




# ATLAS

Wheel Excavator 160Wsr

STABLE. STRONG. STEADY.

# 160WSR



-  15.0 - 16.5 tons
-  75 kW (102 hp)
-  0.67 - 1.12 m<sup>3</sup>



## Technical data

### ENGINE

Power rating acc. to ISO 9249 75kW (102 HP)	Number of cylinders ..... 4	Generator ..... 24 V / 55 Ah
RPM ..... 2100/min	Bore / cylinder stroke ..... 101 / 126	Starter ..... 24 V / 4 kW
Make / model ..... Deutz / TCD 2012 L04 2V	Cooling system ..... Water-cooled	
Design ..... Turbocharger	Air filter ..... Dry air filter	
Displacement ..... 4,040 cm <sup>3</sup>	Battery ..... 2 x 12 V / 100 Ah	

### HYDRAULIC SYSTEM

• AWE 4 System	• Suction valves for all work functions	• Hydraulic system ..... 1 x Axial piston pump
• Load limit controlled high-performance pump	• Load-retaining and fine lowering valves in lifting circuit	• Main pump ..... HPR 105
• Fuel-efficient flow-on-demand control	• Restrictors in the lift and articulating circuits	• Max. oil flow ..... 220 l/min
• Sensitive, proportional, independent control	• Primary and secondary overload protection	• Max. operating pressure ..... 340 bar

### SWING ASSEMBLY

• Swing motor:	Axial piston motor with priority valve	• Max. swing speed ..... 9/min
• Swing gear:	Planetary transmission	• Swing torque ..... 37.5 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

• Variable displacement motor	• Travel controls via foot pedal valve:	• All-wheel drive
• Planetary drives in all four wheel hubs	• Max. speed ..... 20 km/h	• Dual-circuit brake system ..... Multi-disc
• Double-acting brake valve	• Off-road speed ..... 5 km/h	• Parking brake ..... Spring-loaded brake
• Travel direction pre-selection via steering column mounted lever	• Crawling speed ..... 3 km/h	

### UNDERCARRIAGE

• 30 tons special excavator axles	• 8 tires (twins) ..... 10.00 - 20	• Turning radius ..... 7.5 m
• Steering axle with automatic oscillating axle locking	• 4 tires (optional) ..... 600 / 40-22.5	

### FILL CAPACITIES

• Fuel tank ..... 190 litres	• Engine oil ..... 13 litres	• Hydraulic tank ..... 200 litres
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### DRIVER'S CAB

• Elastically mounted	<b>DRIVER'S SEAT:</b>	• Type ..... Atlas Comfort Cab 935
• Panorama glazing with heat-absorbing glass	• Air-cushioned comfort seat (optional seat heating)	• Overall length ..... 1,760 mm
• The interior is glare-free	• Arm rests and lumbar support	• Width ..... 935 mm
• Front window slidable under cab roof	• Seat adjustable separately from console	
	<b>CONTROL:</b>	<b>SOUND LEVELS:</b>
	• Ergonomic joysticks	• ISO 6396 (L <sub>pA</sub> ) in driver's cab ..... 75 dB(A)
	• Slim steering column, height and tilt adjustable	• 2000/14 EG (L <sub>wA</sub> ) ambience level ..... 98 dB(A)

## Working equipment

### EQUIPMENT

#### BASIC UNIT ATLAS 160Wsr (can be combined)

- Wheel Excavator 160Wsr with support/dozer blade, tailswing 1,575 mm

#### STANDARD EQUIPMENT:

- Traveling per foot pedal

#### Hydraulic system:

- Comfort seat with arm rests and orthopedic lumbar support

#### BOOMS:

- Base boom with one lifting cylinder (C6.0)
- Standard main boom with stick cylinder, 2x adjustable, working length 2,930 mm (C6.3)
- Base arm with 2 lifting cylinders and center-mounted articulating cylinder (C6.41)
- Intermediate boom with stick cylinder, for base arm C6.41, working length 3,095 mm (C6.46)

- Grab / grab rotating function

- Accumulator for emergency lowering of boom system

#### EQUIPMENT:

- Sealed pivot points in the case section of the boom

- Grab storage during road travel

#### Cab:

- Air-conditioning

- Central lubrication

- Preparation for radio installation

#### STICKS:

- Stick, working length 2,150 mm (D6.2)
- Stick, working length 2,650 mm (D6.3)

