

# ATLAS

## Wheel Excavator 180Wsr

STABLE. STRONG. STEADY.

# 180WSR



-  17.5 - 21.0 tons
-  115 kW (157 hp)
-  0.82 - 1.12 m<sup>3</sup>



## Specifications

### ENGINE

Power rating acc. to ISO 9249 ... 115 kW (157 HP)	Number of cylinders ..... 4	Generator ..... 24 V / 55 Ah
RPM ..... 1800/min	Bore / cylinder stroke ..... 101 / 126	Starter ..... 24 V / 4 kW
Make / model ..... Deutz TCD 4.1 (Stage 3B)	Cooling system ..... Water-cooled	
Design ..... Turbocharger / charge-air cooling	Air filter ..... Dry air filter	
Displacement ..... 4,040 cm <sup>3</sup>	Battery ..... 2 x 12 V / 100 Ah	

### HYDRAULIC SYSTEM

<ul style="list-style-type: none"> <li>• AWE 4 System</li> <li>• Load limit controlled high-performance pump</li> </ul>	<ul style="list-style-type: none"> <li>• Suction valves for all work functions</li> <li>• Load-retaining and fine lowering valves in lifting circuit</li> </ul>	<ul style="list-style-type: none"> <li>• Hydraulic system ..... 1 x Axial piston pump</li> <li>• Main pump ..... HPR 135</li> </ul>
<ul style="list-style-type: none"> <li>• Fuel-efficient flow-on-demand control</li> <li>• Sensitive, proportional, independent control</li> </ul>	<ul style="list-style-type: none"> <li>• Restrictors in the lift and articulating circuits</li> <li>• Primary and secondary overload protection</li> </ul>	<ul style="list-style-type: none"> <li>• Max. oil flow ..... 300 l/min</li> <li>• Max. operating pressure ..... 340 bar</li> </ul>

### SWING ASSEMBLY

• Swing motor:	Axial piston motor with priority valve	• Max. swing speed ..... 9/min
• Swing gear:	Planetary transmission	• Swing torque ..... 45 kNm
• Swing brake:	Automatically controlled multi-disc brake	

\* working on a slope the superstructure can easily be swung upwards, with lockable foot pedal, when exceeding the hydraulic pressure of 120 bar

### TRACTION DRIVE AND BRAKES

<ul style="list-style-type: none"> <li>• Variable displacement motor</li> <li>• Planetary drives in all four wheel hubs</li> <li>• Double-acting brake valve</li> <li>• Travel direction pre-selection via steering column mounted lever</li> </ul>	<ul style="list-style-type: none"> <li>• Travel controls via foot pedal valve:</li> <li>• Max. speed ..... 20 km/h</li> <li>• Off-road speed ..... 5 km/h</li> <li>• Crawling speed ..... 3 km/h</li> </ul>	<ul style="list-style-type: none"> <li>• All-wheel drive</li> <li>• Dual-circuit brake system ..... Multi-disc</li> <li>• Parking brake ..... Spring-loaded brake</li> </ul>
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### UNDERCARRIAGE

<ul style="list-style-type: none"> <li>• Steering axle with automatic oscillating axle locking</li> </ul>	<ul style="list-style-type: none"> <li>• 8 tires (twins) ..... 10.00 - 20</li> <li>• 4 tires (optional) ..... 600 / 40-22.5</li> </ul>	<ul style="list-style-type: none"> <li>• Turning radius ..... 7.5 m</li> </ul>
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### FILL CAPACITIES

• Fuel tank ..... 230 litres	• Engine oil ..... 13 litres	• Hydraulic tank ..... 300 litres
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### DRIVER'S CAB

<ul style="list-style-type: none"> <li>• Elastically mounted</li> <li>• Panorama glazing with heat-absorbing glass</li> <li>• The interior is glare-free</li> <li>• Front window slidable under cab roof</li> </ul>	<b>DRIVER'S SEAT:</b> <ul style="list-style-type: none"> <li>• Air-cushioned comfort seat (optional seat heating)</li> <li>• Arm rests and lumbar support</li> <li>• Seat adjustable separately from console</li> </ul>	<ul style="list-style-type: none"> <li>• Type ..... Atlas Comfort Cab 935</li> <li>• Overall length ..... 1,760 mm</li> <li>• Width ..... 935 mm</li> </ul>
	<b>CONTROL:</b> <ul style="list-style-type: none"> <li>• Ergonomic joysticks</li> <li>• Slim steering column, height and tilt adjustable</li> </ul>	<b>SOUND LEVELS:</b> <ul style="list-style-type: none"> <li>• ISO 6396 (L<sub>pA</sub>) in driver's cab ..... 78 dB(A)</li> <li>• 2000/14 EG (L<sub>wA</sub>) ambience level .... 100 dB(A)</li> </ul>

