



### Pfanzelt, professional products since 1991.

Pfanzelt Maschinenbau was founded in 1991 by owner Paul Pfanzelt, initially focusing on the production and installation of simple forestry winches for agricultural tractors. Over the years, the range has been further extended to become the widest of any European forestry machine manufacturer.

We consider ourselves as a forge for new ideas that attaches great importance to close contact with our customers. Many of our innovations are the direct result of requirements, suggestions and wishes from our customers that we then turn into concrete products. With our machines we constantly pursue the goal of providing you with solutions that make your everyday work as simple and economical as possible.

The Pfanzelt product range has grown steadily over the years. In addition to forestry technology, today it also includes municipal machinery.

Today, Pfanzelt offers the most comprehensive range of machinesforforestry and municipal technology "made in Germany" - from forwarding trailers in the forest to the K Trac municipal implement carrier, the latest product from the idea forge.



### K Trac system tractor and implement carrier

Thanks to its vehicle design, the K-Trac implement carrier is optimised for year round service in the municipal sector and in environmental maintenance.

- Engine output 205, 253 or 292 hp
- Continuously variable, power-split transmission
- Maximum speed 80 km/h
- 4 changeable attachment and mounting bays
- Pneumatically suspended XXL comfort cab



### **Moritz implement carrier**

The Moritz is the multifunctional, remote-controlled implement carrier for forestry and landscape maintenance.

- Engine output 50 or 75 hp
- Separate on-board, driving and power hydraulics (96 I and 300 bar)
- Mechanical PTO
- Full wireless control
- Perfectly matched attachments: MAX forestry tiller, sowing strip mulcher, Plantomat planter, stump mulcher, traction winch and much more.



### Pm Trac system tractor

The Pm Trac Generation 38 has been designed for combined use in forestry and landscape maintenance. The core of the machine concept includes the central attachment bay above the centre of the rear axle and the rapid and flexible adaptation to various working conditions.

- √ variaDRIVE continuously variable, power-split transmis-
- sion
- 205, 253 or 292 hp and 200 I hydraulic power
- Quick-change bracket and 4 changeable attachment bays

XXL comfort cab with rotatable control station



### Crane trailer 80.13

The new construction concept of the crane trailer opens up new possibilities and the greatest possible flexibility. Whether bulk goods, construction machinery or general cargo transport, the 80.13 is equipped for all tasks.

Stanchions can be mounted in the platform for transporting branches, logs or similar materials.



## K Trac implement carrier

Thanks to its vehicle design, the K-Trac implement carrier is optimised for year round service in the municipal sector and in environmental maintenance. The hydraulic full suspension that can be automatically blocked and 4 steering options enable an extremely safe and ergonomic operation.

### Technical details that will convince you:

- Fast | continuously variable variaDRIVE trasmission (80 km/h)
- Powerful | 205, 253 or 292 hp/up to 200 l hydraulic power
- Manoeuvrable | Combined 4-wheel steering
- Flexible | 4 changeable attachment and mounting bays
- Comfortable | Pneumatically suspended XXL comfort cab with rotatable driver's stand or full-fledged front passenger seat









### All-season vehicle for road maintenance

As different as the seasons, so are the uses in these periods. With its 4 attachment and mounting bays, the K Trac masters everything from winter service, tree maintenance, pruning to mowing work.



### Manoeuvrable and fast

Thanks to its all-wheel steering, the new K Trac is a manoeuvrable implement carrier that doesn't shy away from narrow alleys and small-structured inner cities. With the possible 80 km/h licence, on the other hand, motorway journeys are also possible at high speed.

## Areas of application

### Landscape maintenance

The attachment bay at the front and the mounting bay at the rear enable equipment with different configurations for hedge trimming and mowing. Thanks to the swivelling operator stand, the driver always has an optimal view of the implements.

In spring, it can be used in combination with a salt/brine spreader and a boom for hedge trimming.