- Slim steering column, height and tilt adjustable

- Fuel gauge

- Battery main switch in negative lead

#### UNDERCARRIAGE:

- Wheels with intermediate rings
- Infinitely adjustable support/dozer blade, with parallel guidance
- Toolbox in undercarriage

- Windshield washer system

- Sliding window in cab door

#### BUCKET TIPPING CYLINDER:

- Bucket tipping cylinder with bucket linkage (F6.1)

- Storage box

### SPECIAL EQUIPMENT

#### Booms:

- Additional hydraulic unit for variable boom cylinder (B43.39)
- Pipe-break protection valves for lifting cylinders, overload warning device (B43.41)

#### Superstructure:

- Heavy counterweight, tailswing 1,750 mm (B41.20)
- Heavy counterweight, tailswing 2,000 mm (B41.21)

#### Cab:

- Beacon light
- Heated driver's seat
- Radio CD/MP3, front AUX in, USB
- Xenon working lights

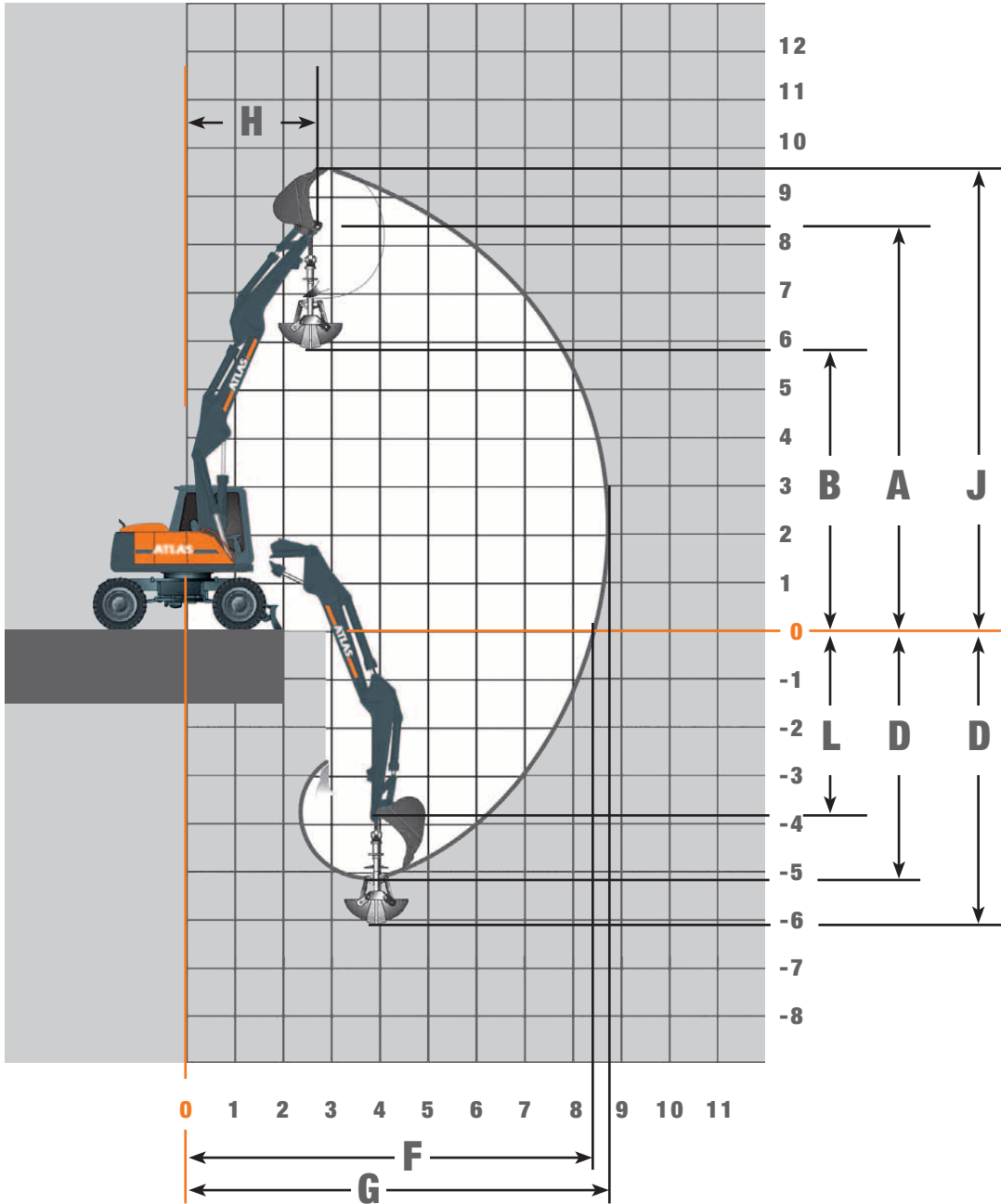
#### Undercarriage:

- Wide axles (overall width 2750 mm)
- Wide dozer blade (overall width 2750 mm)

### ATTACHMENTS (SELECTION)

	Bucket F415	Bucket F416	Bucket F417	Bucket F648
Capacity SAE	0.67 m <sup>3</sup>	0,82 m <sup>3</sup>	0,92 m <sup>3</sup>	1,12 m <sup>3</sup>
Cutting width	850 mm	1000 mm	1100 mm	1300 mm
Max. reach support/dozer blade	6.0 m	6,5 m	7,0 m	5 m

## Working ranges Adjustable boom (C6.41)



	STICK LENGTHS		2,15 m (D6.2)		2,65 m (D6.3)	
	Bucket	Grabs	Bucket	Grabs	Bucket	Grabs
A Bucket pivot point	8.30 m	8.30 m	8.70 m	8.70 m	-	-
B Max. dumping height	-	5.85 m	-	6.20 m	-	-
D Max. digging depth	5.10 m	6.15 m	5.60 m	6.70 m	-	-
F Max. reach	7.45 m	7.45 m	7.90 m	7.90 m	-	-
G Max. digging reach	8.85 m	8.20 m	9.30 m	8.70 m	-	-
H Max. arm position	2.65 m	2.65 m	2.65 m	2.65 m	-	-
J Max. reach height	9.70 m	-	10.10 m	-	-	-
L Lowest bucket pivot point	3.70 m	3.70 m	4.20 m	4.20 m	-	-
Max. bucket digging force	130 kN	-	130 kN	-	-	-
Max. stick digging force	82 kN	-	72 kN	-	-	-
Grab clamping force	-	73 kN	-	73 kN	-	-
Operating Weight	15.3 t	15.5 t	15.4 t	15.6 t	-	-