## Working equipment

### EQUIPMENT

<b>BASIC UNIT ATLAS 180Wsr</b> (can be combined)		
<ul style="list-style-type: none"> <li>Wheel Excavator 180Wsr with support/dozer blade, tailswing 1,750 mm</li> </ul>	<b>STANDARD EQUIPMENT:</b>	
<b>BOOMS:</b> <ul style="list-style-type: none"> <li>Base arm with 2 lifting cylinders and internal articulating cylinder (C66.41)</li> <li>Intermediate boom with stick cylinder, for base arm C66.41, working length 3,300 mm (C66.46)</li> <li>Standard monoblock boom with two lifting cylinders and one stick cylinder, working length 4,950 mm (C66.3M)</li> </ul>	<b>Hydraulic system:</b> <ul style="list-style-type: none"> <li>Grab / grab rotating function</li> <li>Accumulator for emergency lowering of boom system</li> <li>Pipe-break protection valves for articulated and lifting cylinders</li> </ul>	<ul style="list-style-type: none"> <li>Storage box</li> <li>Traveling per foot pedal</li> <li>Comfort seat with arm rests and orthopedic lumbar support</li> </ul>
	<b>Cab:</b> <ul style="list-style-type: none"> <li>Air-conditioning</li> <li>Preparation for radio installation</li> <li>Slim steering column, height and tilt adjustable</li> <li>Fuel gauge</li> <li>Battery main switch in negative lead</li> <li>Windshield washer system</li> <li>Sliding window in cab door</li> </ul>	<b>EQUIPMENT:</b> <ul style="list-style-type: none"> <li>Sealed pivot points in the case section of the boom</li> <li>Grab storage during road travel</li> <li>Central lubrication</li> </ul>
	<b>STICKS:</b> <ul style="list-style-type: none"> <li>Stick, working length 2200 mm (D63.2A)</li> <li>Stick, working length 2700 mm (D63.3A)</li> </ul>	<b>UNDERCARRIAGE:</b> <ul style="list-style-type: none"> <li>Wheels with intermediate rings</li> <li>Infinitely adjustable support/dozer blade, with parallel guidance</li> <li>Toolbox in undercarriage</li> </ul>
<b>BUCKET TIPPING CYLINDER:</b> <ul style="list-style-type: none"> <li>Bucket tipping cylinder with bucket linkage (F66.1)</li> </ul>		