### Crane operation and transport

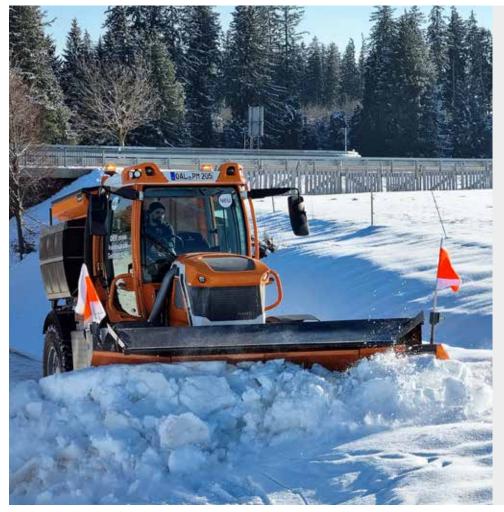
The equipment with a crane in the rear mounting bay opens up new possibilities in combination with the XXL comfort cab with rotatable operator stand. The crane can be designed as a mower boom, a combination crane or a loading crane. Different applications are possible depending on the crane type. In combination with the 80 km/h licence, the K Trac becomes a fast crane transport vehicle.





### **Snow blowers**

For winter use, the K Trac can be equipped with a snow blower at the front and rear. Operation of the snow blower at the rear enables a new level of working comfort. The K Trac and snow blower are intuitively operated and driven from the rotatable driver's stand in a relaxed and comfortable manner.



### Winter service

In winter service, the K Trac impresses with its compact frontend dimensions and the large rear mounting bay for salt and brine spreaders.



### XXL comfort cab

The pneumatically-sprung, large-volume cab developed by Pfanzelt enables quiet and comfortable work with perfect all-round view. A new concept for noise insulation enables quiet and vibration-dampened operation, especially at high engine speeds. Over 7 m² of glass area provide optimum visibility of the working environment and increase work safety.

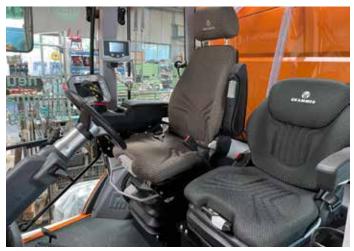
### Rotatable operator stand or two-man cab

Depending on the area of application, you can choose between two variants of the cab. A version with a rotatable operator stand or a version with two air-sprung seats is available.

With the second variant, it is still possible to rotate the seat slightly in order to have an optimal view when working in the roadside greenery.

The driver finds a relaxed and ergonomic seating position in the operator's seat. Optionally, it can be rotated electrically by 340°. All controls, the pedals and the touchscreen terminal rotate together with the seat, always within easy reach.





## K Trac technical data

Implement carrier	K Trac 1220	K Trac 1225	K Trac 1230
Engine	151 kW   205 hp EU V   ISO 14396	186 kW   253 hp EU V   ISO 14396	215 kW   292 hp EU V   ISO 14396
Cylinder/capacity/nominal speed	6   7.4 I.   1,950 rpm		
Type of motor	AGCO power 74 HD		
Tank capacity	350 I. diesel   40 I. AdBlue		
Transmission	variaDRIVE continuously variable (0 – 80 km/h) with reduced engine speed Forward driving modes 3, reverse driving modes 2 (optionally 90 km/h)		
Rear PTO	540 rpm   1,000 rpm		
Front PTO	1,000 rpm		
Hydraulics			
Axial piston variable displacement pump	160 I./min, 210 bar (optional 200 I./min, 210 bar)		
Front/rear power lifts	optional		
Control valves	2 DW electr. Rear end (optional: additional 2 DW electr. prop. front and rear)		
LS connexion	Rear power bracket (LS connexion)		
Dimensions			
Empty weight	8,200 – 9,200 kg*		
Permitted total weight	14,000 kg (optional 17,000 kg)		
Permissible axle load	6,000 kg front   11,500 kg rear		
Bearing load	2,000 kg automatic trailer coupling   3,000 kg ball head with sliding carriage		
Dimensions	4,990 mm long*   2,400 mm wide (standard)   3,220 mm high* Minimum width: 2,250 mm   maximum width: 2,800 mm		
Ground clearance	540 mm*		
Wheelbase	3,325 mm		
Weight distribution	FA 55%, RA 45%		
Turning circle	14.60 m front-axle steering   10.50 m all-wheel steering (with standard tyres)		
Mounting bay	Width up to approx. 1,010 mm inside, above the mudguard up to max. outside width, Height up to approx. 2,820 mm depending on tyres, Length approx. 2,000 mm, also more depending on overhang		
Tyres	400/80 R 28 – 440/80 R 30 No	kian TRI 2 (standard)	



