ATLAS

Wheel Excavator 180WSR

180WSR

STABLE. STRONG. STEADY.

- 17.5 - 21.0 tons
- 95 kW (129 hp)
- 0.82 - 1.12 m³

Courtesy of Machine

ATLAS

TECHNICAL SPECIFICATIONS

Specifications

ENGINE

Power rating acc. to ISO 924995 kW (129 HP)	Number of cylinders 4	Generator ..... 24 V / 55 Ah
RPM 2300/min	Bore / cylinder stroke ..... 101 / 126	Starter ..... 24 V / 4 kW
Make / model ..... Deutz / TCD 2012 L04 2V	Cooling system ..... Water-cooled	
Design..... Turbocharger / charge-air cooling	Air filter ..... Dry air filter	
Displacement ..... 4,040 cm^3	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 135
• Fuel-efficient flow-on-demand control	• Restrictors in the lift and articulating circuits	• Max. oil flow ..... 300 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 ..... 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

• 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

• 40 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 ..... 230 litres	• Engine oil..... 13 litres	• Hydraulic tank ..... 300 litres

DRIVER´S CAB

• Elastically mounted	**DRIVER'S SEAT:**	• 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	
		SOUND LEVELS:
	CONTROL:	• ISO 6396 (L_pA) in driver's cab ..... 78 dB(A)
	• Ergonomic joysticks	• 2000/14 EG (L_wA) ambience level .... 100 dB(A)
	• Slim steering column, height and tilt adjustable	

Working equipment

EQUIPMENT

BASIC UNIT ATLAS 180Wsr (can be combined)

- Wheel Excavator 180Wsr with support/dozer blade, tailswing 1,750 mm

BOOMS:

- Base arm with 2 lifting cylinders and internal articulating cylinder (C66.41)
- Intermediate boom with stick cylinder, for base arm C66.41, working length 3,300 mm (C66.46)
- Standard monoblock boom with two lifting cylinders and one stick cylinder, working length 4,950 mm (C66.3M)

STICKS:

- Stick, working length 2200 mm (D66.2)
- Stick, working length 2700 mm (D66.3)

BUCKET TIPPING CYLINDER:

- Bucket tipping cylinder with bucket linkage (F66.1)

STANDARD EQUIPMENT:

Hydraulic system:

- Grab / grab rotating function
- Accumulator for emergency lowering of boom system

Cab:

- Air-conditioning
- Preparation for radio installation
- Slim steering column, height and tilt adjustable
- Fuel gauge
- Battery main switch in negative lead
- Windshield washer system
- Sliding window in cab door
- Storage box
- Traveling per foot pedal
- Comfort seat with arm rests and orthopedic lumbar support

EQUIPMENT:

- Sealed pivot points in the case section of the boom
- Grab storage during road travel
- Central lubrication

UNDERCARRIAGE:

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

SPECIAL EQUIPMENT

Booms:

- Additional hydraulic unit for variable boom cylinder (B66.39)
- Hose-rupture safety device for lifting cylinders, overload warning device (B66.41)

Uppercarriage:

- Heavy counterweight, tailswing 2,000 mm (B67.20)

Cab:

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

Undercarriage:

- Wide axles, overall width 2,750 mm (B655)
- Wide dozer blade, overall width 2,750 mm (B656)

ATTACHMENTS (SELECTION)

	Bucket F416	Bucket F417	Bucket F648
Capacity SAE	0.82 m^3	0.92 m^3	1.12 m^3
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

