, ROPS / FOPS cab.

Front Attachments

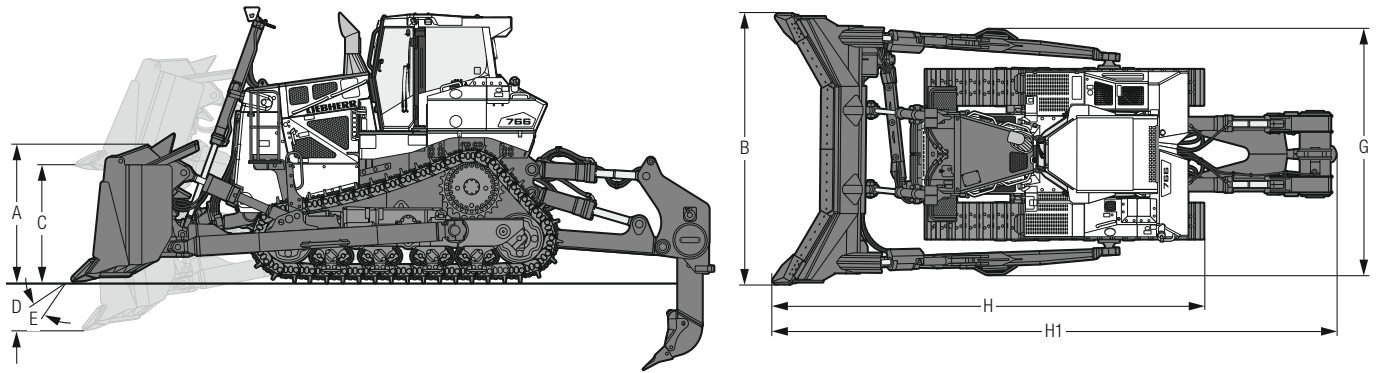


Semi-U-Blade

Blade capacity, ISO 9246		m ³	13.6
		yd ³	17.8
A Height of blade	mm	1,949	
	ft in	6'4"	
B Width of blade	mm	4,324	
	ft in	14'2"	
C Lifting height	mm	1,473	
	ft in	4'8"	
D Digging depth	mm	628	
	ft in	2'	
E Blade pitch adjustment Max. blade tilt	mm	1,150	
	ft in	3'8"	
G Width over push frame	mm	4,165	
	ft in	13'7"	
H Overall length, blade straight	mm	6,916	
	ft in	22'7"	
H1 Overall length, with rear ripper in max. extended position	mm	8,734	
	ft in	28'7"	
F Track shoes 610 mm / 24"			
Operating weight ¹⁾		kg / lb	53,460 / 117,859
Ground pressure, ISO16754 ¹⁾		kg/cm ² / psi	1.12 / 15.9
F Track shoes 710 mm / 28"			
Operating weight ¹⁾		kg / lb	53,979 / 119,003
Ground pressure, ISO16754 ¹⁾		kg/cm ² / psi	0.97 / 13.8
F Track shoes 762 mm / 30"			
Operating weight ¹⁾		kg / lb	54,267 / 119,638
Ground pressure, ISO16754 ¹⁾		kg/cm ² / psi	0.91 / 12.9

¹⁾ Including coolant and lubricants, 100% fuel, ROPS/FOPS cab, operator, Semi-U-blade.
Specified values refer to machine excluding grouser height.

Front Attachments



U-Blade

Blade capacity, ISO 9246		m ³	17.0
		yd ³	22.2
A Height of blade	mm	1,950	
	ft in	6'4"	
B Width of blade	mm	4,590	
	ft in	15'1"	
C Lifting height	mm	1,473	
	ft in	4'8"	
D Digging depth	mm	628	
	ft in	2'1"	
E Blade pitch adjustment Max. blade tilt	mm	1,221	
	ft in	4'	
G Width over push frame	mm	4,165	
	ft in	13'7"	
H Overall length, blade straight	mm	7,301	
	ft in	23'9"	
H1 Overall length, with rear ripper in max. extended position	mm	9,119	
	ft in	29'9"	
F Track shoes 610 mm / 24"			
Operating weight ¹⁾		kg / lb	53,814 / 118,639
Ground pressure, ISO16754 ¹⁾		kg/cm ² / psi	1.13 / 16.1
F Track shoes 710 mm / 28"			
Operating weight ¹⁾		kg / lb	54,333 / 119,783
Ground pressure, ISO16754 ¹⁾		kg/cm ² / psi	0.98 / 13.9
F Track shoes 762 mm / 30"			
Operating weight ¹⁾		kg / lb	54,621 / 120,418
Ground pressure, ISO16754 ¹⁾		kg/cm ² / psi	0.92 / 13.1

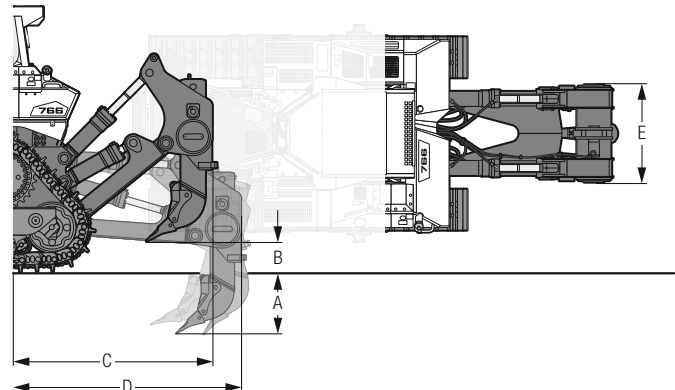
¹⁾ Including coolant and lubricants, 100% fuel, ROPS/FOPS cab, operator, U-blade.
Specified values refer to machine excluding grouser height.

Rear Attachments



1-Shank Ripper

Parallelogram		hydraulic pitch adjustment	
A Ripping depth (max. / min.)	mm	1,375 / 635	
	ft in	4'5" / 2'1"	
B Lifting height (max. / min.)	mm	922 / 182	
	ft in	3' / 0'6"	
C Additional length, attachment raised	mm	1,550	
	ft in	5'1"	
D Additional length, attachment lowered	mm	2,249	
	ft in	7'4"	
E Overall beam width	mm	1,450	
	ft in	4'8"	
F Distance between shanks	mm	-	
	ft in	-	
Max. pitch adjustment		31°	
Maximum penetration force	kN	173	
	lbf	38,891	
Max. pryout force	kN	292	
	lbf	65,644	
Weight	kg	4,823	
	lb	10,632	



3-Shank Ripper

Parallelogram		hydraulic pitch adjustment	
A Ripping depth (max. / min.)	mm	975 / 635	
	ft in	3'2" / 2'1"	
B Lifting height (max. / min.)	mm	923 / 583	
	ft in	3' / 1'9"	
C Additional length, attachment raised	mm	1,581	
	ft in	5'2"	
D Additional length, attachment lowered	mm	2,180	
	ft in	7'2"	
E Overall beam width	mm	2,494	
	ft in	8'2"	
F Distance between shanks	mm	1,130	
	ft in	3'7"	
Max. pitch adjustment		31°	
Maximum penetration force	kN	186	
	lbf	41,814	
Max. pryout force	kN	292	
	lbf	65,644	
Weight	kg	6,514	
	lb	14,361	