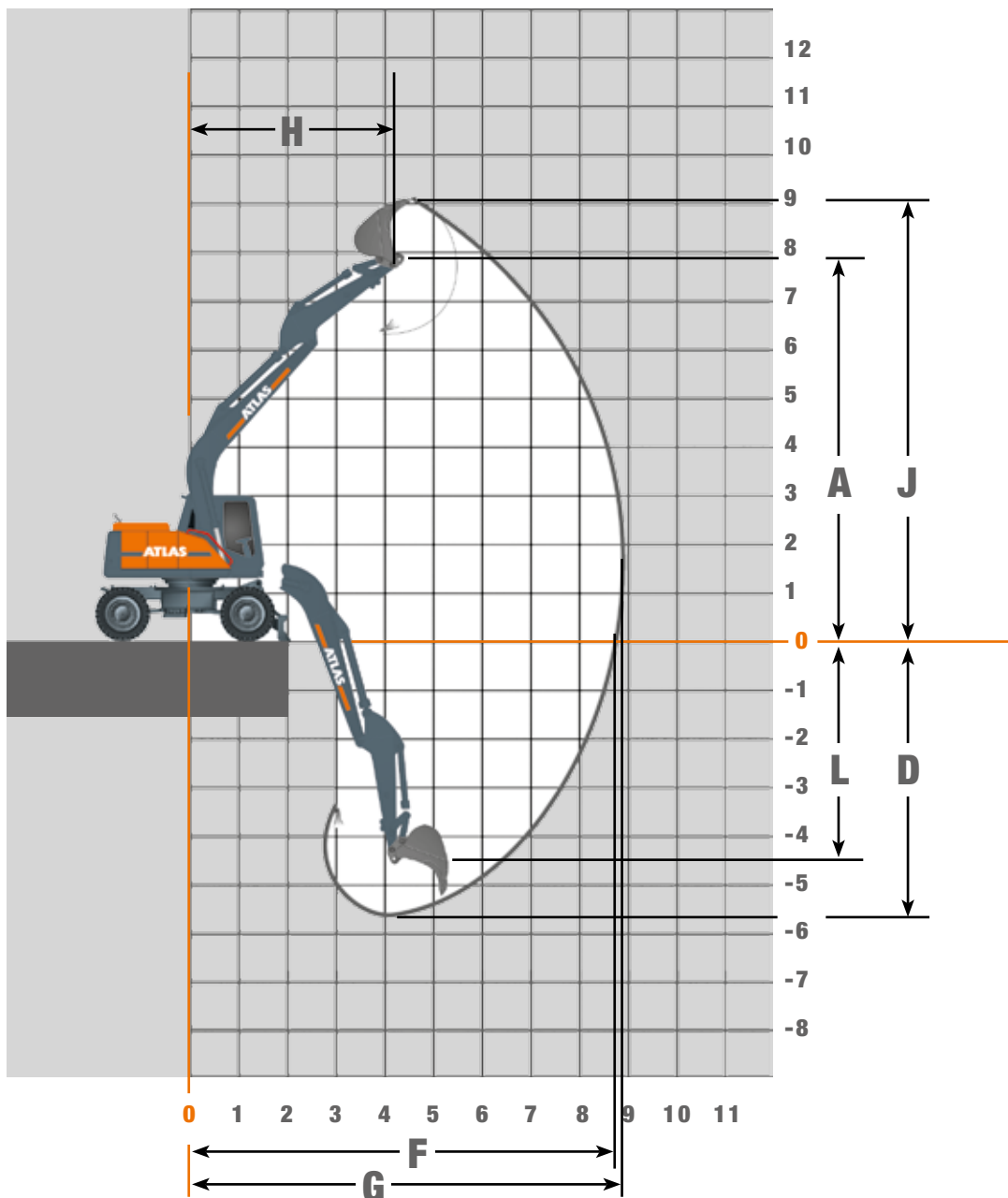
### SPECIAL EQUIPMENT

<b>Booms:</b> <ul style="list-style-type: none"> <li>Additional hydraulic unit for variable boom cylinder (B66.39)</li> </ul>	<ul style="list-style-type: none"> <li>Radio CD/MP3, front AUX in, USB</li> <li>LED working lights</li> </ul>
<b>Uppercarriage:</b> <ul style="list-style-type: none"> <li>Heavy counterweight, tailswing 2,000 mm (B67.20)</li> </ul>	<b>Undercarriage:</b> <ul style="list-style-type: none"> <li>Wide axles, overall width 2,750 mm (B655)</li> <li>Wide dozer blade, overall width 2,750 mm (B656)</li> </ul>
<b>Cab:</b> <ul style="list-style-type: none"> <li>Beacon light</li> <li>Heated driver's seat</li> </ul>	

### ATTACHMENTS (SELECTION)

	Bucket F416	Bucket F417	Bucket F648
Capacity SAE	0.82 m <sup>3</sup>	0.92 m <sup>3</sup>	1.12 m <sup>3</sup>
Cutting width	1,000 mm	1,100 mm	1,300 mm
Max. reach support/dozer blade	6.5 m	7.0 m	5.0 m

## Working ranges Monoblock boom (C66.3M)



	STICK LENGTHS	
	2.20 m (D63.2A)	2.70 m (D63.3A)
A	Bucket	Bucket
B	7.75 m	8.05 m
D	6,45	6,45
F	5.70 m	6.30 m
G	7.50 m	8.00 m
H	8.90 m	9.50 m
J	4.15 m	4.50 m
L	4.30 m	4.80 m
	Max. bucket digging force	122 kN
	Max. stick digging force	92 kN
	Grab clamping force	-
	Operating Weight	17.1 t

