

ENGINE

Power output (acc. ISO 1585)	98 kW (133 HP)
Net brake power	93 kW (127 HP)
Manufacturer	Deutz
Type	BF4M 2012 EC
Piston displacement	3192 cm ³
Max. rpm	2300 min ⁻¹
Charging	Turbocharging/intercooler

HYDRAULIC SYSTEM

Computer controlled AVE4 system with one load limit controlled high performance piston pump and fuel saving oil supply on demand in order to ensure sensitive, proportional and load independent control of all movements. • primary and secondary safeguarding of the hydraulic system against overload • anti cavitation valves for all working functions throttle control in the lifting and folding circuit • Load – holding valves and subtle acting lowering valves in the lifting circuit

Hydraulic system	1x axial piston pump
Main pump	HPR 135
Max. gear pump output	300 l/min
Max. operating pressure	340 bar

NOISE LEVEL

Noise level* well below EU limits

Outside cab (LwA)	104 dB (A)
Inside cab (LpA)	76 dB (A)
*dynamic noise measurements acc. 2000 / 14 EU regulations	

ELECTRICAL SYSTEM

Operating voltage	24 Volt
Cold-start high performance batteries	2 x 100 Ah
Complete electrical system acc. StVZO	

BRAKES

Operating brake	pneumatic-hydraulically actuated drum brake
Parking brake	spring-loaded compressed-air brake
Emergency brake system during rail operation	
Max. trailer pulling force (without brakes)	40 t
Max. trailer pulling force (with special waggon brake system)	120 t

TANK VOLUMES

Fuel tank	230 l
Hydraulic tank	300 l
Engine oil tank	10 l

DOUBLE-CABIN

Shock absorbing resilient mountings • heat insulated panoramic windows for best all around visibility • no glare interior • skylight with window • ergonomic control levers • adjustable steering column • forward and reverse seat adjustment, independent of the control panel • up and over windscreen lockable under roof panel • air condition • second seat for a railway official

Model	ATLAS comfort double-cab model 935
Total length	2130 mm
Width	935 mm



SLEWING MECHANISM

Slew motor	Axial piston with priority valve
Slew gear box	planetary gearing
Slew brake*	lockable multi disc
Drive internally toothed	
Slewing speed	9 min ⁻¹
Slewing torque	59 kNm
*straight forward slewing operations whilst on gradients due to foot locking pedal brake, if slew pressure exceeds 120 bar.	

DRIVE

40 to special excavator axles with planetary gears in all four wheel hubs • all wheel drive • variable speed motor • double acting travel brake valve • directional control lever (forw./rev.) on the steering column or via the push button on the joy-stick • steering axle with automatic blocking of the pendulum axle • accelerator pedal control

TRAVELLING SPEED

Road and Rail operation	
Inching	max. 1.3 km/h
Off-road (infinitely)	max. 5.6 km/h
On-road (infinitely)	max. 20 km/h

Rail guide system: track gauge 1435mm, other gauges on request

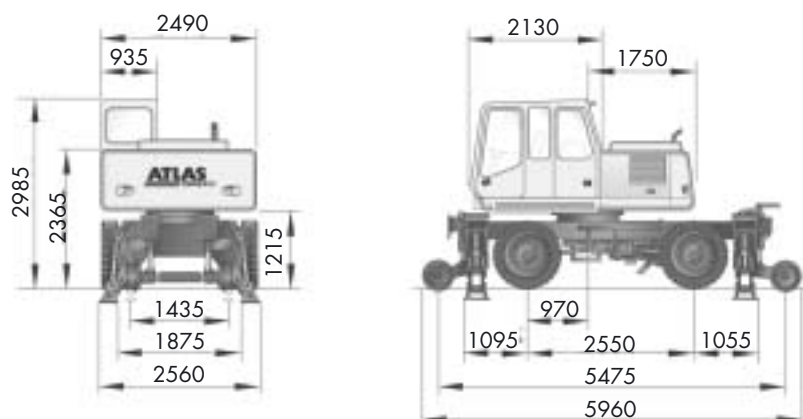
TYRES

8-fold	10.00 - 20
(inner tyres with road profile and outer tyres with all terrain profile)	