<sup>·</sup> Values depend on equipment



## Moritz Fr70/75 radio-controlled mini felling tractor

In 2016, the Moritz revolutionised the concept of a crawler vehicle for landscape maintenance and forestry. The two models have stayed true to the original concept, but are technically in a new league. They offer a combination of aspects of the tried-and-tested mini felling tractor and the requirements for multifunctional, powerful mini felling tractors.

The vehicle might not have changed visually, yet technologically the compact, powerful Moritz mini felling tractor has undergone a major overhaul.

### Technical details that will convince you:

- Powerful, energy-efficient 4-cylinder engine
- Generous ground clearance of 320 mm
- Optimum climbing ability
- Proportional traction drive and drift adjustment to compensate for downhill force across the slope
- Variable running gear for simple transport and perfect stability with automatically hydraulically tensioned dual stator
- Low ground pressure of only 0.28 or 0.33 kg/cm<sup>2</sup>
- Separate driving, on-board and power hydraulics
- Complete remote control of vehicle and cable winch







### More output for your needs

The high torque 4-cylinder DEUTZ engines have 36.4 or 55.4 kW. The powerful Common Rail injection system and highly efficient combustion featuring cooled, external exhaust gas recirculation guarantees maximum engine performance at lowest fuel and emission values.



**High-spec hydraulics** 

three systems.

The hydraulics system consists of three

separate systems for drive mode, on-

board and power hydraulics. This sepa-

ration opens up new dimensions for all

On-board hydraulics | 18 l/min, 200 bar

Power hydraulics | 96 l/min, 300 bar

• Driving hydraulics | 2x 11 kW

6 dual-action control units

with multi-coupling

### New drive dimension

The running gear width of the Moritz Fr70/75 can be changed to achieve the optimum running gear width for both transport and off-road use. The running gear can be hydraulically widened by 400mm. This means that the mini felling tractor can also be safely operated on slopes. The running gear with a length of 1,650 mm is available for special applications in two configured widths: 250 and 300 mm.



### **Mechanical PTO**

The Moritz's mechanical PTO is unique on the market within forestry and mulcher minitractors. It is directly driven with hardly any loss of power, making it highly efficient in use. In combination with the universally suitable cat. 1 three-point hydraulics the Moritz is transformed into a multipurpose minitractor.



### **Traction winch**

Hydraulically driven traction winch for securing the mini felling tractor on steep and difficult terrain and for minimising ground damage.

Cable inlet with all-round rotating cable inlet roller, mounted on the vertically mounted rotation arm so that the vehicle is not obstructed by the tensioned towing cable and all directions of travel can be selected freely.

