## Lifting capacities Monoblock boom (C66.3M)

### Lifting capacities Monoblock boom (C66.3M) and stick 2.20 m (D63.2A). Tailswing 1,750 mm

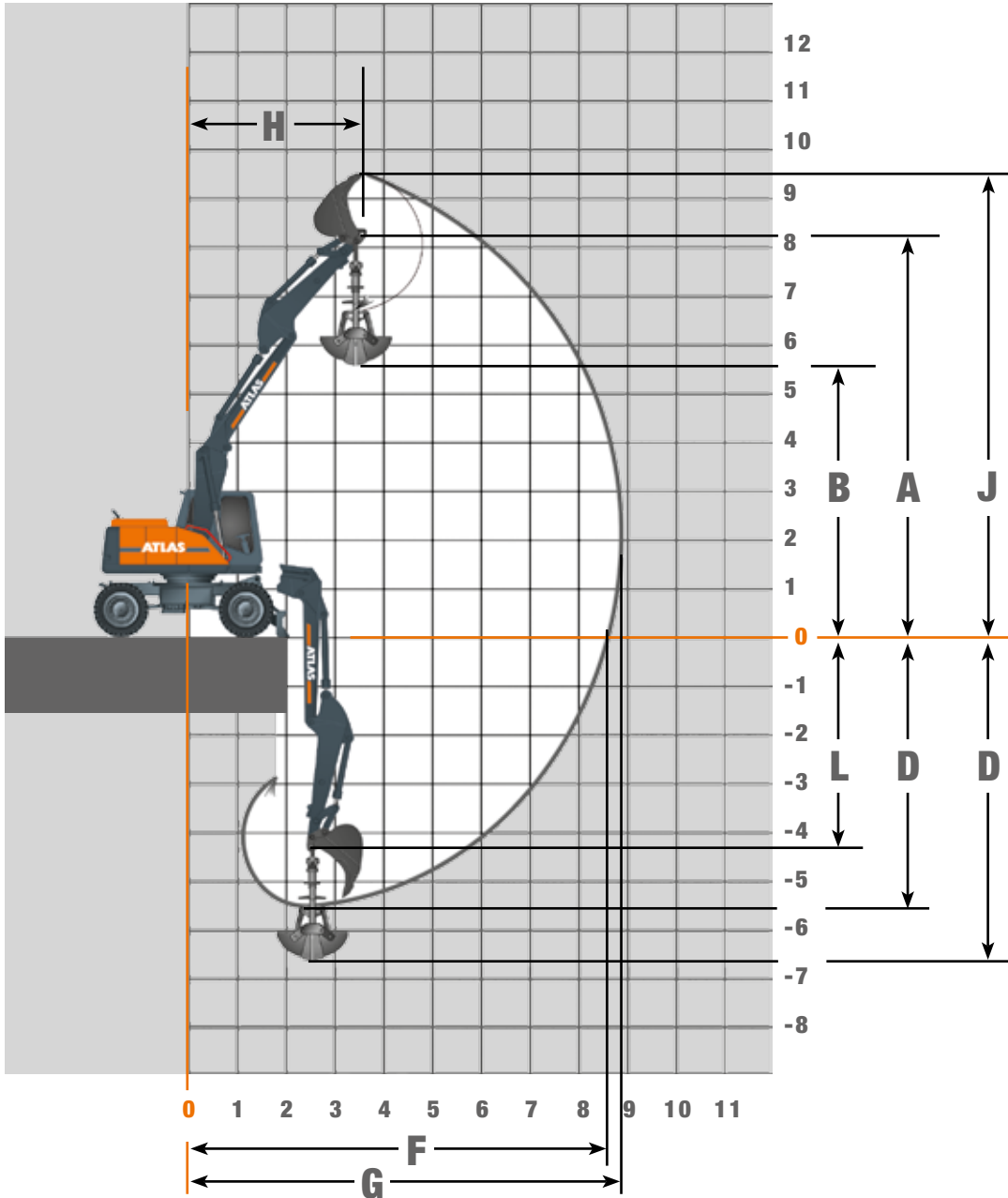
Height		3,0 m		4,0 m		4,5 m		5,0 m		6,0 m		6,5 m		7,0 m	
		FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL
+6,0 m	Supported by blade														
	Traveling							4,1	4,1	4,3	3,2				
+4,5 m	Supported by blade			5,0	5,0	4,8	4,8	4,6	4,2	4,3	3,2				
	Traveling			5,0	5,0	4,8	4,3	4,6	3,7	4,3	2,8				
+3,0 m	Supported by blade			7,0	5,4	6,2	4,6	5,6	4,0	4,9	3,1	4,5	2,5		
	Traveling			7,0	4,7	6,2	4,0	5,6	3,5	4,4	2,7	3,5	2,2		
+1,5 m	Supported by blade			8,8	5,1	7,5	4,4	6,6	3,8	5,5	3,0	4,8	2,4	3,8	2,2
	Traveling			7,8	4,4	6,5	3,8	5,6	3,3	4,3	2,6	3,5	2,1	3,1	1,9
+0 m	Supported by blade			9,3	5,0	8,1	4,2	7,1	3,7	5,8	2,9	4,9	2,4		
	Traveling			7,6	4,3	8,4	3,6	5,4	3,2	4,2	2,5	3,4	2,1		
-1,5 m	Supported by blade	11,7	7,8	8,9	5,0	7,9	4,2	7,1	3,7	5,7	2,9				
	Traveling	11,7	6,5	7,7	4,3	6,4	3,6	5,4	3,2	4,2	2,5				
-3,0 m	Supported by blade	9,9	7,9	7,7	5,1	6,8	4,3	6,1	3,8						
	Traveling	9,9	6,7	7,7	4,4	6,5	3,7	5,5	3,3						