OPERATION WEIGHT

Operation weight	20,5 - 22,5 t
------------------------	---------------

PRINCIPAL DIMENSIONS



TRAVELLING POSITION WITH GRAB



BOOMSYSTEMS



Base boom C 67.41 P
with jib C 66.46



Jib D 67.22

EQUIPMENT

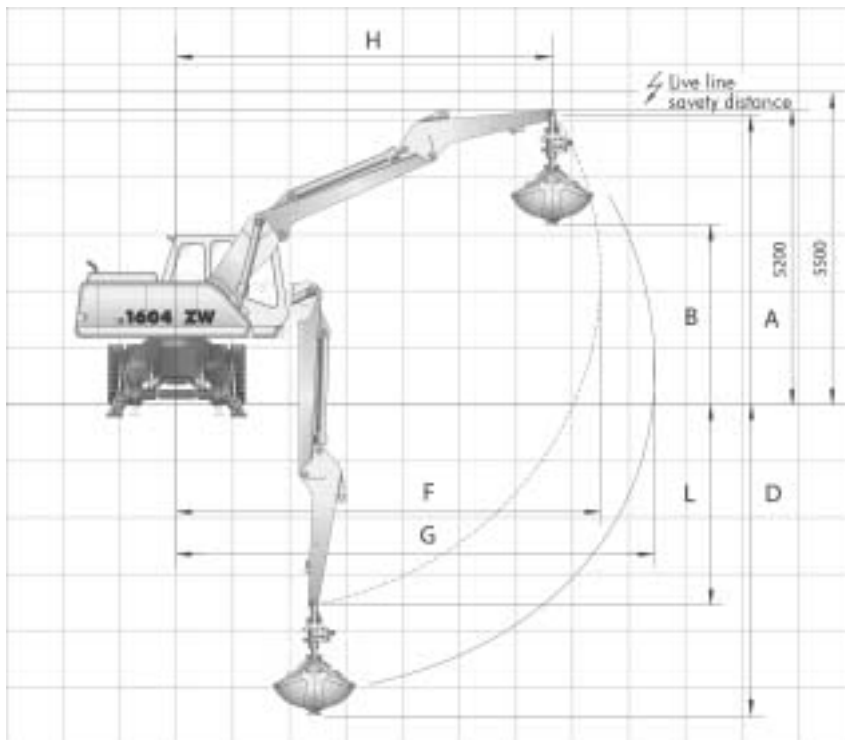
Basic unit		Weight/kg
A 67.5	ATLAS fully hydraulic rail-road excavator 1604 ZW with four-fold stabilizers slewing radius 1750 mm	16500
Additional equipment		
B 66.41	Isolating stop valve and overload warning device for lifting ram	10
B 67.20	Heavy counterweight, slewing radius 2000 mm	400
B 66.39	Hydraulic mounting set for boom positioning ram	20
B 41.23	Two-seated double cabin	300
Base and secondary booms		
C 67.41P	Base boom with two lift rams and one center working ram	1350
C 66.46	Secondary boom with one jib ram only for base boom C 67.41P, effective length 3300 mm	930
Jib		
D 67.22	Special jib for rail-road excavators, effective length 2240 mm	600
Bucket ram		
F 66.1	Crowd ram with linkage	180

Standard equipment:

- maintenance board for the filter system
- Hydraulic mounting set for grab operation and grab rotation
- fuel tank indicator
- battery main switch in the negative wire
- travelling with foot pedals
- emergency boom lowering accumulator
- sliding window in the cabin door
- windscreen washer
- central lubrication point
- infinitely adjustable steering column (height and tilt)
- cab prepared for radio installation
- storage area in cabin
- comfort seat with arm rests and lumbar support
- tool-box in the undercarriage
- sealed base boom pivot pins
- extended lubrication intervals (50 hours) for secondary boom and jib due to sealed pivot pins
- bracket to deposit the grab while travelling
- air condition cab
- air dryer for the compressor-system