## Moritz Fr70/75 mini felling tractor Technical data

Technical data:	Fr70 (HP_RH-10550/6-II)	Fr75 (HP_RH-10575/6-II)	
Engine	Deutz D2.9L4 diesel engine 4 cylinders, water-cooled, Cleanfix reversible fan, combination radiator, 45 l fuel tank		
Power rating	36 kW/50 hp)		
Driving hydraulics	Closed, proportional 2-circuit system, all driving functions can be controlled by radio, continuously variable travel speed, 1st speed level 0-3 km/h, 2nd speed level 0-6 km/h, final speed can be continuously variably preselected, drift setting to compensate for the downhill force when mowing across a slope, automatically hydraulically tensioned dual stator		
Running gear	Caterpillar track running gear with rubber tracks in AS design (250 mm wide, 1,650 mm long)  Hydraulically adjustable in width		
Running gear	Torsion-resistant box frame made of special steel, large, lockable storage bin integrated on the running gear  Various attachment points for securing the mini felling tractor, all-steel floor protection tray, all-round branch deflector with integrated hood protection		
On-board hydraulics	Separate oil circuit with pump (18 l/min at 200 bar) One proportional control unit for hoist with water submersion position		
Operation	Remote control for all functions (emergency stop, throttle adjustment of diesel engine, driving and steering, reversible fan, 1st and 2nd gear, drift adjustment, optional hoist compensation, cable winch control, stacking shield up/down, hoist floating position, width adjustment, PTO on/off, auxiliary control valves, signal horn, lighting, cable winch operation/third-party consumers		
Dimensions	Length 2,300 mm, width 1,150 mm/1,550 mm Height 1,350 mm, weight 1,370 kg	Length 2,300 mm, width 1,150 mm/1,550 mm Height 1,350 mm, weight 1,405 kg	

Accessories range for Moritz Fr70 and Fr75
Track with a width of 300 mm (instead of 250 mm as standard)
LED working spotlights at the front and rear with bracket (mini felling tractor)
Roll bars
Transportbox
Chain curtain for use with mulcher or forestry tiller
Front auxiliary winch   10 kN tractive force
Deflection roller bottom for front auxiliary winch
Three-point hitch for external equipment
Hoist compensation for rear hydraulics
Front power lift with max. lifting force 7 kN
Tractor PTO transmission
Hydraulic top link
Performance hydraulics
Depressurised return with bracket
Proportional DW valve 2/1 (max. 4 pcs.)
Black/white DW valve (max. 2 pcs.)
Fire service equipment

Pfanzelt attachments
Forestry tiller MAX with hydraulic flap and hydraulic pressure device
Mulcher with 120 or 135 working width
Strip mulcher
Sowing module with hopper
Plantomat planter
Traction winch
Stump mulcher
Personal Protective Cover
Cable winch assemblies with 5 – 7.2 t tractive force



## Pm Trac Generation 38 system tractor

Pfanzelt set standards with the presentation of the Pm Trac system tractor at the 2004 ZLF in Munich. The development trend from using a tractor chassis from mass production to a completely customised tractor chassis makes the Pm Trac unique. Among other things, the new, continuously variable and power-split transmission variaDRIVE - a proprietary development for Pfanzelt forestry machines - offers new possibilities and contributes to the motto of the new generation of the Pm Trac: Versatility is its strength - working and operating comfort is its virtue.

The Pm Tracsystem tractor of the new *Generation 38*, thanks to its unique vehicle design. is optimised for combined use in agriculture and forestry as well as in landscape maintenance.

The core of the Pm Trac machine concept includes the large, centrally arranged tractor cab and the central attachment bay above the rear axle. Quick and flexible adaptation to different working conditions based on the Pfanzelt System for Attachment (PSA)

### Technical details that will convince you:

- 6-cylinder engine with 205, 253 or 292 hp, Cleanfix reversible fan and 400-litre fuel tank
- variaDRIVE continuously variable split transmission, up to 50 km/h (max. speed with reduced engine speed)
- Hydraulic system with 160 l/min at 210 bar (optional 200 l/min and additional power pack directly on the transmission PTO)
- New machine control software for complete customisation of operation to the driver
- Pneumatically suspended XXL high comfort cab with optimal all round vision and rotatable operating stand
- Support frame with 4 adjustable mounting and attachment bays for the heaviest implements
- Pfanzelt System for Attachment: tool-free quick-change mounting frame for crane and cable winch



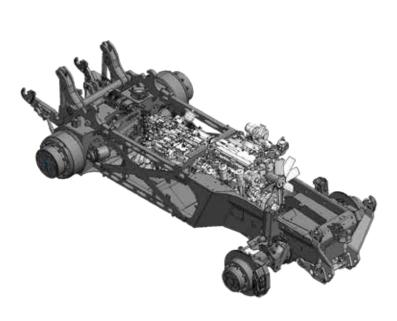
#### Chassis

The chassis is constructed using a frame into which the individual units are installed. The biggest change to the chassis concerns the transaxle. The unit consisting of the transmission and rear axle, which was previously purchased from ZF, is now produced by Pfanzelt itself with the new model series - on the one hand, the variaDRIVE transmission and a planetary rear axle from Pfanzelt are used here. The Pm Trac Generation 38 is now based on an almost 100% Pfanzelt tractor chassis. This enables all components to be fully adapted to heavy-duty use in forestry and as a system tractor. The days of using components from agricultural tractors are now over. The Pm Trac is in a new league.

#### variaDRIVE

The comfortable and powerful driving behaviour corresponds to that of the known power-split transmission. However, users will benefit from added convenience in terms of the function to invert the direction of travel. This process has been made smoother and faster. It is therefore comparable to that of a pure hydrostat. The transmission is also efficient and performance-orientated thanks to the three driving ranges when driving forwards and two driving ranges when reversing.

- Maximum speed 40/50 km/h
- Engine/transmission management
- No shifting of clutches in manoeuvring mode up to approx. ±7 km/h
- Reduction of engine speed when the final speed is reached
- Individual preselection of the maximum speed for special applications (e.g. forestry milling)







### Road travel

The operator can rapidly reach working locations or change between them with a permitted road speed of 50 km/h and a transmission suited for road use, and all without requiring an expensive transporter. Even in combination with a forwarding trailer or a trailer-chipper, the vehicle can still be driven on public roads.

### More hydraulic power

The hydraulic system of the Pm Trac now has 160 l/min at 210 bar in the standard version, which can be optionally increased to 200 l/min. In addition, the new variaDRIVE transmission enables an additional power pack to drive power-intensive implements via a direct PTO. Depending on the power requirement, more than 100 kW drive power is possible for the power pack.

For high efficiency and higher hydraulic pressures, an additional 180 l/min at 350 bar is possible in the closed system.





#### New machine software

The intelligent machine controller, which is operated via a touch screen from the seat, allows presets to be saved for four drivers. In addition, there is a standard user that cannot be changed. An additional control panel for on-road driving is provided next to the steering wheel. All important parameters are displayed optimally in the driver's field of vision.

### Pfanzelt System for Attachment (PSA)

Due to the changed cab position in the middle of the vehicle, additional implements can be located in the rear mounting bay with the Pfanzelt System for Attachment (PSA). It is located directly above the rear axle and is therefore optimally designed for the load and centre of gravity of the vehicle. Via a special quick-change system, attachments can be changed without requiring tools in a very short time. For example, it now takes less than 20 minutes to attach or remove a crane or cable winch.





### XXL comfort cab

The pneumatically-sprung, large-volume cab developed by Pfanzelt enables quiet and comfortable work with perfect all-round view. A new concept for noise insulation enables quiet and vibration-dampened operation, especially at high engine speeds.

- Over 7 m<sup>2</sup> glass area provides optimum visibility of the working environment and increases work safety
- Easy folding away of the steering column when working in the forest
- Relaxed, ergonomic seating position on the air-sprung operator stand, which can be electrically rotated through 340°
- All controls, the pedals and the touchscreen terminal rotate together with the seat, always within easy reach.



### Stowage space

Chainsaws, fuel canisters and other useful accessories can be stowed practically and tidily in a large tool box under the entrance into the driver's cab.



