### Lifting capacities Monoblock boom (C66.3M) and stick 2.70 m (D63.3A). Tailswing 1,750 mm

Height		3,0 m		4,0 m		4,5 m		5,0 m		6,0 m		6,5 m		7,0 m	
		FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL
+6,0 m	Supported by blade									3,7	3,3				
	Traveling									3,7	2,9				
+4,5 m	Supported by blade							4,1	4,1	3,9	3,2	2,2	2,2		
	Traveling							4,1	3,7	3,9	2,9	2,2	2,0		
+3,0 m	Supported by blade	8,9	8,5	6,3	5,6	5,6	4,7	5,1	4,0	4,5	3,1	4,1	2,3		
	Traveling	8,9	7,3	6,3	4,6	5,6	4,1	5,1	3,5	4,4	2,7	3,2	2,0		
+1,5 m	Supported by blade			8,3	5,2	7,1	4,4	6,3	3,8	5,2	3,0	4,4	2,2	2,6	2,0
	Traveling			7,9	4,5	5,6	3,8	5,6	3,3	4,3	2,6	3,1	1,9	2,6	1,8
+0 m	Supported by blade	7,2	7,2	9,2	5,0	7,9	4,2	7,0	3,7	5,7	2,9	4,5	2,2		
	Traveling	7,2	6,4	7,6	4,3	6,4	3,7	5,4	3,2	4,2	2,5	3,1	1,9		
-1,5 m	Supported by blade	12,1	7,7	9,1	4,9	8,0	4,2	7,1	3,6	5,8	2,9				
	Traveling	12,1	6,5	7,6	4,2	6,3	3,6	5,4	3,1	4,2	2,5				
-3,0 m	Supported by blade	10,9	7,8	8,3	5,0	7,3	4,3	6,5	3,7	5,1	2,9				
	Traveling	10,9	6,6	7,7	4,3	6,4	3,7	5,5	3,2	4,1	2,5				

All values in kilogrammes (kg) were determined acc. to ISO 10567 and include a stability factor of 1.33 or 87% of the hydraulic lifting capacity. These values are applicable at the top of the arm with optimum positioning of the corresponding boom.

## Working ranges Adjustable boom (C66.41)



	STICK LENGTHS		2.20 m (D63.2A)		2.70 m (D63.3A)	
	Bucket	Grabs	Bucket	Grabs	Bucket	Grabs
A Bucket pivot point	8.10 m	8.10 m	8.45 m	8.45 m	-	-
B Max. dumping height	-	5.60 m	-	5.95 m	-	-
D Max digging depth	5.50 m	6.60 m	6.00 m	7.10 m	-	-
F Max. reach	7.50 m	7.50 m	8.00 m	8.00 m	-	-
G Max. digging reach	8.90 m	8.25 m	9.40 m	8.75 m	-	-
H Max. arm position	3.40 m	3.40 m	3.75 m	3.75 m	-	-
J Max. reach height	9.50 m	-	9.85 m	-	-	-
L Lowest bucket pivot point	4.10 m	4.10 m	4.60 m	4.60 m	-	-
Max. bucket digging force	122 kN	-	122kN	-	-	-
Max. stick digging force	92 kN	-	81 kN	-	-	-
Grab clamping force	-	73 kN	-	73 kN	-	-
Operating Weight	17.9 t	18.2 t	18.0 t	18.3 t	-	-