## Lifting capacities Adjustable boom (C6.41)

### Lifting capacities Adjustable boom (C6.41) with stick 2.15 m (D6.2). Tailswing 1,575 mm

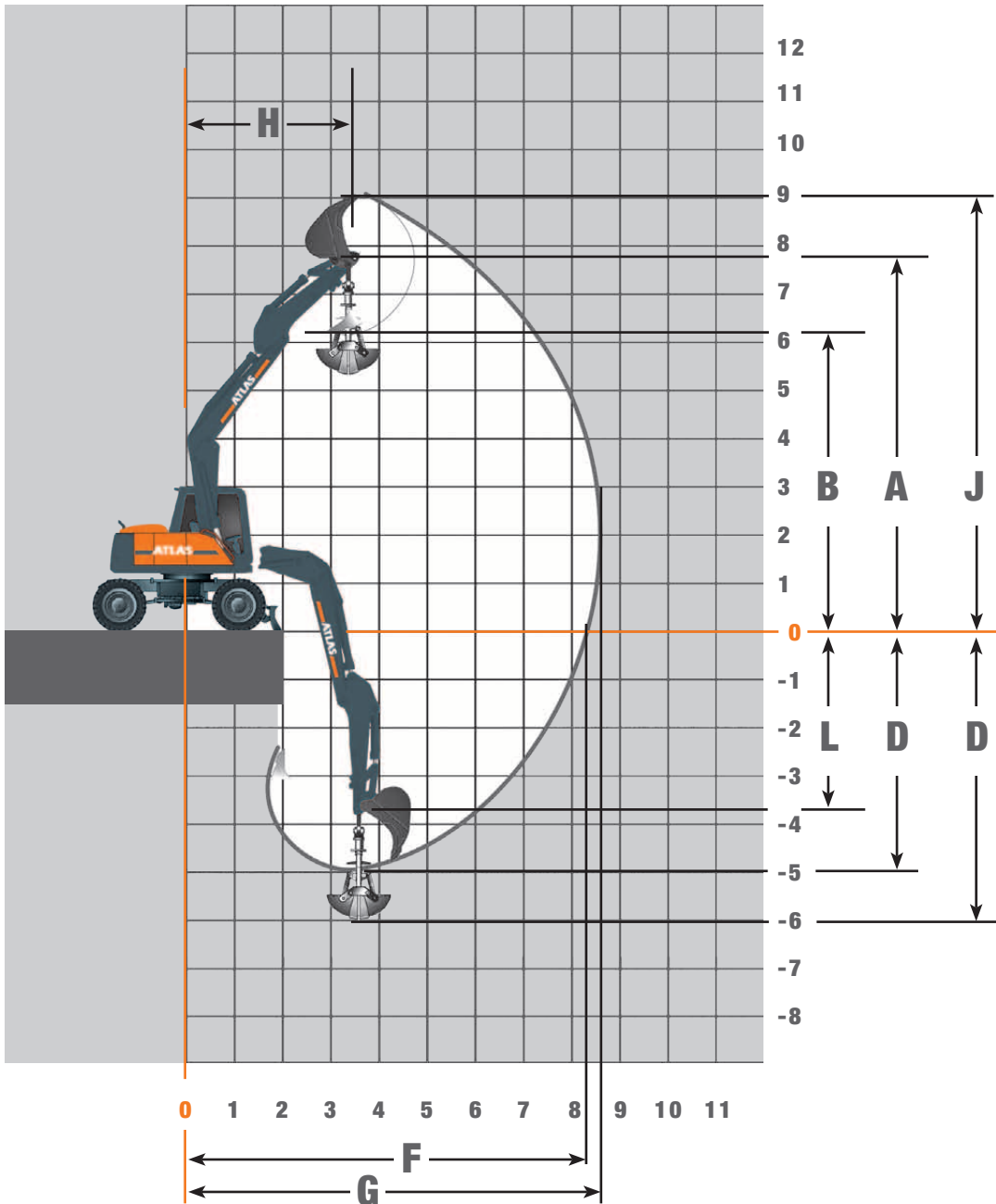
Height		3,0 m		4,0 m		4,5 m		5,0 m		6,0 m		6,5 m		7,0 m	
		FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL
+6,0 m	Supported by blade			4,7	4,5	4,4	3,8	4,2	3,2						
	Traveling			4,7	3,9	4,4	3,3	4,2	2,8						
+4,5 m	Supported by blade	6,4	6,4	5,3	4,4	4,8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

### Lifting capacities Adjustable boom (C6.41) with stick 2.65 m (D6.3). Tailswing 1,575 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					4,0	3,9	3,9	3,3	3,6	2,4				
	Traveling					4,0	3,3	3,9	2,8	3,6	2,0				
+4,5 m	Supported by blade			4,8	4,5	4,4	3,8	4,2	3,2	3,7	2,5	3,4	1,8		
	Traveling			4,8	3,8	4,4	3,2	4,2	2,8	3,7	2,1	2,9	1,5		
+3,0 m	Supported by blade	6,8	6,5	5,9	4,3	5,2	3,6	4,7	3,1	4,0	2,5	3,5	1,8	3,2	1,6
	Traveling	6,8	5,5	5,9	3,6	5,2	3,1	4,7	2,7	3,7	2,1	2,9	1,5	2,6	1,3
+1,5 m	Supported by blade	8,3	6,2	6,8	4,1	5,9	3,5	5,2	3,1	4,3	2,4	3,5	1,8	3,1	1,5
	Traveling	8,3	5,3	6,4	4,5	5,4	3,0	4,6	2,6	3,6	2,0	2,9	1,5	2,5	1,3
+0 m	Supported by blade	9,5	5,1	6,9	4,0	6,0	3,4	5,3	2,9	4,2	2,2	3,4	1,7	3,0	1,5
	Traveling	9,5	5,0	6,4	3,3	5,4	2,8	4,6	2,5	3,6	1,9	2,7	1,4	2,4	1,2
-1,5 m	Supported by blade	10,1	5,7	7,0	3,8	6,1	3,2	5,4	2,8	4,3	2,0	3,1	1,6		
	Traveling	10,1	4,6	6,6	3,1	5,5	2,7	4,7	2,3	3,4	1,7	2,7	1,3		
-3,0 m	Supported by blade	10,4	5,7	7,2	3,7	6,0	3,1	5,0	2,6						
	Traveling	10,4	4,6	6,5	3,0	5,3	2,5	4,5	2,2						

