

ATLAS

Wheel Excavator 160Wsr

STABLE. STRONG. STEADY.
160WSR



-  **15.0 - 16.5 tons**
-  **75 kW (102 hp)**
-  **0.67 - 1.12 m³**



Courtesy of Machine.Market

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 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 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	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	

CONTROL:	SOUND LEVELS:
• Ergonomic joysticks	• ISO 6396 (L _{pA}) in driver's cab 75 dB(A)
• Slim steering column, height and tilt adjustable	• 2000/14 EG (L _{wA}) 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:

- Grab / grab rotating function

- Base boom with one lifting cylinder (C6.0)

- Accumulator for emergency lowering of boom system

EQUIPMENT:

- Standard main boom with stick cylinder, 2x adjustable, working length 2,930 mm (C6.3)

- Sealed pivot points in the case section of the boom

- Base arm with 2 lifting cylinders and center-mounted articulating cylinder (C6.41)

Cab:

- Grab storage during road travel

- Intermediate boom with stick cylinder, for base arm C6.41, working length 3,095 mm (C6.46)

- Air-conditioning

- Central lubrication

- Preparation for radio installation

STICKS:

- Slim steering column, height and tilt adjustable

UNDERCARRIAGE:

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

- Fuel gauge

- Wheels with intermediate rings

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

- Battery main switch in negative lead

- Infinitely adjustable support/dozer blade, with parallel guidance

- Windshield washer system

- Toolbox in undercarriage

BUCKET TIPPING CYLINDER:

- Sliding window in cab door

- 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

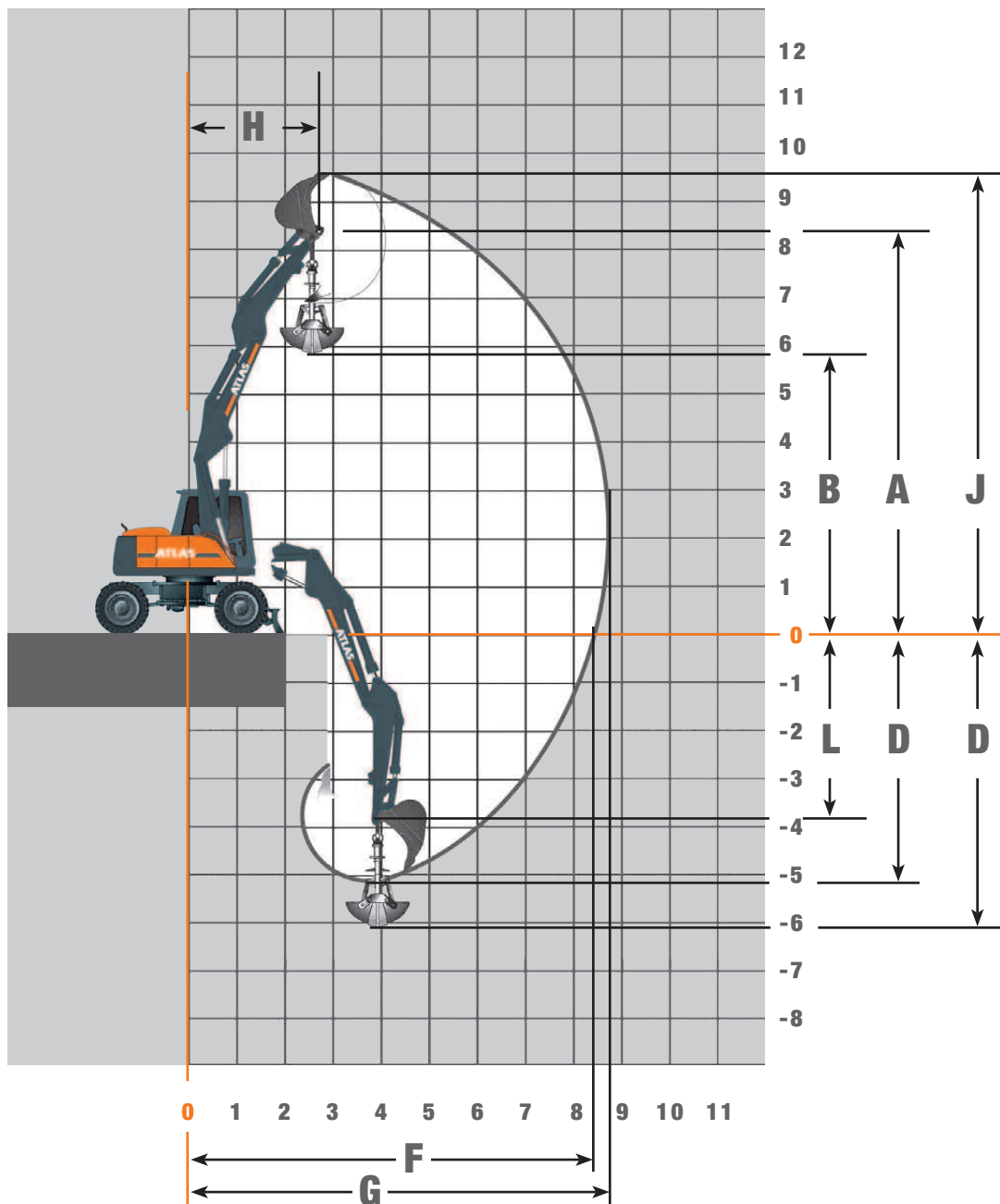
Undercarriage:

- 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 ³	0,82 m ³	0,92 m ³	1,12 m ³
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
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

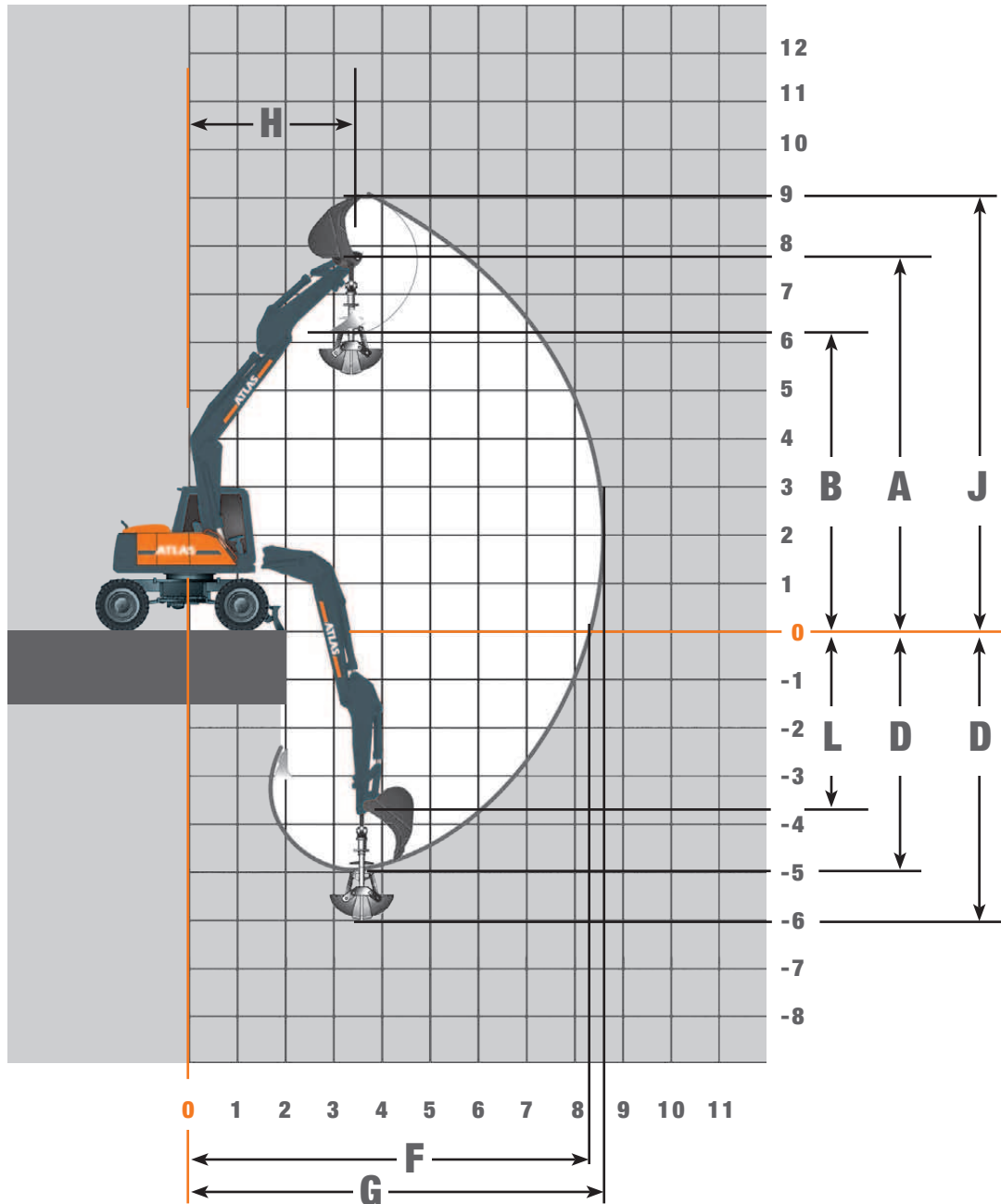
Height		3,0 m		4,0 m		4,5 m		5,0 m		6,0 m		6,5 m		7,0 m	
															
+6,0 m	Supported by blade			4,7	4,5	4,4	3,8	4,2	3,2						
	Traveling			4,7	3,9	4,4	3,3	4,2	2,8						
+4,5 m	Supported by blade	6,4	6,4	5,3	4,4	4,8	3,7	4,5	3,2	3,4	2,4	3,7	2,0		
	Traveling	6,4	5,8	5,3	3,8	4,8	3,2	4,5	2,8	3,7	2,0	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	
															
+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
A	Bucket pivot point	7.80 m	7.80 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

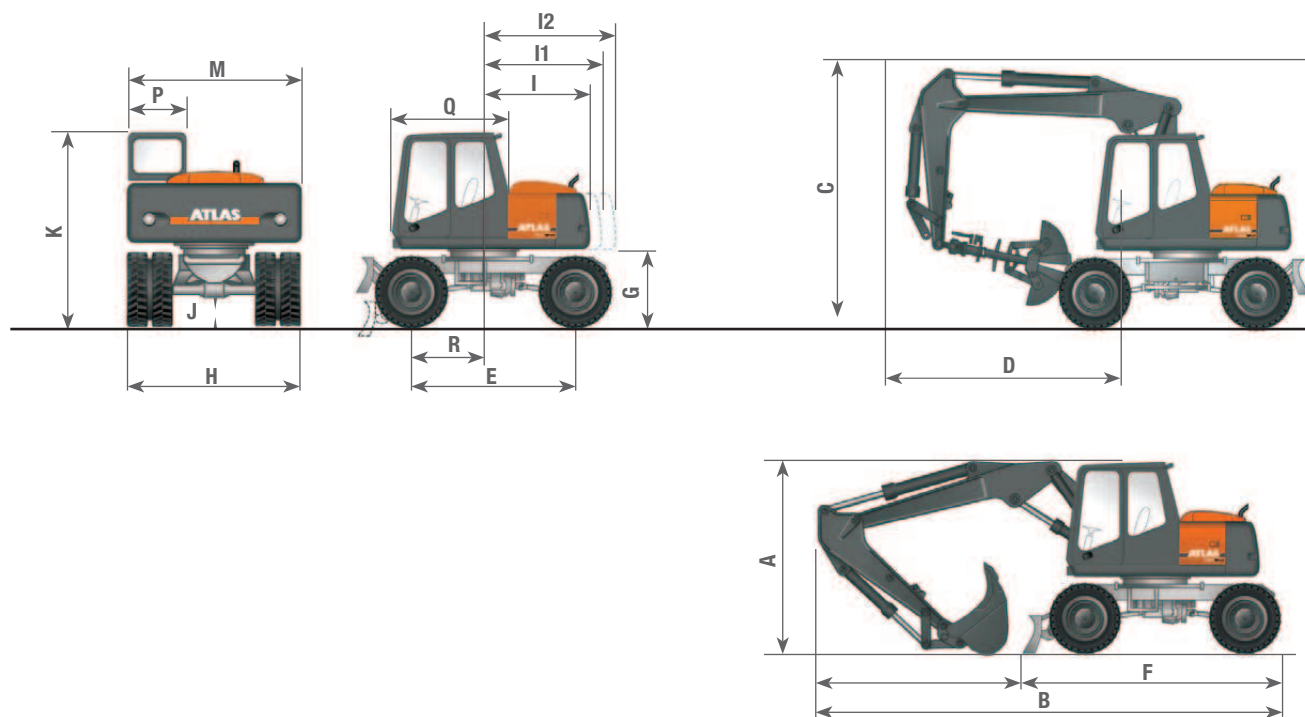
Height		3,0 m		4,0 m		4,5 m		5,0 m		6,0 m		6,5 m		7,0 m	
															
+6,0 m	Supported by blade					4,8	3,8	4,2	3,2						
	Traveling					4,8	3,2	4,2	2,7						
+4,5 m	Supported by blade			5,3	4,5	4,9	3,7	4,7	3,2	4,0	2,4	3,6	2,0		
	Traveling			5,3	3,8	4,9	3,2	4,7	2,7	3,7	2,0	3,2	1,7		
+ 3,0 m	Supported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



A	TRANSPORT HEIGHT (with bucket)	G	CLEARANCE UNDER COUNTERWEIGHT1.22 m
	Adjustable boom with stick 2.15 m.....3.00 m	H	DOZER BLADE WIDTH2.50 m
B	TRANSPORT LENGTH	I	TAILSWING RADIUS1.57 m
	Adjustable boom with stick 2.15 m.....7.70 m	I1	TAILSWING RADIUS1.75 m
		I2	TAILSWING RADIUS2.00 m
C	TRAVEL SETUP	J	GROUND CLEARANCE0.45 m
	Adjustable boom with grab in grab storage4.00 m	K	OVERALL HEIGHT OF CAB3.00 m
D	DISTANCE STEERING WHEEL - BOOM3.50 m	M	OVERALL WIDTH OF SUPERSTRUCTURE2.49 m
E	WHEEL BASE2.50 m	P	CAB WIDTH0.94 m
F	UNDERCARRIAGE LENGTH3.95 m	Q	CAB LENGTH1.76 m
		R	DISTANCE RING GEAR - FRONT AXLE0.97 m

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