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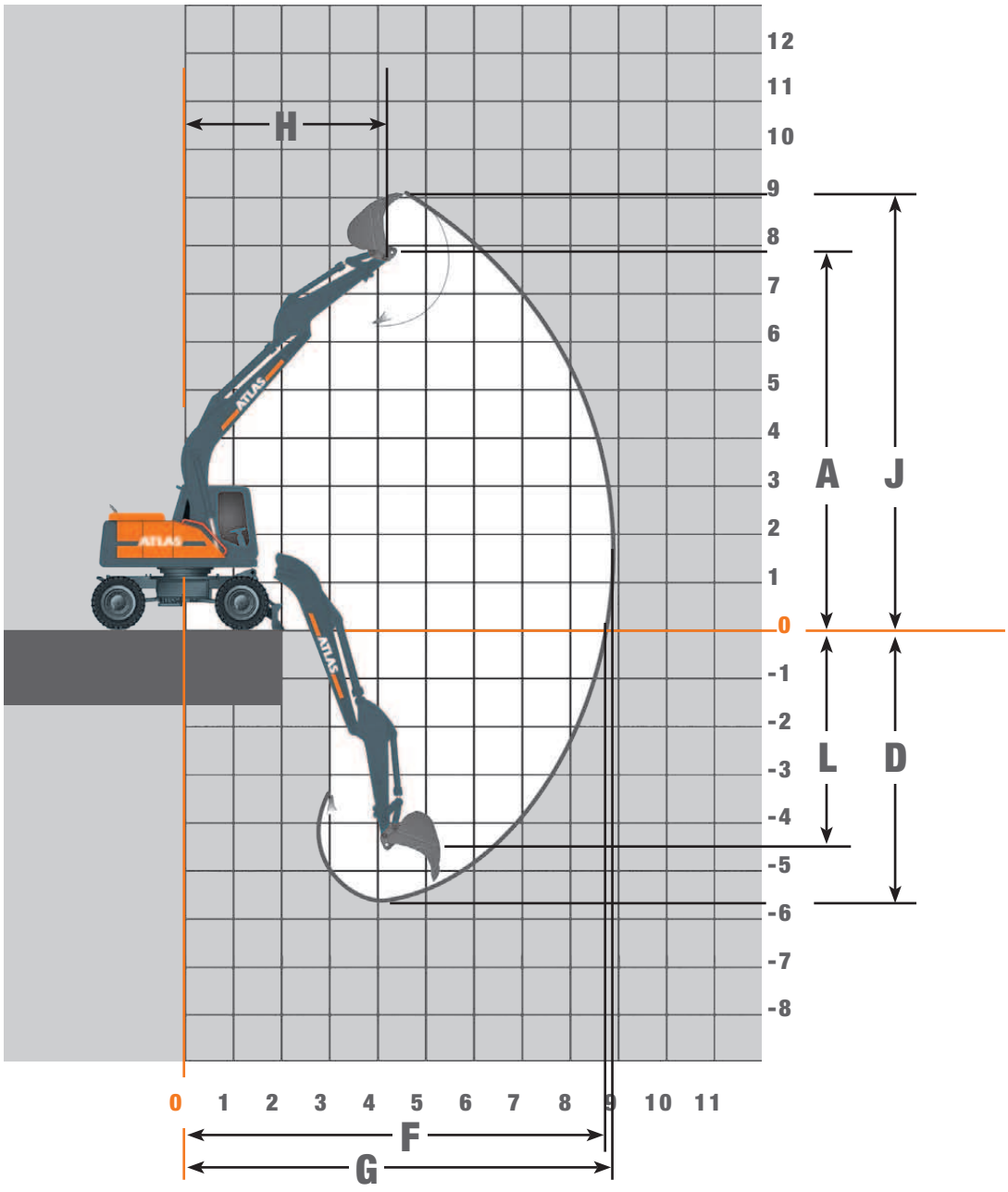
WORKING RANGES

Working ranges Monoblock boom (C66.3M)



STICK LENGTHS		2.20 m (D66.2)	2.70 m (D66.3)
		Bucket	Bucket
A	Bucket pivot point	7.75 m	8.05 m
B	Max. dumping height	6,45	6,45
D	Max digging depth	5.70 m	6.30 m
F	Max. reach	7.50 m	8.00 m
G	Max. digging reach	8.90 m	9.50 m
H	Max. arm position	4.15 m	4.50 m
J	Max. reach height	9.10 m	9.50 m
L	Lowest bucket pivot point	4.30 m	4.80 m
	Max. bucket digging force	122 kN	122 kN
	Max. stick digging force	92 kN	81 kN
	Grab clamping force	-	-
	Operating Weight	17.1 t	17.2 t

Lifting capacities Monoblock boom (C66.3M)

Lifting capacities Monoblock boom (C66.3M) and stick 2.20 m (D66.2). 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							4,1	4,1	4,3	3,2				
	Traveling							4,1	3,8	4,3	2,8				
+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 (D66.3). 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.

