PRODUCT Specification



TWH 216TWH 226TWH 220TWH 228TWH 224TWH 236

WASTE HANDLERS



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OVERVIEW



TWH 216 Greater mobility and flexibility

Service weight: 14.6-17.1 t Engine power: 85 kW Reach: max. 9.0 m

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TWH 220 Outstanding visibility and performance

Service weight: 19.3-21.0 t Engine power: 95 kW Reach: max. 10.4 m



TWH 224 The all-rounder, incorporating turbo efficiency

Service weight: 22.8-24.5 t Engine power: 115 kW Reach: max. 11.0 m

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DYNAMIC DUO FOR HIGH-CLASS RECYCLING PROCESSES





TWH 226 Greater reach. Higher load capacity. Higher speeds.

Service weight: 23.9-25.5 t Engine power: 115 kW Reach: max. 11.0 m



TWH 228

Well-thought-out machine for more power and reach while retaining compact dimensions.

Service weight: 28.4-30.6 t Engine power: 129 kW Reach: max. 12.6 m



TWH 236

Designed especially for high performance, lifting capacity and maximum reliability.

Service weight: 33.0-35.5t Engine power: 160 kW Reach: max. 15.0 m

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COMPLETE RECYCLING SOLUTIONS





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GREATER MOBILITY AND FLEXIBILITY.

Robustness does not necessarily have to do with size, the **TWH 216** is compact and agile. It is the uncompromising response to the ever increasing demands of the recycling industry.







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TWH 216	14.6-17.1 t
Diesel engine	
Manufacturer and model	Deutz TCD 3.6 L04
Design	4-cylinder in-line engine
Functionality	4-cycle diesel, common rail direct injection, turbocharged with intercooler, controlled exhaust gas recirculation, diesel particulate filter with continuous regeneration and SCR catalytic converter
Engine power	85 kW
Rated speed	2,000 rpm
Displacement	3.61
Cooling system	Water and charge air cooling with temperature controlled fan speed
Exhaust emission standard	EU-Stage V
Fuel tank	180 l Diesel
DEF / Urea tank	10 AdBlue
Electrical system	
Alternator	24 V / 95 A
Operating voltage	24 V
Battery	2 × 12 V / 110 Ah
Lighting system	$\rm 2 \times \rm LED$ headlamps, turn indicators and tail lights
Travel drive	
	finitely variable axial piston motor with directly mounted manual gearshift, 4-wheel drive
Travel speed 1st gear	max. 5 kph
Travel speed 2nd gear	max. 19 kph
Gradeability	max. 40%
Turning radius	7.1 m
Turning radius with all-wheel steering	4.5 m
Swing Drive	
Drive	2-stage planetary gear with integrated multi-disc brake
Uppercarriage swing speed	0-8 rpm variable
Slewing lock	Electrically activated

Undercarriage

Front axle	Planetary drive axle with integrated drum brake, rigidly mounted, max. steering angle: 30°
Rear axle	Oscillating planetary drive rear axle with selectable oscillating lock
Outriggers	4-point stabilisers 2-point-stabilisers with support blade
Tyres	9.00-20 pneumatic tyres without intermediate ring
Brakes	
Service brake	Hydraulically operated single-circuit braking system (drum brakes)
Parking brake	Electrically operated spring-loaded disc brake at transmission, acting on both front and rear axle
Hydraulic system	
Max. pump capacity	190 + 90 lpm
Max. operating pressure	350 bar
Hydraulic oil tank	1351
Operator's Cab	
Cab	Infinitely variable hydraulic height-adjustment with eye level up to 5.3 m above ground
	Sound-deadened, ample thermal panoramic glass windows, windshield with pull-down sunblind, viewing window on cab roof, sliding window in cab door, sliding door
Air conditioning	Automatic air-conditioning. Hot water heating with variable temperature control and 8-speed fan, 10 adjus- table air nozzles, including 4 in the roof lining, 3 defroster nozzles
Operator's seat	Air-cushioned comfort seat with integrated headrest, safety belt and lumbar support, optional seat heating. Comfortable operation with multi-purpose adjustment options for seat position, seat inclination, seat cushion placement in relation to armrests and pilot control units. Articulating armrests and joysticks
Monitoring	Ergonomic layout, anti-glare instrumentation. Multi- function display, automatic monitoring and recording of abnormal operating conditions (including all hydraulic oil filters, hydraulic oil temperature (cold/hot), coolant tem- perature and charge air temperature, diesel particulate filter load), visual and audible warning indication with shutdown of pilot controls/engine power reduction. Diag- nosis of individual sensors possible via the multifunction display. Rear view camera and side view camera
Noise level	Sound power level (ambience) L_{WA} 98.7 dB(A) (metreed) acc. to directive 2000/14/EC L_{WA} 100 dB(A) (guaranteed) acc. to directive 2000/14/EC Sound pressure level (inside the cabin)

Engine	Standard	Option
Intercooler and coolant radiator	•	
Direct electronic fuel injection / common rail	•	
Advanced automatic idle incl. engine shut-off function	•	
Diesel particle filter	•	
Engine diagnostics interface	•	
Temperature-dependent fan drive	•	
Undercarriage		
All-wheel drive	•	
Drum brakes	٠	
Rear axle oscillating lock	•	
4-point stabilisers	٠	
Dozer blade in addition to 4-point stabilisers		٠
2-point stabilisers and support blade		٠
Stabiliser cylinders with integrated two-way check valves	٠	
Piston rod protection on stabiliser cylinders	٠	
Travel drive protection		•
Tool box	•	
Central lubrication point		•
Special paint (customer paint work)		•
Pneumatic tyres 9.00-20 without intermediate ring	•	
Solid rubber tyres 10.00-20 (Magnum) (2 L)		•
Solid rubber tyres 10.00-20 with intermediate ring (Solideal)		•
Uppercarriage		
Central lubrication point	•	
Cooling system with temperature-dependent fan drive	•	
Fan drive reversing function	•	
Separate cooling system for engine and hydraulic oil cooler	•	
Rear view camera	•	
Side view camera	•	

•

Further optional equipment available on request! Specification subject to change without notice.

Special paint (customer paint work)

Specification subject to change without notice.

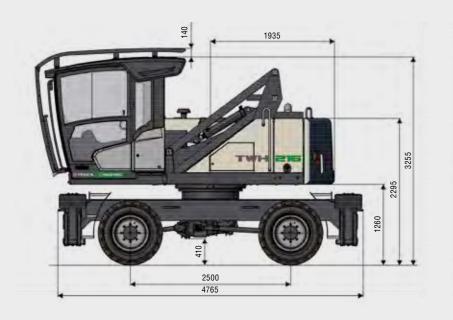


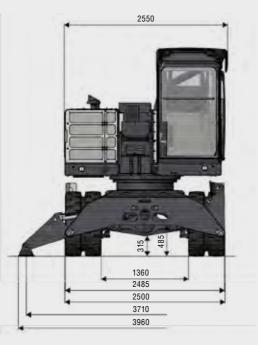


Sliding window in cab door•Windshield washer system (Windshield)•Roof washer system(Skylight)•Air-cushioned operator seat with headrest, seatbelt, and lumbar support•Seat heating•Joystick steering•Steering column, height and tilt adjustable•Automatic air conditioning system•Independent heating system•Multi-function display•Document net•Roof guard grille (FDPS)•Protective grilles to front and roof•12 V transformer•Radio with Bluetooth and hands-free kit (EU and US) Radio with CD and USB (other countries)•12V socket•Fire extinguisher, dry powder•Travel alarm w/ rotating beacon•Other Equipment•Joysticks with inductive driver recognition•Close proximity range limiter for dipper stick•Colant and hydraulic oil level monitoring system•Overload and working range monitoring•Hose rupture valve for stick cylinder•Quick coupling on dipper stick•Querload warning device•Active cyclone prefilter (TOP AIR)•Hydraulic oil preheating•LED front headlights•LED working lights cabin roof front•	Cab	Standard	Option
Sliding window in cab door•Windshield washer system (Windshield)•Roof washer system(Skylight)•Air-cushioned operator seat with headrest, seatbelt, and lumbar support•Seat heating•Joystick steering•Steering column, height and tilt adjustable•Automatic air conditioning system•Independent heating system•Multi-function display•Document net•Roof guard grille (FOPS)•Protective grilles to front and roof•12 V transformer•Radio with Buetooth and hands-free kit (EU and US) Radio with CD and USB (other countries)•12 V socket••Fire extinguisher, dry powder••Travel alarm w/ rotating beacon••Other Equipment••Joysticks with inductive driver recognition••Close proximity range limiter for dipper stick••Coolant and hydraulic oil level monitoring system••Hose rupture valve for stick cylinder••Quick coupling on dipper stick•	, , , ,	•	
Windshield washer system (Windshield)•Roof washer system (Skylight)•Air-cushioned operator seat with headrest, seatbelt, and lumbar support•Seat heating•Joystick steering•Steering column, height and tilt adjustable•Automatic air conditioning system•Independent heating system•Independent heating system•Multi-function display•Document net•Roof guard grille (FOPS)•Protective grilles to front and roof•12 V transformer•Radio with CD and USB (other countries)•12V socket•Fire extinguisher, dry powder•Travel alarm w/ rotating beacon•Other Equipment•Overload and working range monitoring system•Hose rupture valve for boom cylinder•Hose rupture valve for boom cylinder•Hose rupture valve for stick (Vinder•Quick coupling on dipper stick•Quick coupling on dipper stick•LED front headlights•LED front headlights•LED working lights cabin roof front•Boor cylinder damping system (piston accumulator)•	Safety glass	•	
Roof washer system (Skylight)•Air-cushioned operator seat with headrest, seatbelt, and lumbar support•Seat heating•Joystick steering•Steering column, height and tilt adjustable•Automatic air conditioning system•Independent heating system•Multi-function display•Document net•Roof guard grille (FOPS)•Protective grilles to front and roof•12 V transformer•Radio with Bluetooth and hands-free kit (EU and US) Radio with CD and USB (other countries)•12V socket•Fire extinguisher, dry powder•Travel alarm w/ rotating beacon•Other Equipment•Overload and working range monitoring•Hose rupture valve for boom cylinder•Hose rupture valve for stick cylinder•Quick coupling on dipper stick•Querload warning device•Active cyclone prefilter (TOP AIR)•Hydraulic oil preheating•LED front headilghts•LED working lights cabin roof front•LED working lights cabin roof front•	Sliding window in cab door	•	
Air-cushioned operator seat with headrest, seatbelt, and lumbar support•Seat heating•Joystick steering•Steering column, height and tilt adjustable•Automatic air conditioning system•Independent heating system•Multi-function display•Document net•Roof guard grille (FOPS)•Protective grilles to front and roof•12 V transformer•Radio with Bluetooth and hands-free kit (EU and US) Radio with CD and USB (other countries)•12 V socket•Fire extinguisher, dry powder•Travel alarm w/ rotating beacon•Other Equipment•Joysticks with inductive driver recognition•Close proximity range limiter for dipper stick•Coolant and hydraulic oil level monitoring system•Hose rupture valve for stick cylinder•Quick coupling on dipper stick•Quick coupling on dipper stick•Quick coupling on dipper stick•Overload warning device•Active cyclone prefilter (TOP AIR)•Hydraulic oil preheating•LED front headlights•LED working lights cabin roof front•Boon cylinder damping system (piston accumulator)•	Windshield washer system (Windshield)	•	
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Joysticks with inductive driver recognition • Close proximity range limiter for dipper stick • Coolant and hydraulic oil level monitoring system • Overload and working range monitoring • Hose rupture valve for boom cylinder • Hose rupture valve for stick cylinder • Quick coupling on dipper stick • Overload warning device • Active cyclone prefilter (TOP AIR) • Hydraulic oil preheating • Light packages LED • LED front headlights • Boom cylinder damping system (piston accumulator) •	Travel alarm w/ rotating beacon		٠
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Light packages LED • LED front headlights • LED working lights cabin roof front • Boom cylinder damping system (piston accumulator) •	Active cyclone prefilter (TOP AIR)		٠
LED front headlights • LED working lights cabin roof front • Boom cylinder damping system (piston accumulator) •	Hydraulic oil preheating		٠
LED working lights cabin roof front Boom cylinder damping system (piston accumulator)	Light packages LED		٠
Boom cylinder damping system (piston accumulator)	LED front headlights	•	
	LED working lights cabin roof front	•	
Fuchs Telematics System, incl. 2 years service	Boom cylinder damping system (piston accumulator)		٠
	Fuchs Telematics System, incl. 2 years service	•	

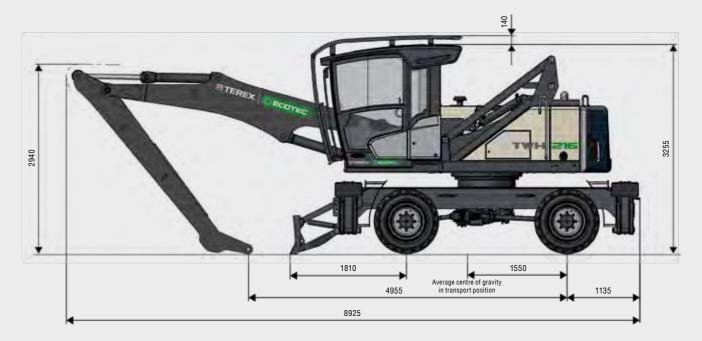
Transport Dimensions (all dimensions in mm)

Undercarriage equipped with 4-point stabilisers



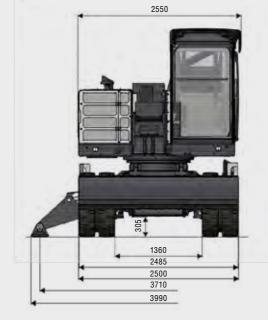


9.0 m reach with dipper stick

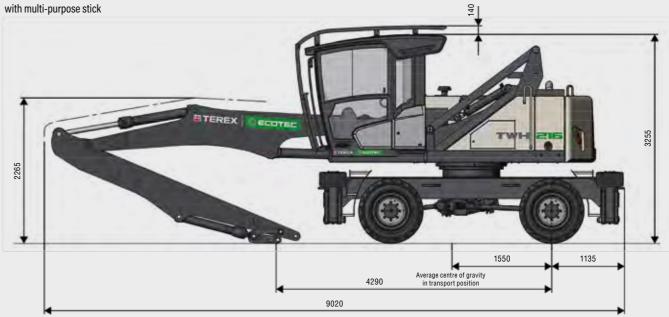


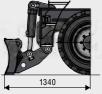
2-point stabilisers and support blade





8.8 m reach





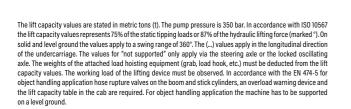




9.0 m reach with dipper stick

Loading equipment	Recommended		
Boom 4.7 m	Multi-tine grapple		
Dipper stick 3.3 m	(lightweight materia		
Cactus grab (Lightweight material) 0.56 m³	Depending on densi		





leight [m]	Undercarriage		Reach [m]			
	stabilisation	4.5	6	7.5	9	
	Without stabilisers	(3.4°)				
9	With 4-pt stabilisers	3.4° (3.4°)				
	With 2-pt / support blade	3.4° (3.4°)				
	Without stabilisers	(3.0°)	(2.7°)			
7.5	With 4-pt stabilisers	3.0° (3.0°)	3.0° (3.0°)			
	With 2-pt / support blade	3.0° (3.0°)	3.0° (3.0°)			
	Without stabilisers	(2.4°)	(2.7°)	(1.8°)		
6	With 4-pt stabilisers	2.4° (2.4°)	2.8° (2.8°)	2.7° (2.7°)		
	With 2-pt / support blade	2.4° (2.4°)	2.8° (2.8°)	2.4° (2.7°)		
	Without stabilisers	(2.4°)	(2.6°)	(1.8°)		
4.5	With 4-pt stabilisers	2.4° (2.4°)	2.9° (2.9°)	2.7° (2.7°)		
	With 2-pt / support blade	2.4° (2.4°)	2.9° (2.9°)	2.4° (2.7°)		
	Without stabilisers	(3.8°)	(2.5°)	(1.8°)	(1.3°)	
3	With 4-pt stabilisers	4.2° (4.2°)	3.6° (3.6°)	2.8° (2.8°)	2.0° (2.0°)	
	With 2-pt / support blade	4.2° (4.2°)	3.3° (3.6°)	2.4° (2.8°)	1.8° (2.0°)	
	Without stabilisers	(3.5°)	(2.3°)	(1.7°)	(1.3°)	
1.5	With 4-pt stabilisers	5.5° (5.5°)	3.7° (3.7°)	2.7° (2.7°)	1.9° (1.9°)	
	With 2-pt / support blade	4.9° (5.5°)	3.2° (3.7°)	2.3° (2.7°)	1.8° (1.9°)	
	Without stabilisers	(3.3°)	(2.2°)	(1.6°)		
0	With 4-pt stabilisers	5.1° (5.1°)	3.5° (3.5°)	2.5° (2.5°)		
	With 2-pt / support blade	4.7° (5.1°)	3.1° (3.5°)	2.2° (2.5°)		
	Without stabilisers		(2.2°)			
-1.5	With 4-pt stabilisers		2.8° (2.8°)			
	With 2-pt / support blade		2.8° (2.8°)			
					Max. reach 9.0 n	
	Without stabilisers				(1.3°)	
1.9	With 4-pt stabilisers				1.9° (1.9°)	
	With 2-pt / support blade				1.7° (1.9°)	

10

8

6

Reach in m

4

2

0

8.8 m reach with multi-purpose stick

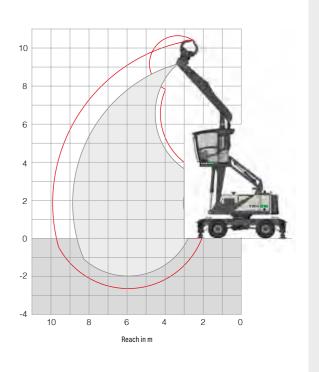
Loading equipment	Recommended attachments
Boom 4.7 m	Sorting grapple up to 0.4 m ³
Multi-purpose stick 3.5 m	
Cactus grab (Lightweight material) 0.3 m³	

The lift capacity values are stated in metric tons (t). The pump pressure is 350 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked *). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hook, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application thes to be supported on a level ground.

Height [m]	t [m] Undercarriage Reach [m]			h [m]	
	stabilisation	3	4.5	6	7.5
	Without stabilisers		(2.6°)	(2.2°)	
7.5	With 4-pt stabilisers		2.6° (2.6°)	2.2° (2.2°)	
	With 2-pt / support blade		2.6° (2.6°)	2.2° (2.2°)	
	Without stabilisers		(2.5°)	(2.6°)	(1.7°)
6	With 4-pt stabilisers		2.5° (2.5°)	2.6° (2.6°)	1.9° (1.9°)
	With 2-pt / support blade		2.5° (2.5°)	2.6° (2.6°)	1.9° (1.9°)
	Without stabilisers		(2.6°)	(2.5°)	(1.7°)
4.5	With 4-pt stabilisers		2.6° (2.6°)	2.9° (2.9°)	2.5° (2.5°)
	With 2-pt / support blade		2.6° (2.6°)	2.9° (2.9°)	2.3° (2.5°)
	Without stabilisers	(7.4°)	(3.7°)	(2.3)	(1.6°)
3	With 4-pt stabilisers	7.8° (7.8°)	4.7° (4.7°)	3.3° (3.3°)	2.5° (2.5°)
	With 2-pt / support blade	7.8° (7.8°)	4.7° (4.7°)	3.2° (3.3°)	2.2° (2.5°)
	Without stabilisers	(2.4°)	(3.3°)	(2.2)	(1.5°)
1.5	With 4-pt stabilisers	2.4° (2.4°)	5.2° (5.2°)	3.4° (3.4°)	2.5° (2.5°)
	With 2-pt / support blade	2.4° (2.4°)	4.7° (5.2°)	3.0° (3.4°)	2.1° (2.5°)
	Without stabilisers	(2.8°)	(3.1°)	(2.1°)	(1.5°)
0	With 4-pt stabilisers	2.8° (2.8°)	4.9° (4.9°)	3.3° (3.3°)	2.3° (2.3°)
	With 2-pt / support blade	2.8° (2.8°)	4.4° (4.9°)	2.9° (3.3°)	2.1° (2.3°)
	Without stabilisers		(3.1°)	(2.0°)	(1.5°)
-1.5	With 4-pt stabilisers		3.7° (3.7°)	2.6° (2.6°)	1.7° (1.7°)
	With 2-pt / support blade		3.7° (3.7°)	2.6° (2.6°)	1.7° (1.7°)
					Max. reach 8.8 r
	Without stabilisers				(1.2°)
1.9	With 4-pt stabilisers				1.8° (1.8°)
	With 2-pt / support blade				1.6° (1.8°)









OUTSTANDING VISIBILITY AND PERFORMANCE – OUTSTANDING OPERATION.

Compact, manoeuvrable, powerful: a snapshot of the mobile material handler **TWH 220**. With a reach of 10.4 metres and an operating weight of 21 tonnes, this machine is the ideal solution for those who refuse to compromise on performance, efficiency and reliability even in an entry-level model.







TWH 220	19.3-21.0 t
Diesel engine	
Manufacturer / model	Deutz TCD 3.6 L04
Design	4-cylinder in-line engine
Functionality	4-cycle diesel, common rail direct injection, turbo- charged with intercooler, controlled exhaust gas recirculation, diesel particulate filter with continuous regeneration and SCR catalytic converter
Engine power	95 kW
Rated speed	2,000 rpm
Displacement	3.61
Cooling system	Water and charge air cooling with temperature controlled fan speed
Exhaust emission standard	EU-Stage V
Fuel tank	305 l Diesel
DEF / Urea tank	20 I AdBlue
Electrical system	
Alternator	28 V / 100 A
Operating voltage	24 V
Battery	$2\times12V$ / 110 Ah/ 750 A (according to EN)
Lighting system	2 × LED headlamps, turn indicators and tail lights
Travel drive	
	finitely variable axial piston motor with directly mounted manual gearshift, 4-wheel drive
Travel speed 1st gear	max. 5 kph
Travel speed 2nd gear	max. 20 kph
Gradeability	max. 55 %
Turning radius	7.0 m
Slewing drive	
Slewing ring	Internally geared, double-row ball turning ring
Drive	2-stage planetary gear with integrated multi-disc brake
Uppercarriage swing speed	0-8 rpm variable
Slewing lock	Electrically activated

Undercarriag

Planetary drive axle with integrated drumbrake, rigidly mounted, max. steering angle: 30°	
Oscillating planetary drive rear axle with integrated drum brake and selectable oscillating lock	
4-point stabilisers 2-point-stabilisers with support blade	
10.00-20 solid rubber with intermediate rings	
Hydraulic single-circuit braking system acting on all four wheel pairs (drum brakes)	
Electrically operated spring-loaded drum brake at transmission, acting on both front and rear axle	
290 lpm	
320 / 360 bar	
2751	
Infinitely variable hydraulic height-adjustment with eye level up to 5.3 m above ground. Sound-deadened, heat-insulated windows, windshield with pull-down sunblind, viewing window on cab roof, sliding window in cab door, sliding door	
Automatic air-conditioning. Hot water heating with variable temperature control and 8-speed fan, 10 adjustable air nozzles, including 4 in the roof lining, 3 defroster nozzles	
Air-cushioned comfort-seat with integrated headrest, safety belt and lumbar support. Comfortable operation with multi-purpose adjustment options for seat position, seat inclination, seat cushion placement in relation to armrests and pilot control units. Articulating armrest and joysticks	
Ergonomic layout, anti-glare instrumentation. Multifunction display, automatic monitoring and recording of abnormal operating conditions (including all hydraulic oil filters, hydraulic oil temperature (cold/hot), coolant temperature and charge air temperature, diesel particulate filter load, visual and audible warning indication with shutdown of pilot controls/engine power reduction. Diagnosis of individual sensors possible via the multifunction display. Rear view camera and side view camera	
Sound power level (ambience) $L_{_{WA}}$ 97,2 dB(A) (metreed) acc. to directive 2000/14/EG $L_{_{WA}}$ 100 dB(A) (guaranteed) acc. to directive 2000/14/EG Sound pressure level (inside the cabin)	

Engine Standard Option Intercooler and coolant radiator • Direct electronic fuel injection / common rail • Advanced automatic idle incl. engine shut-off function • Engine diagnostics interface • Temperature-dependent fan drive • Undercarriage All-wheel drive with differential • Drum brake • Rear axle oscillating lock • 4-point stabilisers • 2-point stabilisers with support blade • Dozer blade in addition to 4-point stabilisers • Stabiliser cylinders with integrated two-way check valves • Piston rod protection on stabiliser cylinders • Tool box • Solid rubber tyres with intermediate rings • Uppercarriage Separate cooling system • for engine and hydraulic oil cooler Cooling system with temperature-dependent fan drive • Fan drive reversing function • Automatic central lubrication system •

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Further optional equipment available on request! Specification subject to change without notice.

Rear view camera

Side view camera

Specification subject to change without notice.

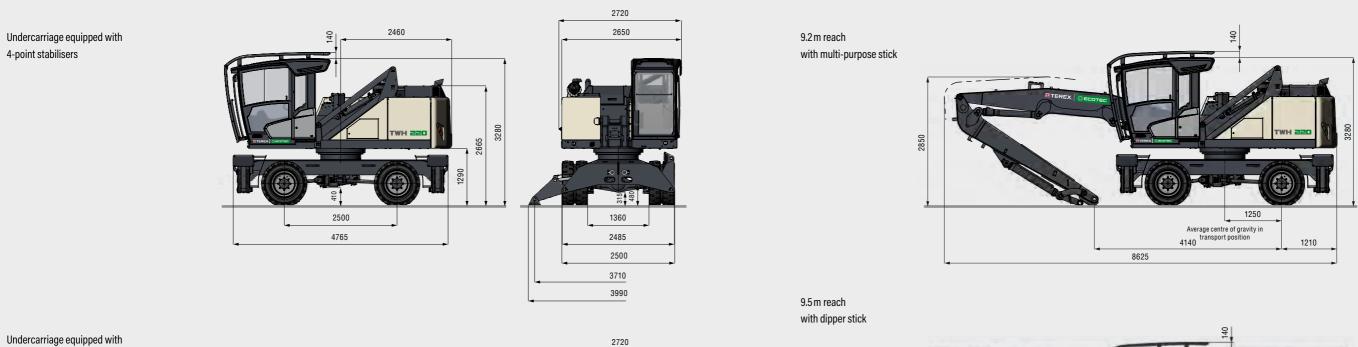




Cab	Standard	Option
Hydraulically adjustable cab	•	
Safety glass	•	
Roof guard grille (FOPS)		٠
Protective grilles to front and roof		٠
Sliding window in cab door	•	
Windshield washer system	•	
Roof washer system		•
Air-cushioned operator seat with headrest, seatbelt, and lumbar support	•	
Joystick steering	•	
Automatic air conditioning system	•	
Multi-function display	•	
Document net	•	
Radio with Bluetooth and hands-free kit (EU and US) Radio with CD and USB (other countries)	•	
12 V socket		•
Fire extinguisher, dry powder		•
Travel alarm w/ rotating beacon		•
Other equipment		
Close proximity range limiter for dipper stick	•	
Coolant and hydraulic oil level monitoring system	•	
Filter system for attachments		•
Hose rupture valve for boom cylinder		•
Hose rupture valve for stick cylinder		•
Overload and work area control		•
Overload warning device		•
Quick coupling on dipper stick	•	
Dipper stick impact protection		•
Active cyclone prefilter (TOP AIR)		•
Lubrication of the grab suspension by central lubrication system	•	
Light packages LED		٠
LED front headlights	•	
LED working lights cabin roof front	•	
Boom cylinder damping system (piston accumulator)		٠
Fuchs Telematics System, incl. 2 years service	•	

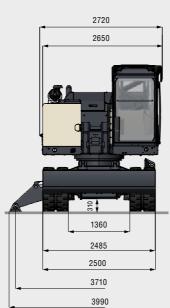
Transport Dimensions

(all dimensions in mm)



Undercarriage equipped with 2-point stabilisers and support blade

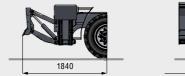




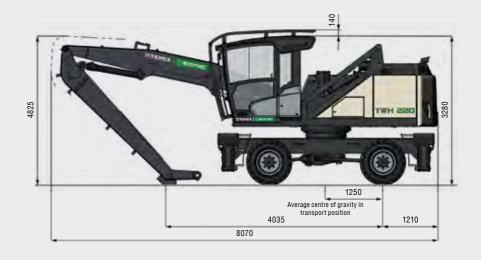
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10.4 m reach with dipper stick

Dozer blade in addition to 4-point stabilisers













16 | 17

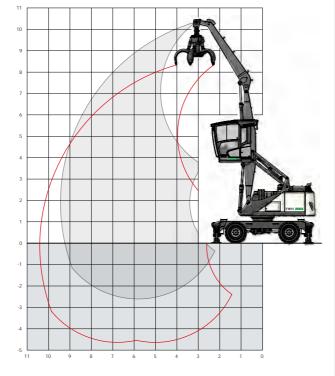
9.5 m reach with dipperstick

Loading equipment

Boom: 5.2 m
Dipperstick: 4.0 m
Cactus grab: 0.6 m³

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked "). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift tapacity table in the cab are required. For object handling application the machine has to be supported on a level ground.

eight [m]	Undercarriage	Reach [m]			
	stabilisation	4.5	6	7.5	9
	not supported	(6.5°)			
9	4-point supported	6.5° (6.5°)			
	2-point supported with blade	6.5° (6.5°)			
	not supported		(4.6°)		
7.5	4-point supported		5.7° (5.7°)		
	2-point supported with blade		5.7° (5.7°)		
	not supported		(4.5°)	(3.2°)	
6	4-point supported		5.7° (5.7°)	4.9° (4.9°)	
	2-point supported with blade		5.7° (5.7°)	4.0° (4.9°)	
	not supported	(6.9°)	(4.4°)	(3.2°)	(2.4°)
4.5	4-point supported	7.5° (7.5°)	6.0° (6.0°)	4.9° (4.9°)	3.8° (4.0°)
	2-point supported with blade	7.5° (7.5°)	5.6° (6.0°)	4.0° (4.9°)	3.0° (4.0°)
	not supported	(6.5°)	(4.3°)	(3.1°)	(2.3°)
3	4-point supported	8.5° (8.5°)	6.3° (6.3°)	5.0° (5.0°)	3.8° (3.9°)
	2-point supported with blade	8.4° (8.5°)	5.4° (6.3°)	3.9° (5.0°)	2.9° (3.9°)
	not supported	(6.1°)	(4.1°)	(3.0°)	(2.3°)
1.5	4-point supported	9.2° (9.2°)	6.5° (6.5°)	4.9° (4.9°)	3.7° (3.7°)
	2-point supported with blade	8.0° (9.2°)	5.2° (6.5°)	3.8° (4.9°)	2.9° (3.7°)
	not supported	(5.9°)	(3.9°)	(2.9°)	(2.3°)
0	4-point supported	8.6° (8.6°)	6.2° (6.2°)	4.5° (4.5°)	3.1° (3.1°)
	2-point supported with blade	7.7° (8.6°)	5.0° (6.2°)	3.7° (4.5°)	2.9° (3.1°)
	not supported	(5.8°)	(3.9°)	(2.9°)	
-1.5	4-point supported	6.8° (6.8°)	5.1° (5.1°)	3.6° (3.6°)	
	2-point supported with blade	6.8° (6.8°)	5.0 (5.1°)	3.6° (3.6°)	
					Max. reach 9.5 r
	not supported				(2.2°)
1.9	4-point supported				3.4° (3.4°)
	2-point supported with blade				2.7° (3.4°)



Reach in m

10.4 m reach with dipper stick

Loading equipment

Boom: 5.2 m

Dipper stick: 5.0 m

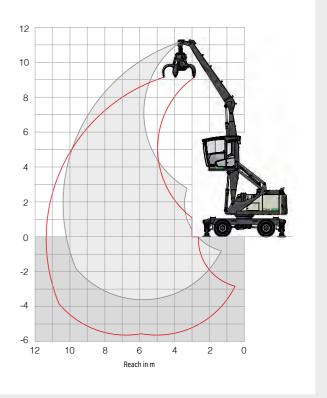
Cactus grab: 0.4 m³

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked *). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application the machine has to be supported on a level ground.

leight [m]	Undercarriage		Read	h [m]	
	stabilisation	4.5	6	7.5	9
	not supported	(5.2°)			
10.5	4-point supported	5.2° (5.2°)			
	2-point supported with blade	5.2° (5.2°)			
	not supported		(4.7°)		
9	4-point supported		4.9° (4.9°)		
	2-point supported with blade		4.9° (4.9°)		
	not supported		(4.7°)	(3.3°)	
7.5	4-point supported		5.0° (5.0°)	4.5° (4.5°)	
	2-point supported with blade		5.0° (5.0°)	4.1° (4.5°)	
	not supported		(4.7°)	(3.3°)	(2.4°)
6	4-point supported		5.1° (5.1°)	4.5° (4.5°)	3.9° (3.9°)
	2-point supported with blade		5.1° (5.1°)	4.1° (4.5°)	3.1° (3.9°)
	not supported		(4.6°)	(3.2°)	(2.4°)
4.5	4-point supported		5.4° (5.4°)	4.6° (4.6°)	3.9° (4.0°)
	2-point supported with blade		5.4° (5.4°)	4.0° (4.6°)	3.0° (4.0°)
	not supported	(6.8°)	(4.4°)	(3.1°)	(2.4°)
3	4-point supported	7.6° (7.6°)	5.9° (5.9°)	4.8° (4.8°)	3.8° (4.0°)
	2-point supported with blade	7.6° (7.6°)	5.5° (5.9°)	3.9° (4.8°)	3.0° (4.0°)
	not supported	(6.3°)	(4.2°)	(3.0°)	(2.3°)
1.5	4-point supported	8.7° (8.7°)	6.3° (6.3°)	4.9° (4.9°)	3.7° (3.9°)
	2-point supported with blade	8.2° (8.7°)	5.3° (6.3°)	3.8° (4.9°)	2.9° (3.9°)
	not supported	(5.9°)	(4.0)	(2.9°)	(2.2°)
0	4-point supported	9.0° (9.0°)	6.4° (6.4°)	4.8° (4.8°)	3.6° (3.6°)
	2-point supported with blade	7.8° (9.0°)	5.1° (6.4°)	3.7° (4.8°)	2.8° (3.6°)
	not supported	(5.7°)	(3.8°)	(2.8°)	(2.2°)
-1.5	4-point supported	8.1° (8.1°)	5.8° (5.8°)	4.3° (4.3°)	3.0° (3.0°)
	2-point supported with blade	7.6° (8.1°)	4.9° (5.8°)	3.6° (4.3°)	2.8° (3.0°)
	not supported	(5.7°)	(3.8°)	(2.8°)	
-3	4-point supported	6.0° (6.0°)	4.4° (4.4°)	3.1° (3.1°)	
	2-point supported with blade	6.0° (6.0°)	4.4° (4.4°)	3.1° (3.1°)	
		()		()	Max. reach 10.4
	not supported				(1.9°)
1.9	4-point supported				3.0° (3.0°)
	2-point supported with blade				2.4° (3.0°)







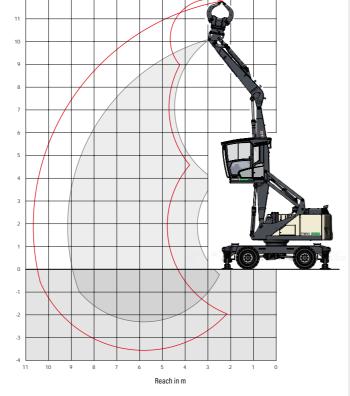
9.2 m reach with multi-purpose stick

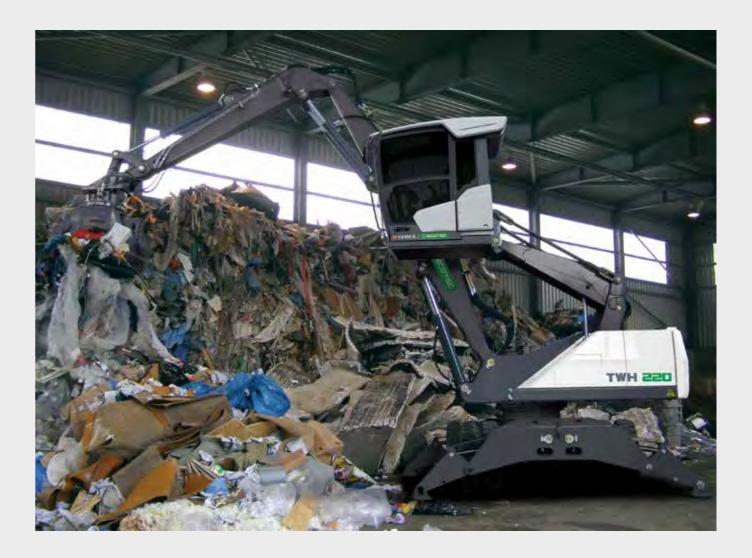
Loading equipment

Boom: 5.2 m Multi-purpose stick: 3.7 m Sorting grab

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked *). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hotsing equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application thes to be supported on a level ground.

leight [m]	Undercarriage		Reac	h [m]	
	stabilisation	4.5	6	7.5	9
	not supported	(6.5°)			
9	4-point supported	6.5° (6.5°)			
	2-point supported with blade	6.5° (6.5°)			
	not supported	(6.8°)	(4.3°)		
7.5	4-point supported	6.8° (6.8°)	5.6° (5.6°)		
	2-point supported with blade	6.8° (6.8°)	5.5° (5.6°)		
	not supported	(6.9°)	(4.3°)	(3.0°)	
6	4-point supported	6.9° (6.9°)	5.6° (5.6°)	4.7° (4.7°)	
	2-point supported with blade	6.9° (6.9°)	5.5° (5.6°)	3.8° (4.7°)	
	not supported	(6.6°)	(4.2°)	(2.9°)	
4.5	4-point supported	7.5° (7.5°)	5.8° (5.8°)	4.7° (4.7°)	
	2-point supported with blade	7.5° (7.5°)	5.3° (5.8°)	3.7° (4.7°)	
	not supported	(6.2°)	(4.0°)	(2.8°)	(2.1°)
3	4-point supported	8.4° (8.4°)	6.1° (6.1°)	4.7° (4.7°)	3.6° (3.6°)
	2-point supported with blade	8.1° (8.4°)	5.1° (6.1°)	3.6° (4.7°)	2.7° (3.6°)
	not supported	(5.8°)	(3.8°)	(2.7°)	(2.1°)
1.5	4-point supported	8.8° (8.8°)	6.2° (6.2°)	4.6° (4.6°)	3.2° (3.2°)
	2-point supported with blade	7.7° (8.8°)	4.9° (6.2°)	3.5° (4.6°)	2.7° (3.2°)
	not supported	(5.6°)	(3.7°)	(2.7°)	
0	4-point supported	8.0° (8.0°)	5.7° (5.7°)	4.1° (4.1°)	
	2-point supported with blade	7.4° (8.0°)	4.8° (5.7°)	3.5° (4.1°)	
	not supported	(5.5°)	(3.6°)	(2.6°)	
-1.5	4-point supported	6.0° (6.0°)	4.4° (4.4°)	3.0° (3.0°)	
	2-point supported with blade	6.0° (6.0°)	4.4° (4.4°)	3.0° (3.0°)	
					Max. reach 9.2
	not supported				(2.0°)
1.9	4-point supported				3.2° (3.2°)
	2-point supported with blade				2.6° (3.2°)











THE ALL-ROUNDER, INCORPORATING TURBO EFFICIENCY.

With its diverse applications and near legendary manoeuvring speed, the **TWH 224** really does rev up the recycling business. The solid undercarriage ensures stability when loads weighing several tonnes are to be moved utilising a reach of up to 11 metres.



TWH 226

BIGGER UNDERCARRIAGE. HIGHER LOAD CAPACITY.

Flexibility and speed are the key to success in the recycling business. That's why smart professionals rely on the **TWH 226**. Convenient handling, the greatest power, high lifting capacities throughout the entire working range, ergonomic, straightforward operation in the vertically movable cab and legendary reliability make you ready for any challenge!

_				
F	au	nm	ent	
	99	P		

Operating weight without	attachments	
TWH 224	22.8-24.2t	
TWH 226	23.9-25.5 t	
Engine		
Manufacturer / model	Deutz TCD 4.1 L4	
Design	4-cylinder in-line engine	
Functionality	charged with intercooler	iculate filter with continuous
Engine power	115 kW	
Rated speed	2,000 rpm	
Displacement	4.11	
Cooling system	Water and charge air coo temperature controlled f	
Exhaust emission standard	EU-Stage V	
Fuel tank	260 l Diesel	
DEF / Urea tank	321 AdBlue	
Electrical system		
Alternator	28 V / 100 A	
Operating voltage	24 V	
Battery	2 × 12 V / 110 Ah / 750 A (ac	cording to EN)
Lighting system	2 × LED headlamps, turn indicators and tail lig	ghts
Travel drive		
Hydrostatic travel drive via in travel brake valve, two-spee		n motor with directly mounted I drive
	TWH 224	TWH 226
Travel speed 1 st gear	max. 5 kph	max. 5 kph
Travel speed 2 nd gear	max. 18 kph	max. 18 kph

max. 40 %

2-stage planetary gear with integrated multi-disc brake

Electrically activated

7.9 m

Uppercarriage swing speed 0-7.5 rpm variable

max. 40 %

8.3 m

Internally geared, double-row ball turning ring

Front axle	Planetary drive axle with integrated multi-disc brake, rigidly mounted, max. steering angle: 29°	Planetary drive axle with integrated multi-disc brake, rigidly mounted, max. steering angle: 27°
Rear axle	Oscillating planetary drive rear axle with integrated multi-disc brake and selec- table oscillating lock	Oscillating planetary drive rear axle with integrated multi-disc brake and selec table oscillating lock
Outriggers	4-point stabilisers 2-point-stabilisers and support blade	4-point stabilisers
Tyres	10.00-20 solid rubber with intermediate rings	10.00-20 solid rubber with intermediate rings
Brakes		
Service brake	Hydraulic single-circuit bral acting on all four wheel pair	
Parking brake	Electrically operated spring at transmission, acting on b	
Hydraulic system		
Pump delivery rate	max. 380 lpm	
Operating pressure	max. 320 / 360 bar	
Hydraulic oil tank	3251	
Operator's cab		
Cab	Infinitely variable hydraulic level up to 5.3m above grou Sound-deadened, heat-insu with pull-down sunblind, vie sliding window in cab door,	nd. lated windows, windshield wing window on cab roof,
Air conditioning	Automatic air-conditioning. with 8-speed fan, 10 adjusta 4 in the roof lining, 3 defrost	ble air nozzles, including
Operator's seat	seat inclination, seat cushio	ort. Comfortable operation ent options for seat position,
Monitoring	Ergonomic layout, anti-glard function display, automatic of abnormal operating cond hydraulic oil filters, hydrauli hot), coolant temperature ai diesel particulate filter load indication with shutdown of reduction. Diagnosis of indir the multifunction display. Re view camera	monitoring and recording itions (including all c oil temperature (cold/ nd charge air temperature, visual and audible warning pilot controls / engine powe vidual sensors possible via
Noise level	Sound power level (ambiend L _{wa} 99,1dB(A) (metreed) acc L _{wa} 102 dB(A) (guaranteed) a Sound pressure level (insid acc. to standard ISO 6396 L _z	to directive 2000/14/EG cc. to directive 2000/14/EG the cabin)
Certified in accordance		

TWH 224

TWH 226

Undercarriage

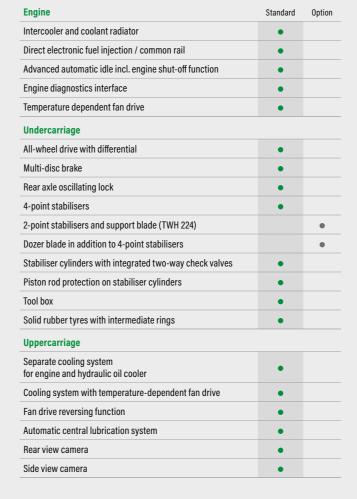
Specification subject to change without notice.

Gradeability

Turning radius
Slewing drive

Slewing ring Drive

Slewing lock



Further optional equipment available on request! Specification subject to change without notice.

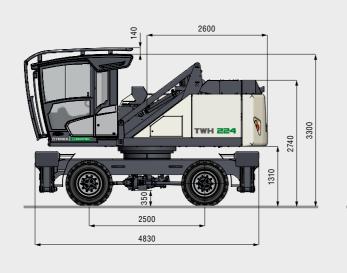


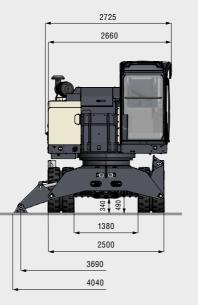


Cab	Standard	Option
Hydraulically adjustable cab	•	
Safety glass	•	
Sliding window in cab door	•	
Reinforced glass (windscreen and roof panel) P5A		•
Windshield washer system	•	
Roof washer system		•
Air-cushioned operator seat with headrest, seatbelt, and lumbar support	•	
Joystick steering	•	
Automatic air conditioning system	•	
Multi-function display	•	
Document net	•	
Radio with Bluetooth and hands-free kit (EU and US) Radio with CD and USB (other countries)	•	
Fire extinguisher, dry powder		•
Travel alarm w/ rotating beacon		•
Other equipment		
Close proximity range limiter for dipper stick	•	
Coolant and hydraulic oil level monitoring system	•	
Hose rupture valve for boom cylinder		•
Hose rupture valve for stick cylinder		•
Overload and work area control		•
Overload warning device		•
Quick coupling on dipper stick	•	
Active cyclone prefilter (TOP AIR)		•
Lubrication of the grab suspension by central lubrication system	•	
Light packages LED		٠
LED front headlights	•	
LED working lights cabin roof front	•	
Boom cylinder damping system (piston accumulator)		•
Fuchs Telematics System, incl. 2 years service	•	

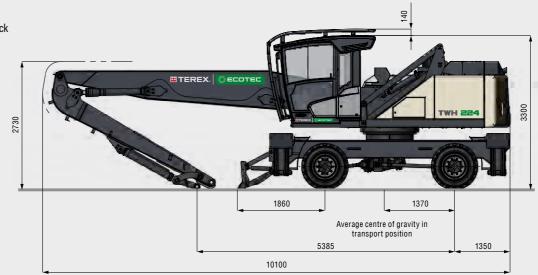
TWH 224 Transport Dimensions (all dimensions in mm)

Undercarriage equipped with 4-point stabilisers



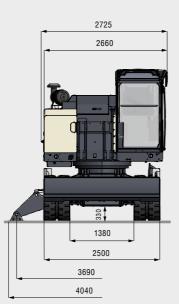


10.7 m reach with multi-purpose stick

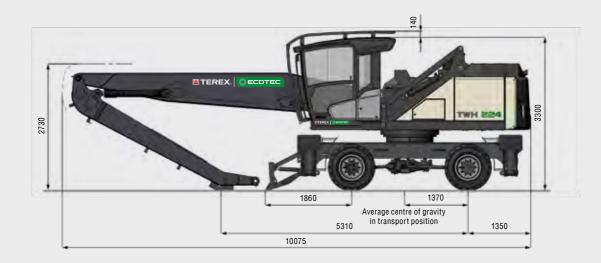


Undercarriage equipped with 2-point stabilisers and support blade





11.0 m reach with dipper stick



Dozer blade in addition to 4-point stabilisers









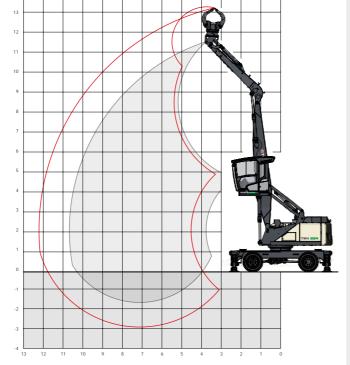
10.7 m reach with multi-purpose stick

Loading equipment

Boom: 6.5 m Multi-purpose stick: 4.0 m Sorting grab: 0.45 m³

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked "). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift (tapacity table in the cab are required. For object handling application the machine has to be supported on a level ground.

Height [m]	Undercarriage			Reach [m]		
	outrigger	4.5	6	7.5	9	10.5
	not supported		(5.0°)	(3.4°)		
9	4-point supported		6.3° (6.3°)	5.0° (5.0°)		
	2-point supported with support blade		6.3° (6.3°)	4.4° (5.0°)		
	not supported		(4.9°)	(3.4°)	(2.4°)	
7.5	4-point supported		6.3° (6.3°)	5.4° (5.6°)	4.0° (4.0°)	
	2-point supported with support blade		6.3° (6.3°)	4.4° (5.6°)	3.2° (4.0°)	
	not supported	(7.7°)	(4.8°)	(3.3°)	(2.4°)	
6	4-point supported	8.3° (8.3°)	6.7° (6.7°)	5.4° (5.8°)	3.9° (4.9°)	
	2-point supported with support blade	8.3° (8.3°)	6.3° (6.7°)	4.3° (5.8°)	3.1° (5.1°)	
	not supported	(7.1)	(4.5°)	(3.2°)	(2.3°)	
4.5	4-point supported	9.8° (9.8°)	7.5° (7.6°)	5.2° (6.3°)	3.9° (4.8°)	
	2-point supported with support blade	9.6 (9.8°)	6.0° (7.4°)	4.2° (6.1°)	3.1° (5.0°)	
	not supported	(6.4°)	(4.2°)	(3.0°)	(2.2°)	(1.7°)
3	4-point supported	11.4° (11.8°)	7.1° (8.3°)	5.0° (6.3°)	3.8° (4.7°)	2.9° (3.7°)
	2-point supported with support blade	8.6° (11.6°)	5.6° (8.3°)	3.9° (6.5°)	3.0° (4.9°)	2.3° (3.8°)
	not supported	(5.8)	(3.9°)	(2.8°)	(2.1°)	(1.7°)
1.5	4-point supported	7.6° (7.6°)	6.8° (8.7°)	4.8° (6.1°)	3.7° (4.6°)	2.9° (3.6°)
	2-point supported with support blade	7.3° (7.3°)	5.2° (8.9°)	3.7° (6.3°)	2.8° (4.8°)	2.2° (3.8°)
	not supported	(5.6°)	(3.7°)	(2.7°)	(2.1°)	
0	4-point supported	6.2° (6.2°)	6.6° (8.5°)	4.7° (6.0°)	3.6° (4.5°)	
	2-point supported with support blade	6.2° (6.2°)	5.0° (8.8°)	3.6° (6.2°)	2.8° (4.7°)	
	not supported			(2.7°)		
-1.5	4-point supported			4.6° (5.9°)		
	2-point supported with support blade			3.6° (6.1°)		
						Reach max. 10.
	not supported					(1.6°)
2.0	4-point supported					2.8° (3.6°)
	2-point supported with support blade					2.2° (3.7°)



Reach in m

11.0 m reach with dipper stick		
Loading equipment		
Boom: 6.5 m		

Dipper stick: 4.4 m

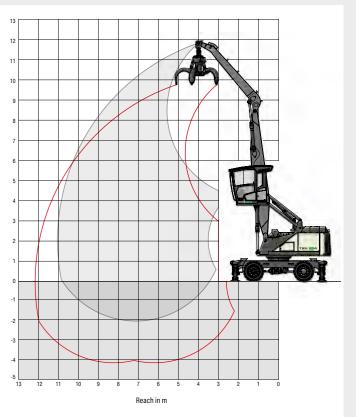
Cactus grab: 0.6 m³

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked *). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift (tapacity table in the cab are required. For object handling application the machine has to be supported on a level ground.

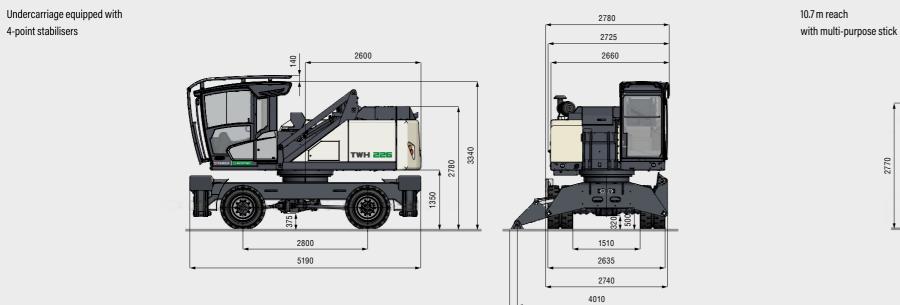
Height [m]	Undercarriage			Reach [m]		
	outrigger	4.5	6	7.5	9	10.5
	not supported		(5.2°)			
10.5	4-point supported		5.6° (5.6°)			
	2-point supported with support blade		5.6° (5.6°)			
	not supported		(5.3°)	(3.6°)		
9	4-point supported		6.3° (6.3°)	5.6° (5.6°)		
	2-point supported with support blade		6.3° (6.3°)	4.7° (5.6°)		
	not supported		(5.2°)	(3.7°)	(2.7°)	
7.5	4-point supported		6.3° (6.3°)	5.7° (5.7°)	4.2° (4.9°)	
	2-point supported with support blade		6.3° (6.3°)	4.7° (5.7°)	3.5° (4.9°)	
	not supported		(5.1°)	(3.6°)	(2.6°)	
6	4-point supported		6.7° (6.7°)	5.6° (5.9°)	4.2° (5.2°)	
	2-point supported with support blade		6.7° (6.7°)	4.6° (5.9°)	3.5° (5.3°)	
	not supported	(7.5°)	(4.8°)	(3.4°)	(2.6°)	(2.0°)
4.5	4-point supported	9.6° (9.6°)	7.5° (7.5°)	5.5° (6.3°)	4.1° (5.1°)	3.2° (4.0°)
	2-point supported with support blade	9.6° (9.6°)	6.3° (7.5°)	4.5° (6.3°)	3.4° (5.3°)	2.6° (4.2°)
	not supported	(6.8°)	(4.5°)	(3.3°)	(2.5°)	(2.0°)
3	4-point supported	11.6° (11.6°)	7.4° (8.4°)	5.3° (6.6°)	4.0° (5.0°)	3.2° (3.9°)
	2-point supported with support blade	9.2° (11.6°)	6.0° (8.4°)	4.3° (6.8°)	3.3° (5.2°)	2.6° (4.1°)
	not supported	(6.2°)	(4.2°)	(3.1°)	(2.4°)	(1.9°)
1.5	4-point supported	10.1° (10.1°)	7.1° (9.0°)	5.1° (6.4°)	3.9° (4.9°)	3.1° (3.9°)
	2-point supported with support blade	8.5° (9.6°)	5.6° (9.2°)	4.1° (6.7°)	3.2° (5.1°)	2.5° (4.1°)
	not supported	(5.9°)	(4.0°)	(3.0°)	(2.3°)	(1.9°)
0	4-point supported	6.9° (6.9°)	6.8° (8.8°)	5.0° (6.2°)	3.8° (4.8°)	3.1° (3.9°)
	2-point supported with support blade	6.9° (6.9°)	5.4° (9.2°)	3.9° (6.5°)	3.1° (5.0°)	2.5° (4.0°)
	not supported		(3.9°)	(2.9°)	(2.3°)	
-1.5	4-point supported		6.8° (8.7°)	4.9° (6.2°)	3.8° (4.7°)	
	2-point supported with support blade		5.3° (9.1°)	3.9° (6.4°)	3.0° (5.0°)	
						Reach max. 11.0
	not supported					(1.8°)
2.0	4-point supported					2.9° (3.7°)
	2-point supported with support blade					2.4° (3.8°)



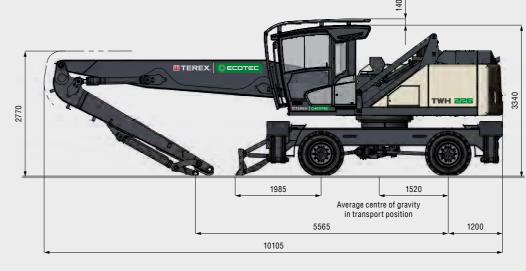




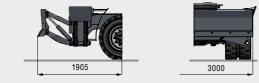
TWH 226 Transport Dimensions (all dimensions in mm)



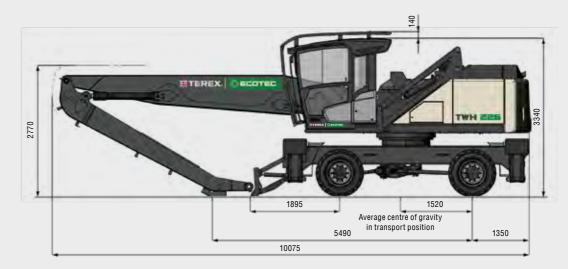
4360



Dozer blade in addition to 4-point stabilisers



11.0 m reach with dipper stick







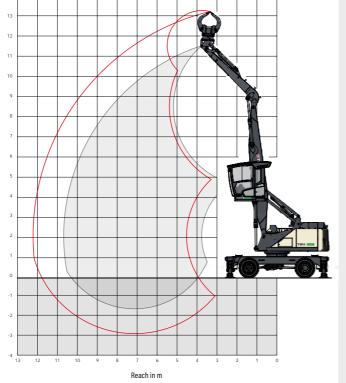
10.7 m reach with multi-purpose stick

Loading equipment

Boom: 6.5 m Multi-purpose stick: 4.0 m Sorting grab: 0.45 m³

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the init capacity values are stated in metric toris (r). The pullip pressure is 300 bar, in accordance with ISU (IbB) the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked *). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for *not supported* only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hock, etc.) must be deduced from the lift exactly a super the super term of term of term of term of the super term of the super term of te capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application the machine has to be supported on a level ground.

eight [m]	Undercarriage			Reach [m]		
	outrigger	4.5	6	7.5	9	10.5
10.5	not supported		(5.0°)			
10.5	4-point supported		5.0° (5.0°)			
9	not supported		(6.0°)	(4.1°)		
9	4-point supported		6.4° (6.4°)	5.1° (5.1°)		
75	not supported		(5.9°)	(4.1°)	(2.9°)	
7.5	4-point supported		6.4° (6.4°)	5.8° (5.8°)	4.1° (4.1°)	
•	not supported	(8.3°)	(5.8°)	(4.0°)	(2.9°)	
6	4-point supported	8.3° (8.3°)	6.9° (6.9°)	5.9° (5.9°)	4.7° (5.8°)	
4.5	not supported	(8.6°)	(5.5°)	(3.8°)	(2.9°)	
4.5	4-point supported	10.0° (10.0°)	7.6° (7.6°)	6.1° (6.3°)	4.6° (5.5°)	
0	not supported	(7.9°)	(5.1°)	(3.7°)	(2.8°)	(2.2°)
3	4-point supported	12.0° (12.0°)	8.5° (8.5°)	5.9° (6.8°)	4.5° (5.7°)	3.5° (4.4°)
	not supported	(7.3°)	(4.8°)	(3.5°)	(2.7°)	(2.1°)
1.5	4-point supported	7.4° (7.4°)	8.1° (9.2°)	5.8° (7.1°)	4.4° (5.6°)	3.5° (4.4°)
•	not supported	(6.3°)	(4.6°)	(3.4°)	(2.6°)	
0	4-point supported	6.3° (6.3°)	7.9° (9.4°)	5.6° (7.2°)	4.3° (5.5°)	
	not supported			(3.3°)		
-1.5	4-point supported			5.6° (6.9°)		
						Max. reach 10.7 n
0.1	not supported					(2.1°)
2.1	4-point supported					3.4° (4.0°)



11.0 m reach with dipper stick

Loading equipment

Boom: 6.5 m

Dipper stick: 4.4 m

Cactus grab: 0.6 m³

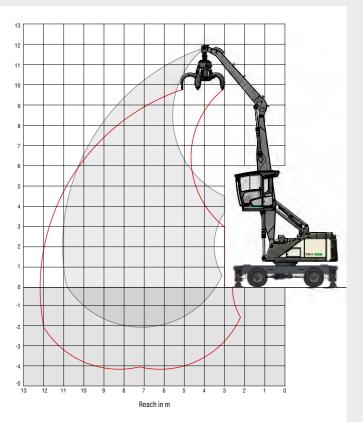
The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 The lift capacity values are stated in metric tons (1). The pump pressure is 360 bar. In accordance with ISO 10657 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked *). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hosting equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity value in the cab are required. For object handling application the sate provide the construction of the machine has to be supported on a level ervend. on a level ground.

Height [m]	Undercarriage					
••••	outrigger	4.5	6	7.5	9	10.5
10.5	not supported		(5.7°)			
10.5	4-point supported		5.7° (5.7°)			
9	not supported		(6.3°)	(4.4°)		
3	4-point supported		6.3° (6.3°)	5.7° (5.7°)		
7.5	not supported		(6.2°)	(4.4°)	(3.2°)	
1.5	4-point supported		6.4° (6.4°)	5.8° (5.8°)	5.0° (5.0°)	
6	not supported		(6.1°)	(4.3°)	(3.2°)	
0	4-point supported		6.8° (6.8°)	6.0° (6.0°)	4.9° (5.5°)	
4.5	not supported	(9.1°)	(5.8°)	(4.1°)	(3.1°)	(2.4°)
4.3	4-point supported	9.7° (9.7°)	7.6° (7.6°)	6.4° (6.4°)	4.8° (5.6°)	3.8° (4.6°)
3	not supported	(8.3°)	(5.4°)	(3.9°)	(3.0°)	(2.4°)
3	4-point supported	11.8° (11.8°)	8.6° (8.6°)	6.2° (6.9°)	4.7° (5.9°)	3.8° (4.7°)
1.5	not supported	(7.7°)	(5.1°)	(3.8°)	(2.9°)	(2.4°)
1.0	4-point supported	9.7° (9.7°)	8.4° (9.4°)	6.0° (7.4°)	4.6° (5.8°)	3.7° (4.6°)
0	not supported	(6.9°)	(4.9°)	(3.6°)	(2.9°)	(2.3°)
U	4-point supported	6.9° (6.9°)	8.2° (9.8°)	5.9° (7.5°)	4.6° (5.7°)	3.7° (4.6°)
-1.5	not supported		(4.8°)	(3.6°)	(2.8°)	
-1.0	4-point supported		8.1° (9.5°)	5.8° (7.4°)	4.5° (5.7°)	
						Max. reach 11.0 m
2,1	not supported					(2.2°)
2.1	4-point supported					3.5° (3.8°)

Height [m]	Undercarriage					
	outrigger	4.5	6	7.5	9	10.5
10.5	not supported		(5.7°)			
10.5	4-point supported		5.7° (5.7°)			
9	not supported		(6.3°)	(4.4°)		
3	4-point supported		6.3° (6.3°)	5.7° (5.7°)		
7.5	not supported		(6.2°)	(4.4°)	(3.2°)	
7.5	4-point supported		6.4° (6.4°)	5.8° (5.8°)	5.0° (5.0°)	
6	not supported		(6.1°)	(4.3°)	(3.2°)	
0	4-point supported		6.8° (6.8°)	6.0° (6.0°)	4.9° (5.5°)	
4.5	not supported	(9.1°)	(5.8°)	(4.1°)	(3.1°)	(2.4°)
4.5	4-point supported	9.7° (9.7°)	7.6° (7.6°)	6.4° (6.4°)	4.8° (5.6°)	3.8° (4.6°)
3	not supported	(8.3°)	(5.4°)	(3.9°)	(3.0°)	(2.4°)
3	4-point supported	11.8° (11.8°)	8.6° (8.6°)	6.2° (6.9°)	4.7° (5.9°)	3.8° (4.7°)
1.5	not supported	(7.7°)	(5.1°)	(3.8°)	(2.9°)	(2.4°)
1.9	4-point supported	9.7° (9.7°)	8.4° (9.4°)	6.0° (7.4°)	4.6° (5.8°)	3.7° (4.6°)
0	not supported	(6.9°)	(4.9°)	(3.6°)	(2.9°)	(2.3°)
U	4-point supported	6.9° (6.9°)	8.2° (9.8°)	5.9° (7.5°)	4.6° (5.7°)	3.7° (4.6°)
1.5	not supported		(4.8°)	(3.6°)	(2.8°)	
-1.5	4-point supported		8.1° (9.5°)	5.8° (7.4°)	4.5° (5.7°)	
						Max. reach 11.0 m
0.1	not supported					(2.2°)
2.1	4-point supported					3.5° (3.8°)









WELL-THOUGHT-OUT MACHINE FOR MORE POWER AND REACH WHILE RETAINING COMPACT DIMENSIONS.

With its substantial reach and high load capacity, the TWH 228 is one of the top recycling models in the world. Its rock-solid stability and tough boom design ensure safety in the most extreme situations. Highly efficient dualcircuit hydraulics ensure that slewing manoeuvres are as swift and powerful as they are precise.







TWH 228	28.4 t-30.6 t
Diesel engine	
Manufacturer / model	Deutz 6.1 L6
Design	6-cylinder inline
Functionality	4-cycle diesel, common rail direct injection, turbo- charged with intercooler, controlled exhaust gas recirculation, diesel particulate filter with continuous regeneration and SCR catalytic converter
Engine power	129 kW
Rated speed	2,000 rpm
Displacement	6.1
Cooling system	Water and charge air cooling with temperature controlled fan speed
Exhaust emission standard	EU-Stage V
Fuel tank	380 I Diesel
DEF / Urea tank	32 I AdBlue
Electrical system	
Alternator	28 V / 100 A
Operating voltage	24 V
Battery	2 × 12 V / 110 Ah / 750 A (in accordance with EN standards)
Lighting system	$\rm 2 \times \rm LED$ headlamps, turn indicators and tail lights
Travel drive	
	finitely variable axial piston motor with directly wo-speed manual gearshift, 4-wheel drive
Travel speed 1st gear	5 kph
Travel speed 2nd gear	18 kph
Gradeability	max. 40%
Turning radius	8.3 m
Slewing drive	
Slewing ring	Internally geared, double-row ball turning ring
Drive	2-stage planetary gear

Drive Uppercarriage swing speed	2-stage planetary gear with integrated multi-disc brake 0-7.5 rpm variable
Slewing lock	Electrically operated

Undercarriage Rigid axle with integral drum brake, planetary drive, Front axle max. steering angle: 27° Rear axle Oscillating axle with integral drum brake and selectable oscillation lock, planetary drive Outriggers 4-point stabiliser system 10.00-20 solid rubber with intermediate rings Tyres Brakes Service brake Hydraulic single-circuit braking system acting on all four wheel pairs Electrically operated disc brake on travel gearbox, Parking brake acting on both front and rear axles Hydraulic system Pump delivery rate max. 2 × 330 lpm Operating pressure max. 320 / 360 bar Hydraulic oil tank 350 I Operator's cab Cab Infinitely variable hydraulic height-adjustment with eye level up to 5.60 m above ground. Sound-deadened, ample thermal panoramic glass windows, windshield with pulldown sunblind, viewing window on cab roof, sliding window in cab door, sliding door Air conditioning Automatic air-conditioning. Infinitely variable heating with 8-speed fan, 10 adjustable air nozzles, including 4 in the roof lining, 3 defroster nozzles Operator's seat Air-cushioned comfort seat with integrated headrest, safety belt and lumbar support, optional seat heating. Comfortable operation with multi-purpose adjustment options for seat position, seat inclination, seat cushion placement in relation to armrests and pilot control units. Articulating armrests and joysticks Monitoring Ergonomic layout, anti-glare instrumentation. Multifunction display, automatic monitoring and recording of abnormal operating conditions (including all hydraulic oil filters, hydraulic oil temperature (cold/hot), coolant temperature and charge air temperature), diesel particulate filter load, visual and audible warning indication with shutdown of pilot controls/engine power reduction. Diagnosis of individual sensors possible via the multifunction display. Rear view camera and side view camera Noise level Sound power level (ambience) L_{wa} 99.3 dB(A) (metreed) acc. to directive 2000/14/EG 101 dB(A) (guaranteed) acc. to directive 2000/14/EG Sound pressure level (inside the cabin) acc. to standard ISO 6396 L_{n4} 70 dB(A)

Certified in accordance with CE regulations

Equipment

Engine	Standard	Option
Intercooler and coolant radiator	•	
Direct electronic fuel injection / common rail	•	
Advanced automatic idle incl. engine shut-off function	•	
Engine preheating		•
Engine diagnostics interface	•	
Temperature-dependent fan drive	•	
Undercarriage		
All-wheel drive with differential	•	
Drum brakes	•	
Rear axle oscillating lock	•	
2-speed powershift transmission		•
4-point stabilisers	•	
Dozer blade in addition to 4-point stabilisers		•
Stabiliser cylinders with integrated two-way check valves	•	
Piston rod protection on stabiliser cylinders	•	
Tool box	•	
Special paint (customer paint work)		•
Solid rubber tyres (10.00-20) with intermediate rings	•	•
Uppercarriage		
Separate cooling system for engine and hydraulic oil cooler	•	
Cooling system with temperature-dependent fan drive	•	
Fan drive reversing function		•
Automatic central lubrication system	•	
Rear view camera	•	
Side view camera	•	
Travel alarm		٠
Electric refuelling pump		•
Lighting protection		٠
Special paint (customer paint work)		•

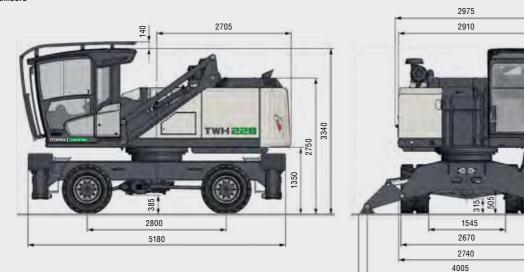
Further optional equipment available on request! Specification subject to change without notice.

Specification subject to change without notice.



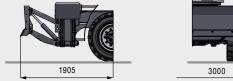
Cab	Standard	Option
Hydraulically adjustable cab	•	
Safety glass	•	
Sliding window in cab door	•	
Reinforced glass (windscreen and roof panel) P5A		•
Windshield washer system	•	
Roof washer system		•
Air-cushioned operator seat with headrest, seatbelt, and lumbar support	•	
Seat heating		•
Joystick steering	•	
Steering column, height and tilt adjustable		•
Automatic air conditioning system	•	
Independent heating system		•
Multi-function display	•	
Document net	•	
Roof guard grille		•
Protective grilles to front and roof		•
12 V transformer		•
Radio with Bluetooth and hands-free kit (EU and US) Radio with CD and USB (other countries)	•	
12 V socket		•
Fire extinguisher, dry powder		•
Travel alarm w/ rotating beacon		٠
Other equipment		
Close proximity range limiter for dipper stick	•	
Coolant and hydraulic oil level monitoring system	•	
Filter system for attachments		•
Hose rupture valve for boom cylinder		•
Hose rupture valve for stick cylinder		•
Overload warning device		•
Quick coupling on dipper stick	•	
Dipper stick impact protection		•
Active cyclone prefilter (TOP AIR)		٠
Hydraulic oil preheating		٠
Lubrication of the grab suspension by central lubrication system	•	
Light packages LED		•
LED front headlights	•	
LED working lights cabin roof front	•	
Boom cylinder damping system (piston accumulator)		•
Fuchs Telematics System, incl. 2 years service	•	

Undercarriage equipped with 4-point stabilisers



4355

Dozer blade in addition to 4-point stabilisers



3000

Transport Dimensions

(all dimensions in mm) 12.6 m reach



12.6 m reach with dipper stick

Loading equipment

Boom: 7.2 m

Dipper stick: 5.1 m

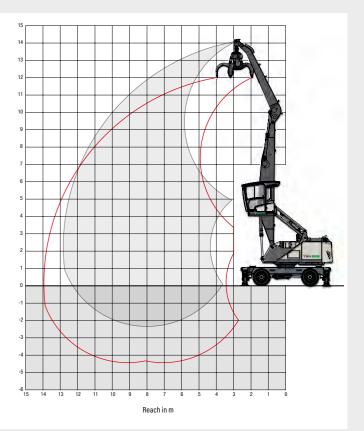
Cactus grab: 0.6 m³

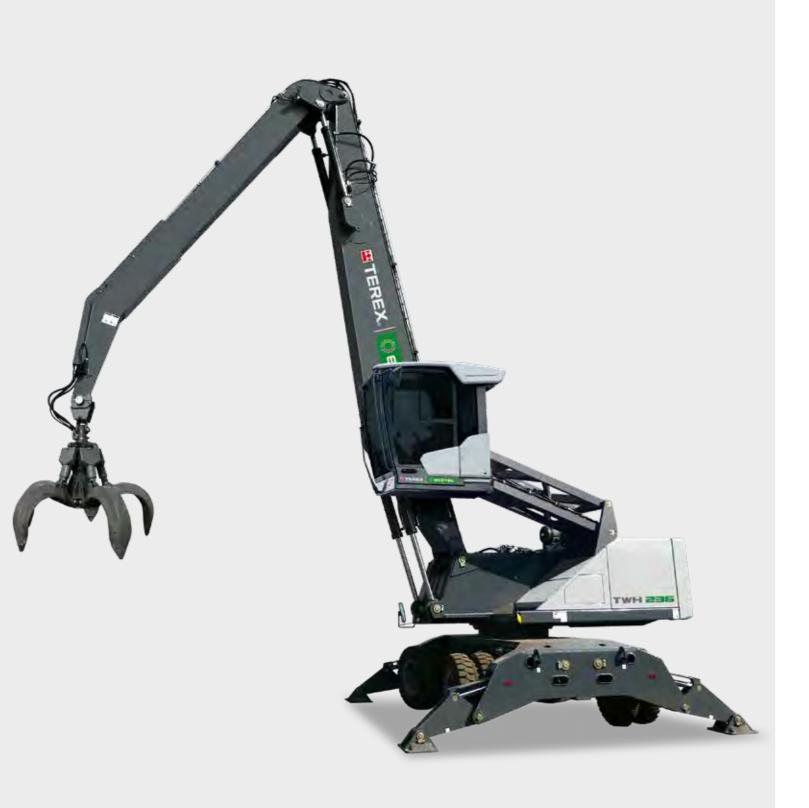
The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked "). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hotsing equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application the store be supported on a level ground.

Height [m]	Undercarriage	Reach [m]							
	outrigger	4.5	6	7.5	9	10.5	12		
10.5	not supported	(6.3°)							
13.5	4-point supported	6.3° (6.3°)							
10	not supported		(6.6°)	(4.7°)					
12	4-point supported		6.6° (6.6°)	4.7° (4.7°)					
10.5	not supported		(7.5°)	(5.6°)	(4.1°)				
10.5	4-point supported		7.5° (7.5°)	6.5° (6.5°)	4.7° (4.7°)				
0	not supported		(8.0°)	(5.7°)	(4.2°)	(3.2°)			
9	4-point supported		8.0° (8.0°)	7.5° (7.5°)	6.3° (6.3°)	4.3° (4.3°)			
	not supported		(8.0°)	(5.6°)	(4.1°)	(3.2°)			
7.5	4-point supported		8.7° (8.7°)	7.7° (7.7°)	6.3° (6.6°)	4.9° (5.6°)			
•	not supported	(9.3°)	(7.7°)	(5.4°)	(4.0°)	(3.1°)	(2.5°)		
6	4-point supported	9.3° (9.3°)	9.6° (9.6°)	7.9° (7.9°)	6.2° (6.8°)	4.8° (5.8°)	3.7° (4.1°)		
	not supported	(11.3°)	(7.2°)	(5.1°)	(3.9°)	(3.0°)	(2.4°)		
4.5	4-point supported	14.1° (14.1°)	10.4° (10.4°)	8.0° (8.3°)	6.0° (6.9°)	4.7° (5.9°)	3.8° (4.8°)		
2	not supported	(10.0°)	(6.6°)	(4.8°)	(3.7°)	(2.9°)	(2.4°)		
3	4-point supported	15.8° (15.8°)	10.7° (11.1°)	7.6° (8.6°)	5.8° (7.0°)	4.6° (5.7°)	3.8° (4.7°)		
	not supported	(5.4°)	(6.1°)	(4.5°)	(3.5°)	(2.8°)	(2.3°)		
1.5	4-point supported	5.4° (5.4°)	10.2° (11.3°)	7.3° (8.6°)	5.6° (6.9°)	4.5° (5.6°)	3.7° (4.5°)		
•	not supported	(4.8°)	(5.8°)	(4.3°)	(3.4°)	(2.8°)	(2.3°)		
0	4-point supported	4.8° (4.8°)	9.9° (10.6°)	7.1° (8.2°)	5.5° (6.6°)	4.4° (5.2°)	3.7° (3.9°)		
	not supported		(5.7°)	(4.2°)	(3.3°)	(2.7°)			
-1.5	4-point supported		9.1° (9.1°)	7.0° (7.3°)	5.4° (5.8°)	4.4° (4.5°)			
							Max. reach 12.8 m		
	not supported						(2.1°)		
2.3	4-point supported						3.2° (3.2°)		









DESIGNED ESPECIALLY FOR HIGH PERFORMANCE, LIFTING CAPACITY AND **MAXIMUM RELIABILITY.**

Cutting-edge engine technology combined with intelligent hydraulics make the **TWH 236** one of the fastest and most sensitive handlers in waste handling. 15 metres of reach and an undercarriage width of three metres, make it a particularly stable machine - impressive machine statistics backed up by impressive machine performance.







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Engine

TWH 236	33.0-35.5 t
Diesel engine	
Manufacturer / model	Deutz TCD 6.1 L6
Design	6-cylinder in-line engine
Control	EEC IV
Functionality	4-stroke engine, direct common-rail fuel injection, turbocharger with charge air intercooling, controllec exhaust gas recirculation, diesel particle filter with a continuously regenerating system and SCR catalytic converter
Engine power	160 kW
Rated speed	2,000 rpm
Displacement	6.11
Cooling system	Water / charge air cooling with temperature-controlled fan speed
Exhaust emission standard	EU-Stage V
Fuel tank	315 l diesel
DEF / Urea tank	32 I Ad Blue
Electrical system	
Alternator	28 V / 100 A
Operating voltage	24 V
Battery	2×12 V / 110 Ah / 760 A (as per EN)
Lighting system	2 × LED floodlights at the front of the machine, rear parking lights and indicator lights
Travel drive	
	nitely variable axial piston motor with directly 2-gear transmission, all-wheel drive
Travel speed 1st Gear	max. 5 km/h
Travel speed 2nd Gear	max. 17 km/h
Gradeability	max. 35 %
Turning radius	9.2 m
Slewing drive	
Slewing ring	Double slewing ring with inner teeth
Drive	2-stage planetary gear with integrated multi-disk brake
Uppercarriage swing speed	0-7 rpm infinitely variable
Slewing lock	Electronically activated

Front axle	Planetary drive axle with integrated drum brake, rigidly mounted, max. steering angle 27°
Rear axle	Planetary drive axles with integrated drum brake, with self aligning bearing and switching oscillating lock
Outriggers	4-point stabilisers
Tyres	Elastic, solid rubber 8 × 12.00-20
Brakes	
Service brake	Hydraulically operated single-service brake system acting on all four wheel pairs
Parking brake	Electronically-operated disc brake on the driving transmission acting on both axles
Hydraulic system	
Max. flow rate	2 × 330 l/min
Max. operating pressure	320 / 360 bar
Hydraulic oil tank	366 I
Operator's cab	
Cab	Continuously variable elevation system up to a viewing height of 5.6 m. Soundproof, insulating panoramic windows enabling all- round visibility, windscreen with pull-down sunblind, roof skylight, cab door sliding window, sliding door
Air conditioning	Automatic climate control. Infinitely variable water hea- ting with 8-speed fans, 10 adjustable nozzles, 4 set into the roof lining and 3 defrosting nozzles
Operator's seat	Air-sprung comfort seat with integrated headrest, safety belt and lumbar support, optional seat heating. It allows for comfortable working by offering universal adjustment possibilities of the seat position, the seat incline, and the position of the seat cushion in relation to the armrests and pilot controls
Monitoring	Ergonomically-arranged, anti-glare controls, multi- functional display, automatic monitoring and storage of deviating operating conditions, (e.g. all hydraulic oil filters hot/cold hydraulic oil temperature, coolant temperature and charge air temperature, diesel particle filter load), visual and acoustic warning up to the point of shutting feed forward control or reducing engine output. Individua sensor diagnosis using the multi-functional display, rear camera and side camera
Noise level	Sound power level (outdoor area) L_{WA} 98.8 dB(A) (measured) as per directive 2000/14/EC L_{WA} 101 dB(A) (guaranteed) as per directive 2000/14/EC Sound power level (inside the cab) as per the directive ISO 6396 L_{ex} 70 dB(A)

Certification as per CE directives

Intercooler and coolant radiator	•	
Direct electronic fuel injection / common rail	•	
Advanced automatic idle incl. engine shut-off function	•	
Engine preheating		•
Engine diagnostics interface	٠	
Temperature-dependent fan drive	•	
Undercarriage		
All-wheel drive with differential	٠	
Drum brakes	٠	
Rear axle oscillating lock	•	
2-speed powershift transmission		•
4-point stabilisers	٠	
Dozer blade in addition to 4-point stabilisers		•
Stabiliser cylinders with integrated two-way check valves	٠	
Piston rod protection on stabiliser cylinders	•	
Tool box	•	
Special paint (customer paint work)		•
Solid rubber tyres (12.00-20) with intermediate rings	٠	
Uppercarriage		
Separate cooling system for engine and hydraulic oil cooler	•	
Cooling system with temperature-dependent fan drive	٠	
Fan drive reversing function		•
Automatic central lubrication system	٠	
Rear view camera	•	
Side view camera	•	
Electric refuelling pump		•
Lighting protection		•
Special paint (customer paint work)		•

Standard Option

Further optional equipment available on request! Specification subject to change without notice.

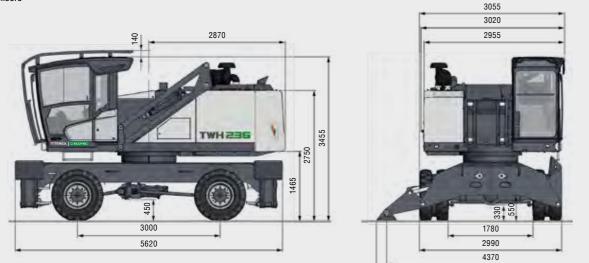
Specification subject to change without notice.





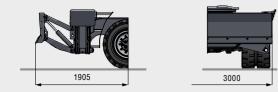
Cab	Standard	Option
Hydraulically adjustable cab	•	
Safety glass	•	
Sliding window in cab door	•	
Glass ceiling	•	
Reinforced glass (windscreen and roof panel) P5A		•
Roof washer system (roof panel)		•
Air-cushioned operator seat with headrest, seatbelt, and lumbar support	•	
Seat heating		•
Joystick steering	•	
Steering column, height and tilt adjustable		٠
Automatic air conditioning system	•	
Independent heating system		•
Multi-function display	•	
Document clip	•	
Roof guard grille		•
Protective grilles to front and roof		٠
12 V transformer		٠
Radio USB & Bluetooth (EU & USA)		•
12 V socket	•	
Fire extinguisher, dry powder		•
Travel alarm w/ rotating beacon		•
Other equipment		
Close proximity range limiter for dipper stick	•	
Coolant and hydraulic oil level monitoring system	•	
Filter system for attachments		•
Hose rupture valve for boom cylinder		
Hose rupture valve for stick cylinder		
Overload warning device		
Quick coupling on dipper stick	•	
Dipper stick impact protection		•
Active cyclone prefilter (TOP AIR)		•
Hydraulic oil preheating		
Lubrication of the grab suspension by central lubrication system	•	
Light packages LED		•
LED front headlights	•	
LED working lights cabin roof front	•	
Boom cylinder damping system (piston accumulator)		•
Fuchs Telematics System, incl. 2 years service	•	

Undercarriage equipped with 4-point stabilisers



4800

Dozer blade in addition to 4-point stabilisers



Transport Dimensions

(all dimensions in mm)

15.0 m reach with dipper stick



15.0 m reach with dipper stick

Loading equipment

Boom: 8.5 m

Dipper stick: 6.2 m

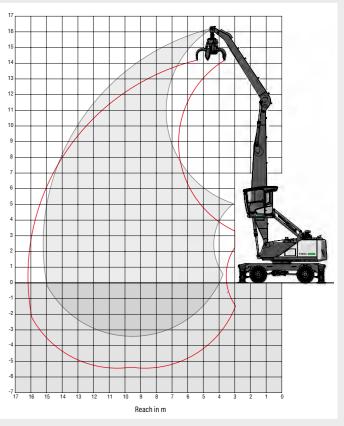
Cactus grab: 0.6 m³

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked "). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axe or the locked oscillating axe. The weights of the attached load hotsing equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application the store be supported on a level ground.

Height [m]	Undercarriage				Reac	h [m]			
	outrigger	4.5	6	7.5	9	10.5	12	13.5	15
	not supported		(5.5°)	(3.7°)					
15	4-point supported		5.5° (5.5°)	3.7° (3.7°)					
10.5	not supported			(5.7°)	(4.3°)				
13.5	4-point supported			5.7° (5.7°)	4.3° (4.3°)				
10	not supported			(6.5°)	(5.5°)	(4.1°)			
12	4-point supported			6.5° (6.5°)	5.7° (5.7°)	4.3° (4.3°)			
10.5	not supported			(7.2°)	(5.5°)	(4.2°)	(3.2°)		
10.5	4-point supported			7.2° (7.2°)	6.6° (6.6°)	5.6° (5.6°)	3.8° (3.8°)		
•	not supported			(7.4°)	(5.4°)	(4.1°)	(3.2°)	(2.5°)	
9	4-point supported			7.6° (7.6°)	6.7° (6.7°)	5.9° (5.9°)	5.1° (5.1°)	2.6° (2.6°)	
	not supported			(7.1°)	(5.3°)	(4.0°)	(3.2°)	(2.5°)	
7.5	4-point supported			8.0° (8.0°)	6.9° (6.9°)	6.0° (6.0°)	5.1° (5.3°)	4.1° (4.1°)	
	not supported		(9.7°)	(6.7°)	(5.0°)	(3.9°)	(3.1°)	(2.5°)	
6	4-point supported		10.5° (10.5°)	8.5° (8.5°)	7.1° (7.1°)	6.2° (6.2°)	5.0° (5.4°)	4.1° (4.8°)	
	not supported	(13.9°)	(8.8°)	(6.3°)	(4.7°)	(3.7°)	(3.0°)	(2.4°)	(2.0°)
4.5	4-point supported	16.3° (16.3°)	11.6° (11.6°)	9.0° (9.0°)	7.4° (7.4°)	6.1° (6.3°)	5.0° (5.5°)	4.1° (4.8°)	2.9° (2.9°)
•	not supported	(6.4°)	(7.9°)	(5.8°)	(4.4°)	(3.5°)	(2.8°)	(2.3°)	(1.9°)
3	4-point supported	6.4° (6.4°)	12.5° (12.5°)	9.5° (9.5°)	7.4° (7.7°)	5.8° (6.4°)	4.8° (5.5°)	4.0° (4.7°)	3.4° (3.4°)
	not supported		(7.1°)	(5.3°)	(4.1°)	(3.3°)	(2.7°)	(2.3°)	(1.9°)
1.5	4-point supported		10.3° (10.3°)	9.2° (9.7°)	7.1° (7.8°)	5.6° (6.4°)	4.7° (5.4°)	3.9° (4.6°)	3.3° (3.3°)
•	not supported		(6.7°)	(5.0°)	(3.9°)	(3.2°)	(2.6°)	(2.2°)	(1.9°)
0	4-point supported		7.0° (7.0°)	8.9° (9.5°)	6.8° (7.6°)	5.5° (6.3°)	4.5° (5.2°)	3.9° (4.3°)	3.0° (3.0°)
	not supported		(6.5°)	(4.9°)	(3.8°)	(3.1°)	(2.6°)	(2.2°)	
-1.5	4-point supported		6.5° (6.5°)	8.7° (8.7°)	6.7° (7.1°)	5.4° (5.9°)	4.5° (4.8°)	3.8° (3.8°)	
_	not supported			(4.8°)	(3.8°)	(3.1°)			
-3	4-point supported			7.6° (7.6°)	6.3° (6.3°)	5.2° (5.2°)			
									Max. reach 15.2 n
	not supported								(1.9°)
2.5	4-point supported								2.4° (2.4°)











 Separate cooling system for engine and hydraulic oil cooler • Rear and side view camera Cooling system with temperaturedependent fan drive

Undercarriage

- All-wheel drive with differential
- 4-point stabilisers
- Solid rubber tyres



DUNGANNON

NEWTON

Dealer Stamp:

32 Farlough Road Dungannon, Co. Tyrone BT71 4DT, Northern Ireland

Tel: +44 (0) 28 87 718 500

22 Whittier Street Newton, New Hampshire USA, 03858

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