## Lifting capacities Adjustable boom (C66.41)

### Lifting capacities Adjustable boom (C66.41) with stick 2.20 m (D63.2A). Tailswing 1,750 mm

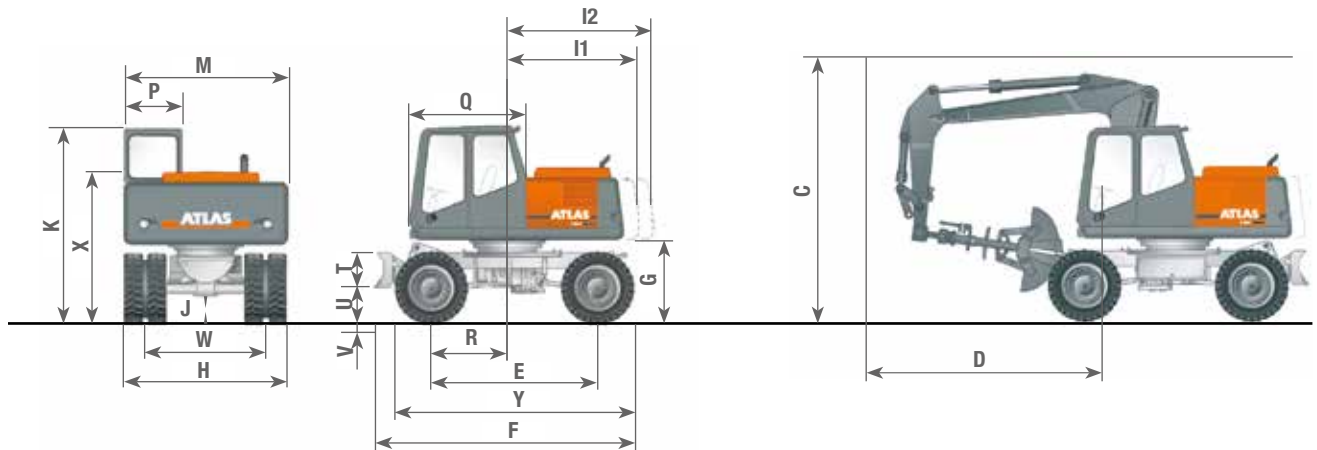
Height		3,0 m		4,0 m		4,5 m		5,0 m		6,0 m		6,5 m		7,0 m	
		FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL
+6,0 m	Supported by blade					4,8	4,8	4,7	4,3	4,6	3,1				
	Traveling					4,8	4,5	4,7	3,8	4,5	2,8				
+4,5 m	Supported by blade			5,8	5,8	5,4	4,9	5,1	4,3	4,6	3,3				
	Traveling			5,8	5,2	5,4	4,4	5,1	3,8	4,5	2,9				
+3,0 m	Supported by blade	9,4	8,5	7,4	5,6	6,5	4,8	5,9	4,2	5,0	3,2	4,5	2,4		
	Traveling	9,4	7,5	7,4	5,0	6,5	4,3	5,8	3,7	4,5	2,9	3,5	2,1		
+1,5 m	Supported by blade	10,8	8,4	8,7	5,6	7,5	4,8	6,6	4,1	5,5	3,1	4,7	2,4	4,1	2,4
	Traveling	10,8	7,3	7,8	4,9	6,6	4,2	5,7	3,7	4,5	2,8	3,7	2,1	3,0	1,8
+0 m	Supported by blade	12,6	8,3	8,9	5,5	7,8	4,6	6,9	4,0	5,6	3,0	4,7	2,3		
	Traveling	12,6	7,0	7,9	4,7	8,6	4,0	5,7	3,5	4,3	2,6	3,3	2,0		
-1,5 m	Supported by blade	12,9	8,0	9,1	5,2	7,9	4,4	7,0	3,8	5,6	2,8				
	Traveling	12,9	6,7	8,0	4,5	6,6	3,8	5,6	3,2	4,2	2,4				
-3,0 m	Supported by blade	13,1	8,0	8,8	5,0	7,3	4,2	6,0	3,6						
	Traveling	13,1	6,7	7,8	4,3	6,4	3,6	5,4	3,1						

### Lifting capacities Adjustable boom (C66.41) with stick 2.70 m (D63.3A). Tailswing 1,750 mm

Height		3,0 m		4,0 m		4,5 m		5,0 m		6,0 m		6,5 m		7,0 m	
		FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL
+6,0 m	Supported by blade					4,4	4,4	4,5	4,3						
	Traveling					4,4	4,4	4,5	3,8						
+4,5 m	Supported by blade							4,2	4,2	4,1	3,3				
	Traveling							4,2	3,9	4,1	2,9				
+3,0 m	Supported by blade	9,6	8,6	6,8	5,7	6,1	4,8	5,5	4,2	4,8	3,3	4,1	2,2		
	Traveling	9,6	7,5	6,8	5,0	6,1	4,3	5,5	3,7	4,5	2,9	3,2	1,9		
+1,5 m	Supported by blade	10,7	8,4	8,4	5,5	7,2	4,7	6,4	4,1	5,3	3,3	4,3	2,1	2,8	1,9
	Traveling	10,7	7,2	7,8	4,9	6,6	4,2	5,7	3,7	4,4	2,9	3,1	1,9	2,8	1,6
+0 m	Supported by blade	12,2	8,4	8,9	5,5	7,7	4,7	6,8	4,0	5,6	3,1	4,3	2,1		
	Traveling	12,2	7,4	7,8	4,8	6,6	4,1	5,7	3,5	4,4	2,7	3,0	1,8		
-1,5 m	Supported by blade	12,7	8,0	9,0	5,2	7,8	4,4	6,9	3,8	5,7	2,9				
	Traveling	12,7	6,8	8,0	4,5	6,7	3,8	5,7	3,3	4,2	2,5				
-3,0 m	Supported by blade	13,2	7,9	9,3	5,1	8,0	4,2	6,9	3,6	4,6	2,8				
	Traveling	13,2	6,7	7,8	4,4	6,4	3,7	5,4	3,1	4,1	2,4				

All values in kilogrammes (kg) were determined acc. to ISO 10567 and include a stability factor of 1.33 or 87% of the hydraulic lifting capacity. These values are applicable at the top of the arm with optimum positioning of the corresponding boom.

## Dimensions



<b>C</b>	<b>HEIGHT TRAVEL POSITION</b> Adjustable boom with grab in grab storage.....	4.00 m	<b>M</b>	<b>OVERALL WIDTH OF SUPERSTRUCTURE</b> .....	2.49 m
<b>D</b>	<b>DISTANCE STEERING WHEEL - BOOM</b> .....	3.50 m	<b>P</b>	<b>CAB WIDTH</b> .....	0.94 m
<b>E</b>	<b>WHEEL BASE</b> .....	2.55 m	<b>Q</b>	<b>CAB LENGTH</b> .....	1.76 m
<b>F</b>	<b>UNDERCARRIAGE LENGTH</b> .....	3.95 m	<b>R</b>	<b>DISTANCE RING GEAR - FRONT AXLE</b> .....	0.97 m
<b>G</b>	<b>CLEARANCE UNDER COUNTERWEIGHT</b> .....	1.22 m	<b>T</b>	<b>DOZER BLADE HEIGHT</b> .....	3.50 m
<b>H</b>	<b>DOZER BLADE WIDTH</b> .....	2.50 m	<b>U</b>	<b>DOZER LIFT ABOVE GROUND</b> .....	0.48 m
<b>I1</b>	<b>TAILSWING RADIUS</b> .....	1.75 m	<b>V</b>	<b>DIGGING DEPTH</b> .....	0.15 m
<b>I2</b>	<b>TAILSWING RADIUS</b> .....	2.00 m	<b>W</b>	<b>WHEEL BASE</b> .....	1.88 m
<b>J</b>	<b>GROUND CLEARANCE</b> .....	0.45 m	<b>X</b>	<b>DISTANCE GROUND LEVEL - STEERING WHEEL</b> .....	2.45 m
<b>K</b>	<b>OVERALL HEIGHT OF CAB</b> .....	3.00 m	<b>Y</b>	<b>DISTANCE FRONT TIRE-REAR TIRE</b> .....	3.66 m

[www.atlasgmbh.com](http://www.atlasgmbh.com)

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