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, mechanical (C6.0)



	STICK LENGTHS		2,15 m (D6.2)		2,65 m (D6.3)	
	Bucket	Grabs	Bucket	Grabs	Bucket	Grabs
A	Bucket pivot point	7.80 m	7.80 m	8.10 m	8.10 m	8.10 m
B	Max. dumping height	-	5.30 m	-	5.65 m	-
D	Max digging depth	4.90 m	4.90 m	5.45 m	6.50 m	-
F	Max. reach	7.20 m	7.20 m	7.70 m	7.70 m	-
G	Max. digging reach	8.60 m	8.10 m	9.05 m	8.45 m	-
H	Max. arm position	3.30 m	3.30 m	3.70 m	3.70 m	-
J	Max. reach height	9.15 m	-	9.50 m	-	-
L	Lowest bucket pivot point	3.55 m	3.55 m	4.05 m	4.05 m	-
	Max. bucket digging force	130 kN	-	130 kN	-	-
	Max. stick digging force	82 kN	-	72 kN	-	-
	Grab clamping force	-	73 kN	-	73 kN	-
	Operating Weight	14.8 t	15.0 t	14.9 t	15.1 t	-

## Lifting capacities Adjustable boom, mechanical (C6.0)

### Lifting capacities Adjustable boom, mechanical (C6.0) with stick 2.15 m (D6.2). Tailswing 1575 mm

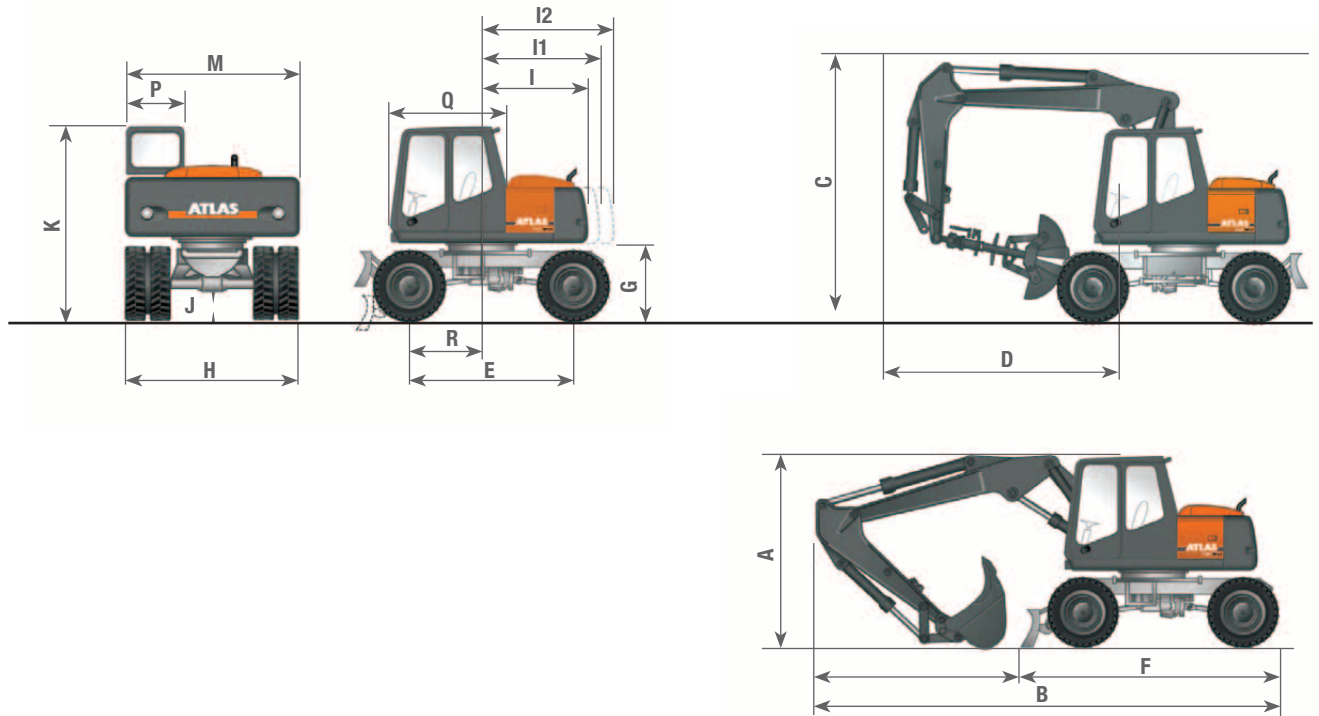
Height		3,0 m		4,0 m		4,5 m		5,0 m		6,0 m		6,5 m		7,0 m	
		FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL	FRONT	LATERAL
+6,0 m	Supported by blade					4,8	3,8	4,2	3,2						
	Traveling					4,8	3,2	4,2	2,7						
+4,5 m	Supported by blade			5,3	4,5	4,9	3,7	4,7	3,2	4,0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

### Lifting capacities Adjustable boom, mechanical (C6.0) with stick 2.65 m (D6.3). Tailswing 1575 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							4,0	3,2	3,3	2,4				
	Traveling							4,0	2,8	3,3	2,0				
+4,5 m	Supported by blade					4,5	3,8	4,3	3,2	4,0	2,4	2,7	1,8		
	Traveling					4,5	3,2	4,3	2,7	3,8	2,1	2,7	1,5		
+3,0 m	Supported by blade	7,6	6,7	5,8	4,3	5,2	3,7	4,8	3,1	4,2	2,4	3,5	1,8	2,5	1,6
	Traveling	7,6	5,5	5,8	3,6	5,2	3,1	4,8	2,7	3,7	2,0	2,8	1,5	2,5	1,3
+1,5 m	Supported by blade	10,0	6,1	6,9	4,0	6,0	3,4	5,4	2,9	4,4	2,2	3,5	1,7	3,1	1,5
	Traveling	10,0	5,0	6,7	3,4	5,6	2,9	4,8	2,5	3,6	1,9	2,8	1,5	2,5	1,3
+0 m	Supported by blade	10,3	5,6	7,2	3,7	6,3	3,1	5,5	2,7	4,3	2,1	3,4	1,6		
	Traveling	10,3	4,5	6,5	3,1	5,4	2,6	4,6	2,3	3,5	1,8	2,7	1,4		
-1,5 m	Supported by blade	9,7	5,5	7,0	3,6	6,1	3,1	5,4	2,7	4,2	2,1				
	Traveling	9,7	4,4	6,4	2,9	5,3	2,5	4,5	2,2	3,4	1,7				
-3,0 m	Supported by blade	7,9	5,6	5,9	3,7	5,1	3,1	4,4	2,7						
	Traveling	7,9	4,5	5,9	3,0	5,1	2,6	4,4	2,2						

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>A</b>	<b>TRANSPORT HEIGHT (with bucket)</b>	<b>G</b>	<b>CLEARANCE UNDER COUNTERWEIGHT</b> .....1.22 m
	Adjustable boom with stick 2.15 m.....3.00 m	<b>H</b>	<b>DOZER BLADE WIDTH</b> .....2.50 m
<b>B</b>	<b>TRANSPORT LENGTH</b>	<b>I</b>	<b>TAILSWING RADIUS</b> .....1.57 m
	Adjustable boom with stick 2.15 m.....7.70 m	<b>I1</b>	<b>TAILSWING RADIUS</b> .....1.75 m
<b>C</b>	<b>TRAVEL SETUP</b>	<b>I2</b>	<b>TAILSWING RADIUS</b> .....2.00 m
	Adjustable boom with grab in grab storage .....4.00 m	<b>J</b>	<b>GROUND CLEARANCE</b> .....0.45 m
<b>D</b>	<b>DISTANCE STEERING WHEEL - BOOM</b> .....3.50 m	<b>K</b>	<b>OVERALL HEIGHT OF CAB</b> .....3.00 m
<b>E</b>	<b>WHEEL BASE</b> .....2.50 m	<b>M</b>	<b>OVERALL WIDTH OF SUPERSTRUCTURE</b> .....2.49 m
<b>F</b>	<b>UNDERCARRIAGE LENGTH</b> .....3.95 m	<b>P</b>	<b>CAB WIDTH</b> .....0.94 m
		<b>Q</b>	<b>CAB LENGTH</b> .....1.76 m
		<b>R</b>	<b>DISTANCE RING GEAR - FRONT AXLE</b> .....0.97 m

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

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