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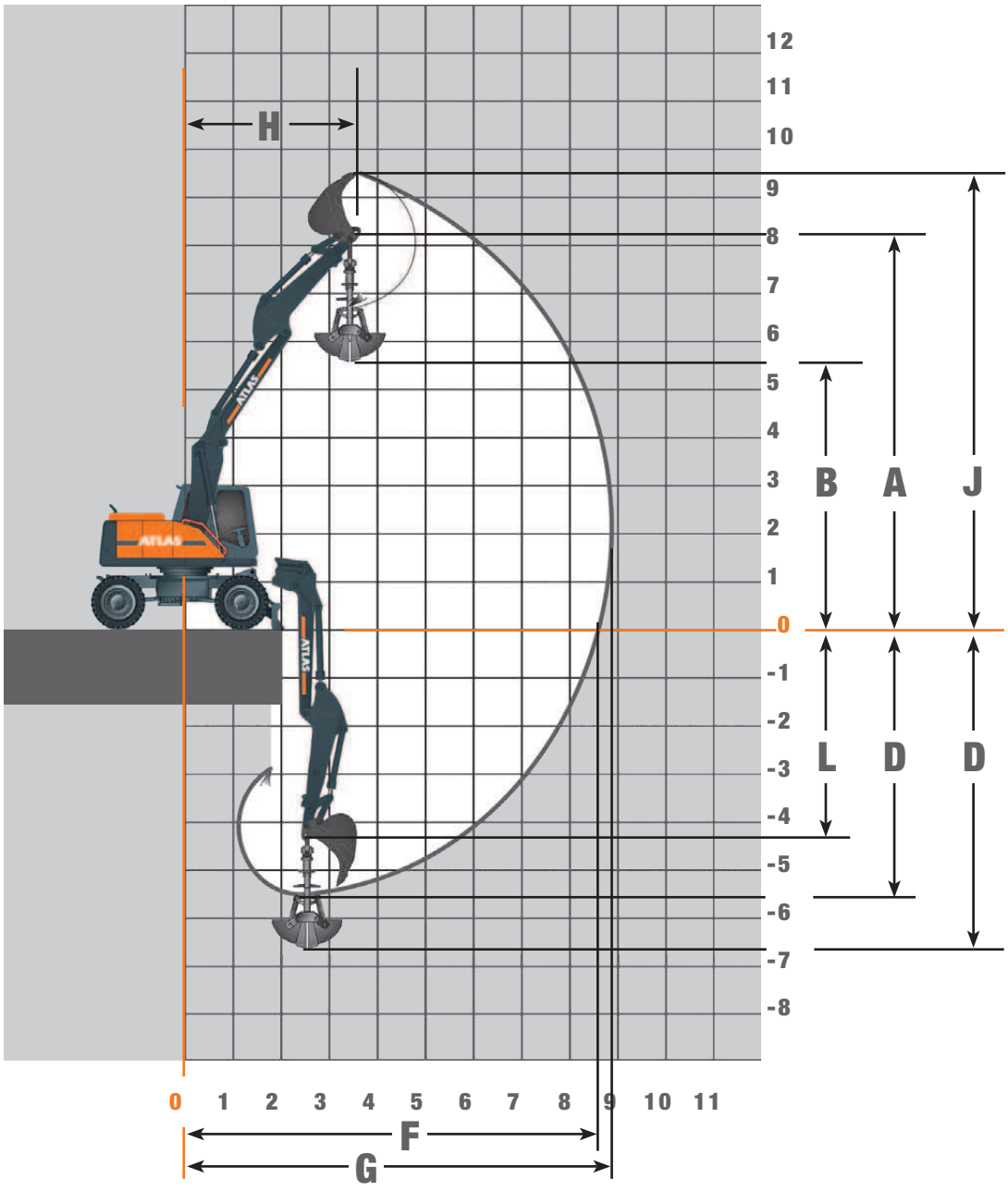
WORKING RANGES

Working ranges Adjustable boom (C66.41)



STICK LENGTHS		2.20 m (D66.2)		2.70 m (D66.3)	
		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 (D66.2). 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 (D66.3). 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.

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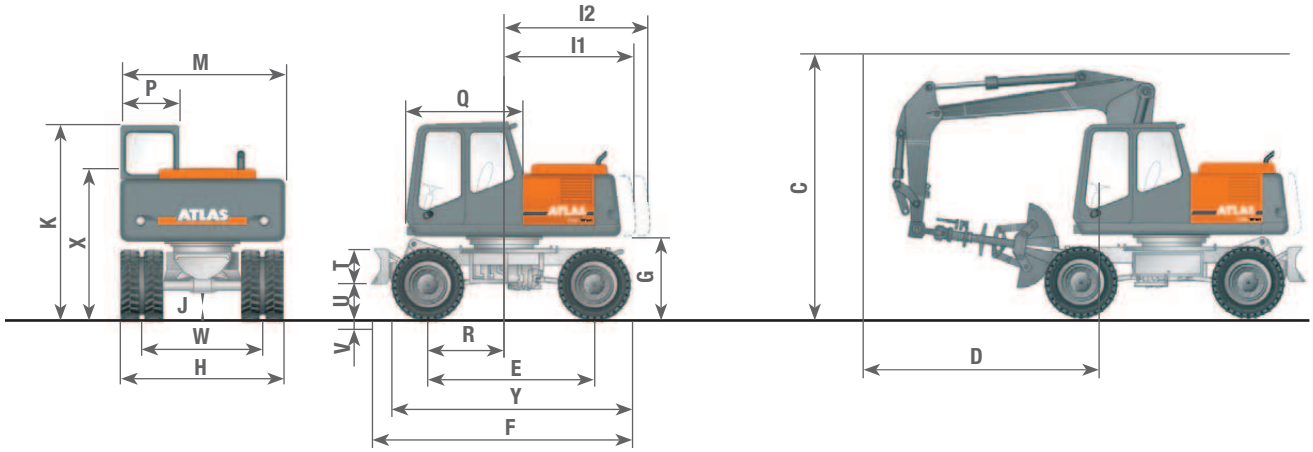
Dimensions



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

DIMENSIONS

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