DIGGING DIAGRAMM

ATLAS 1604 ZW

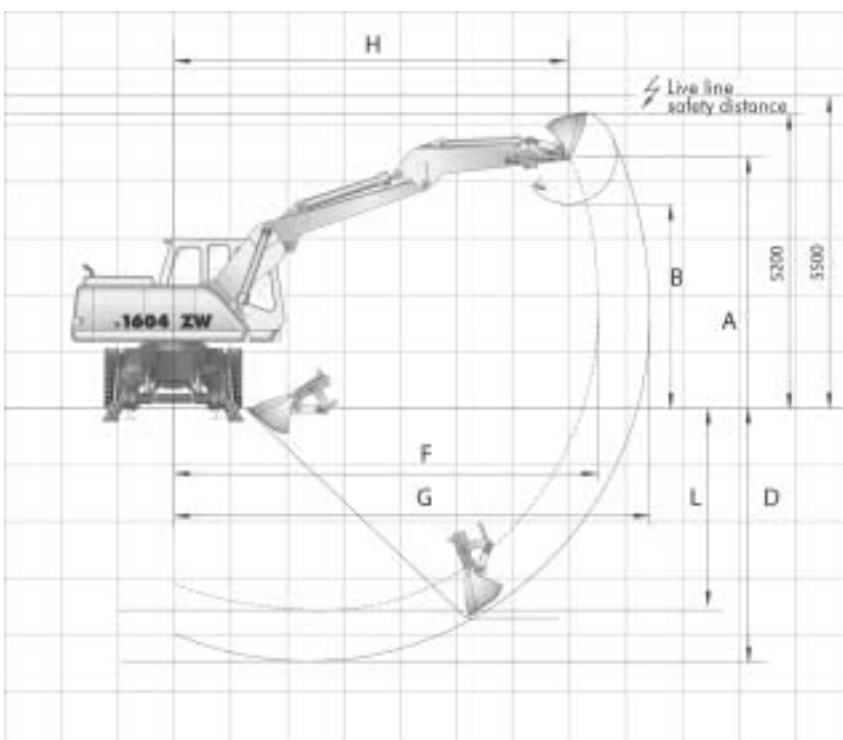


Jib D 67.22 - Effective length 2240 mm

Equipment: A 67.5, C 67.41 P, C 66.46, D 67.22, T 31, E 332, E 346 Grab

A	Jib height	mm	5100
B	Dumping height	mm	3150
D	Max. digging depth	mm	5500
F	Max. length of jib	mm	7450
G	Max. outreach	mm	8300
H	Max. outreach length	mm	6600
J	Max. outreach height	mm	–
L	Bucket pivot	mm	3550
Grab	l		450
	Grab closing force	kN	72,8
	Operation weight	t	21,3

ATLAS 1604 ZW



Jib D 67.22 - Effective length 2240 mm

Equipment: A 67.5, C 67.41 P, C 66.46, D 67.22, G 624 Bucket

A	Jib height	mm	4400
B	Dumping height	mm	–
D	Max. digging depth	mm	4450
F	Max. length of jib	mm	7450
G	Max. outreach	mm	8350
H	Max. outreach length	mm	6950
J	Max. outreach height	mm	–
L	Bucket pivot	mm	3550
Bucket	l		800
	Tear out force	kN	112
	Break out force	kN	141
	Operation weight	t	21,0

Equipment A 67.5, C 67.41 P, C 66.46

Jib D 67.22 - Effective length 2240 mm
Slewing radius 1750 mm

Hook height m		3.0 m		4.0 m		4.5 m		5.0 m		6.0 m		7.0 m	
		l	q	l	q	l	q	l	q	l	q	l	q
5	a b	– –	– –	– –	– –	6.9 6.9	5.7 3.6	6.5 6.5	4.9 3.1	6.0 6.0	3.7 2.3	– –	– –
4.5	a b	– –	– –	7.7 7.7	6.7 4.1	7.2 7.2	5.7 3.5	6.7 6.7	4.9 3.1	6.0 6.0	3.7 2.3	– –	– –
3	a b	11.0 11.0	10.1 5.8	9.4 9.4	6.5 4.0	8.3 8.3	5.5 3.4	7.5 7.5	4.8 3.0	6.4 6.4	3.7 2.3	5.7 5.7	2.8 1.7
1.5	a b	12.7 12.7	9.9 5.7	10.6 10.6	6.4 3.9	9.2 9.2	5.5 3.4	8.2 8.2	4.8 3.0	6.8 6.8	3.6 2.2	5.8 5.8	2.7 1.6
0	a b	14.6 14.6	9.7 5.5	10.7 10.7	6.3 3.8	9.4 9.4	5.3 3.2	8.4 8.4	4.6 2.8	6.9 6.9	3.4 2.1	5.7 5.7	2.7 1.6
-1.5	a b	15.1 15.1	9.3 5.2	10.9 10.9	6.1 3.5	9.5 9.5	5.1 3.0	8.6 8.6	4.4 2.6	6.7 6.7	3.3 1.9	– –	– –
-3	a b	15.0 15.0	9.4 5.2	10.1 10.1	5.9 3.4	8.3 8.3	5.0 2.9	– –	– –	– –	– –	– –	– –

The stated maximum payload volume in metric tons (t) include a stability margin of 33 % or are calculated at 87 % of the hydraulic lifting force in accordance with ISO 10567 standard. These values apply at the jib end when the boom-jib system is in the optimal position.