## Pm Trac *Generation 38* system tractor Technical data

System tractor	Pm Trac 3820	Pm Trac 3825	Pm Trac 3830
Engine		engine with electronic control, cor rel EU V, Cleanfix MC reversible fa	•
Power (at 2,100 rp <sup>m</sup> as per ISO14396)	151 kW/205 hp)	186 kW/253 hp)	215 kW/292 hp)
Torque	818 Nm at 1,500 rp <sup>m</sup>	1,027 Nm at 1,500 rpm	1,280 Nm at 1,950 rpm
Cylinder capacity	7.4 ltr.	7.4 ltr.	7.4 ltr.
Cooling	Wat	er-cooled, turbocharger, intercoo	ling
Exhaust gas post-treatment	SCR technology with AdBlue injection, soot particle filter		
Tank capacity	400 I diesel, 40 I AdBlue 400 I diesel, 40 I AdBlue		
Transmission	variaDRIVE 0-50 km/h		
Specifications	Continuously variable, power-split transmission with cruise control function, engine/transmission management, 3 driving ranges forward, 2 driving ranges reverse, max. driving speed at reduced engine speed (approx. 1,800 rpm), active parking control		
Front axle	Hydro-pneumatically spring-loaded thrust tube axle with automatic level control, electro-hydrau- lically switchable differential lock, central front axle drive, integrated constant-speed steering cylinder, axle automatically blocked when crane is operated when stationary		
All-wheel drive	All-w	neel and differential lock manage	ment
Steering	Hydrostatic steering, steering	g column can be folded away who	en working, joystick steering
	2 conductor compressed-air brake system		
Brakes	Rear axle: Dry drum brake, pneumatically actuated parking brake via tristop cylinder wi grated trailer test position, single wheel brake Front axle: Dry disc brakes incl. integrated Opti-Stop front-axle brake		
РТО	Switchable PTO 750/1,000 rpm (optional 1,000/1,450 rpm) PTO connection 1 3/8" plug-in PTO, electro-hydraulically switchable wet multi-plate clutch, PTO automatic, PTO management, adjustable start-up mode, automatic switch-off (speed-dependent)		
Hydraulics	Hydraulic system with axial piston variable displacement pump, load sensing controlled, hydraulic oil cooler		
Pumping rate/operating pressure	160 l/min at 210 bar (optional 200 l/min)		
Performance hydraulics	180 l/min/350 bar		
Electronics	CAN BUS system: Central control and monitoring of engine, transmission, additional con units at operator stand		
	Integrated functions for crane settings, all-wheel drive, differential, steering 4 different driver settings can be saved, additionally Pfanzelt basic setting		
Front power lift	max. lifting force 35 kN, double-action		
Rear power lift	max. lifting power 82 kN, external lifting cylinder with floating position, can be switched to double-action for lifting and pushing  Lower link rapid-action coupler, adjustable lower link stabilisers		sition, can be switched to dou-
Front loader	Flange points on integrated bearing frame for mounting front loader mounting brackets		t loader mounting brackets
Rear mounting bay	Pfanzelt System for Attachment (PSA), vehicle support frame for stabilisation, block construction		
Cab	Large-volume, air-suspended cab with all-round visibility (over 7 m² widown area), two large roof windows,, safety cab as per ISO standards (ROPS)		
Operator stand	Air-suspension rotary seat wi	th seat heater, can be rotated by	340° using an electric motor
Ventilation	Efficient heating and air-conditioning system with 3-stage blower, incl. automatic air conditioning system		
Additional standard equipment	Removable mudguards, storage box, pneumatically controlled step, fire extinguisher		
Road licence	COC document, machine definition (agricultural tractor/implement carrier)		
Unladen weight/permitted max. weight	Depending on equipment/14 t		



### 80.13 crane trailer

The construction concept of the 80.13 crane trailer opens up new possibilities and maximum flexibility for you. Whether bulk goods, construction machinery or general cargo transport, the 80.13 crane trailer is equipped for all tasks. This means that it can be used all year round in construction yards and depots, garden and cemetery administrations, park and environmental maintenance companies and by landscaping companies.

The vehicle consists of a loading crane built on a stable and robust substructure that has proven itself in the forestry sector. This means that the crane does not have to be mount-

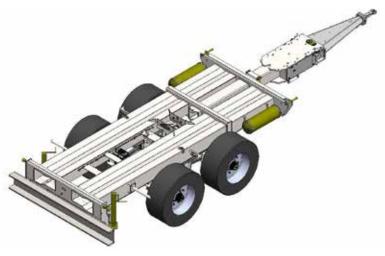
ed on the towing vehicle itself, for example a Unimog. This means that the towing vehicle can be used flexibly both in summer and winter. In addition, the payload of the towing vehicle is not reduced by the heavy bodies.





### Road licence & brake system

The crane trailer has TÜV licence at 80 km/h as standard. The trailer is equipped with a pneumatically actuated two-line compressed-air brake system with spring-loaded parking brake. All 4 wheels are braked, an ABS and an automatic load-dependent brake (ALB) are also installed.



### Frame and axle

The frame made of special fine-grained structural steel consists of two multiple folded tubes. These ensure special stability of the chassis and at the same time are the transport devices for two aluminium access ramps.

### Trailer hitch & steerable draw bar

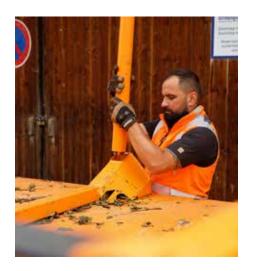
The standard steerable draw bar with a high steering angle is perfectly suited for manoeuvring in narrow alleys. Two lifting cylinders, which can be operated from the towing vehicle, also ensure reliable operation when swivelling against the slope with a loaded trailer.



### **Crane control**

The highest performance is achieved when the controls are perfectly ergonomic. In addition to the operating position, this is also determined by the crane controller.

The EHC radio control enables precise and safe work with optimum visibility.





### Load flexibility

Dropside attachments increase the load capacity and are available in 50 cm increments.

Stanchions can be mounted in the platform for transporting branches, logs or similar materials.









# 80.13 crane trailer Technical data

Crane trailer	80.13
Construction	Double frame construction made of special steel, box profile
Long flat bed	4,500 mm
Unladen weight (with crane in series equipment)	4,000 kg
Permissible gross weight on public roads	13,000 kg
Load capacity on non-public roads	12,000 kg
Axis	sprung axle
Brake system	Compressed-air brake system (ALB, ABS)
Brake surface	300 x 135 mm
Tyres	Complete wheel 355/60-18" Continental Agro Trailer (Permitted max. weight 11.5 t at 80 km/h)
tipper body	Tipper body 4,500 x 2,200 mm
Lighting	LED lighting as per StVZO (integrated in frame)
Steerable draw bar	Hydraulically steerable draw bar
Stabilisers	Telescopic A-support, support plate 300 x 300 mm
Paintwork	Municipal orange, RAL 2011 (platform, crane)
Miscellaneous	Drive-in drawers for access ramps 200 x 120 mm, 3,500 mm long
Acceptance certificates	80 km/h operating permit, crane inspection log book

Type of crane	Z4359	<b>Z</b> 5376	<b>Z</b> 5388	
Crane length	5,700 mm	7,600 mm	8,800 mm	
Crane column height	1,740 mm	2,190 mm	2,190 mm	
Net lifting torque	40.5 kNm	51 kNm	51 kNm	
Pivoting torque	15.2 kNm	21.5 kNm	21.5 kNm	
rotator	Rotator MTR 463 (4.5	Rotator MTR 463 (4.5 t)		
Crane control	EHC control Danfoss	EHC control Danfoss 8-way with radio control panel		
gripper	Two-row gripper type	Two-row gripper type 230 (opening width 1.250 mm)		