Rail guide

Track gauge 1435mm, other gauges on request

ATLAS CARSY (Computer Aided Rail Pressure System).

Automatic system which regulates and monitors the contact pressure of the rail guide wheels. During rail operation the wheels are automatically adjusted to the required pressures and corrected if necessary. Depending on the preselected operating mode and the position of the boom / jib, the individual guide wheel rams are pressurized or shut-off or hydraulically adjusted according to a predefined modus.

The front and rear rail wheels can be operated independently in order to ensure easy railing of the machine and to ensure permanent rail contact when passing the rail control boxes which survey the rail traffic.

Automatic self-diagnosis of the electronical system.

In case of emergency, failure of functions or total breakdown of the machine the excavator can still be de-railed.

Operating weights, slewing radius

The following versions of the ATLAS 1604 rail road excavator with CARSY are available:

Type	Base unit	Operation weight with adjustable equipment	Slewing radius mm	
1604 K ZW with 4 stabilizers	A 67.5	ca. 21000 kg	1750	Distance between rails ≥ 3700 mm
1604 K ZW with 4 stabilizers	A 67.5	ca. 21500 kg	2000	Distance between rails ≥ 4000 mm

Approvals

Those positions marked * are obligatory for works on the rails of the German Railway (Deutsche Bahn).

Safety of the machine will be tested by the German Health & Safety Organization and compliance with the applicable instructions is approved by Deutsche Bahn AG and the German TÜV.

Jib D 67.22 - Effective length 2240 mm
Slewing radius 2000 mm

Hook height m		3.0 m		4.0 m		4.5 m		5.0 m		6.0 m		7.0 m	
		l	q	l	q	l	q	l	q	l	q	l	q
5	a b	– –	– –	– –	– –	6.9 6.9	6.0 3.8	6.5 6.5	5.1 3.3	6.0 6.0	3.9 2.5	– –	– –
4.5	a b	– –	– –	7.7 7.7	7.1 4.4	7.2 7.2	6.0 3.8	6.7 6.7	5.1 3.3	6.0 6.0	3.9 2.5	– –	– –
3	a b	11.0 11.0	10.5 6.2	9.4 9.4	6.9 4.2	8.3 8.3	5.8 3.6	7.5 7.5	5.0 3.2	6.4 6.4	3.9 2.5	5.7 5.7	2.9 1.8
1.5	a b	12.7 12.7	10.4 6.1	10.6 10.6	6.8 4.2	9.2 9.2	5.8 3.6	8.2 8.2	5.0 3.2	6.8 6.8	3.8 2.4	5.8 5.8	2.9 1.8
0	a b	14.6 14.6	10.2 5.9	10.7 10.7	6.6 4.0	9.4 9.4	5.6 3.5	8.4 8.4	4.8 3.0	6.9 6.9	3.6 2.2	5.7 5.7	2.8 1.7
-1.5	a b	15.1 15.1	9.9 5.6	10.9 10.9	6.4 3.8	9.5 9.5	5.4 3.3	8.6 8.6	4.6 2.8	6.7 6.7	3.5 2.1	– –	– –
-3	a b	15.0 15.0	9.9 5.6	10.1 10.1	6.3 3.7	8.3 8.3	5.2 3.1	– –	– –	– –	– –	– –	– –

a = dozer lowered, b = in travel position, q = laterally, l = longitudinally

Additional and special equipment:

- Short deck machine (slewing radius 1575, 1750 or 2000 mm)*
- Double cabin*
- Night heater
- Isolating stop valve and overload warning device for the lifting ram*
- Trailer coupling on the undercarriage*
- Manually operated emergency hand pump*
- Tow-bar*
- Special German Railway light system*
- Lift-limitation system, adjustable from the cabin*
- Slew-limitation system, adjustable from the cabin*
- Waggon brake system with special brake-valves, permissible trailer load is 120 to
- German Railway approval, incl. certificate and all necessary items such as Fire-distinguisher, first-aid-kit, grounding cable, red and white signal flag, Pocket lamp with red blind, macrophon, digital speedometer, oil collecting awning and oil binding agent*
- Beacon
- Working lights
- Radio
- Fuel pump
- Track guiding systems for track width up to 1700mm
- German TÜV approval

Those items marked * are mandatory to achieve the German Railway approval.



ATLAS-TEREX GmbH
Stedinger Straße 324 · D-27751 Delmenhorst
Tel. ++49 (0)42 21 / 49 10 · Fax ++49 (0)42 21 / 49 12 13
www.atlas-terex.de · E-Mail: Info@atlas-terex.de

Dealer: