



Wheel loaders

TORION

2014 / 1913

1611 P / 1611 / 1285

CLAAS

Move mountains.

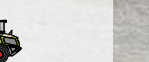
With five series, there’s one to match your business.

Smooth and efficient material handling is an essential part of your agricultural business. Loads ranging from tens of kilograms to several tonnes need to be moved over long or short distances, just above the ground or high overhead in keeping with the space available at each individual site. This calls for specialist equipment such as the TORION wheel loaders, which are on top of their field and precisely matched to the size of your business.

Get even more out of your business with a TORION wheel loader in the large or medium performance class. The agile, fast TORION SINUS models are specialists for moving heavy loads in tight spaces and reach impressive lifting heights in the telescopic wheel loader variant. You’ll love the agility and economy of the small series in your everyday work.

- Large series: impresses with high-end features and is ideal for handling large volumes in biogas plants or multi-company agricultural businesses
- Medium series: delivers outstanding flexibility in intensive livestock farming and all farmyard, clamp and field work
- SINUS series: convinces as a comfortable, fast all-rounder for expansive operations and performs efficiently even in tight spaces
- Telescopic wheel loader: combines all of the positive features of the SINUS series and reach remarkable lift heights thanks to a bucket pivot point at 4.96 m
- Small series: cuts a great figure as a robust all-rounder for businesses with constrained spaces and low access heights



TORION¹		Large series		Medium series			SINUS series			T SINUS telescopic wheel loaders	Small series		
													
		2014	1913	1611 P	1611	1285	956	644	537	738	639	535	530
Operating weight²	kg	20,000	19,000	15,200	15,810	13,570	9,070	6,390	5,550	7,000	5,700	4,970	4,600
Tipping load, fully articulated²	kg	12,700	11,500	9,400	10,250	8,000	5,575	4,430	3,750	3,800	3,900	3,500	3,000
Max. bucket pivot point height	mm	4,150	4,150	3,980	3,980	3,875	3,720	3,345	3,215	4,960	3,340	3,190	3,180
Rated output (ISO 14396)	kW/hp	183/249	163/222	168/228	138/188	116/158	76/103	54/73	54/73	54/73	55/74	55/74	34/46
Height over the operator's cab	mm	3,370	3,370	3,250	3,250	3,250	3,025	2,780	2,750	2,790	2,630	2,480	2,480
Width with standard tyres³	m	2.65	2.65	2.48	2.48	2.48	2.38	2.09	1.92	2.09	1.96	1.78	1.78
³ Standard tyres: 2014 and 1913 / 23.5 R 25 (L3), 1611P, 1611 and 1285 / 20.5 R 25 (L3), 956 / 17.5 R 25 (L3), 644 / 405/70 R 18 (L2), 537 / 365/70 R 18 (L2), 738T / 400/70 R 20 (L3), 639 / 400/70 R 18 (L3), 535 and 530 / 340/80 R 18 (L3) ¹ With Z-kinematics (738 T SINUS: telescopic arm with integrated Z-kinematics), implement carrier with quick-change system and earthmoving bucket ² The values shown apply for the tyres specified above, including all lubricants, full fuel tanks, ROPS / FOPS cab and driver. Tyre size and additional equipment change the operating weight and tipping load (fully articulated tipping load according to ISO 14397-1)													



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Load higher, faster and more with the large TORION.



Powerful engines with up to 183 kW / 249 hp boast large reserves during work.
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The intelligent power train delivers high performance at low fuel consumption.
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SMART LOADING automates loading functions and reduces operators' workload every minute of the day.
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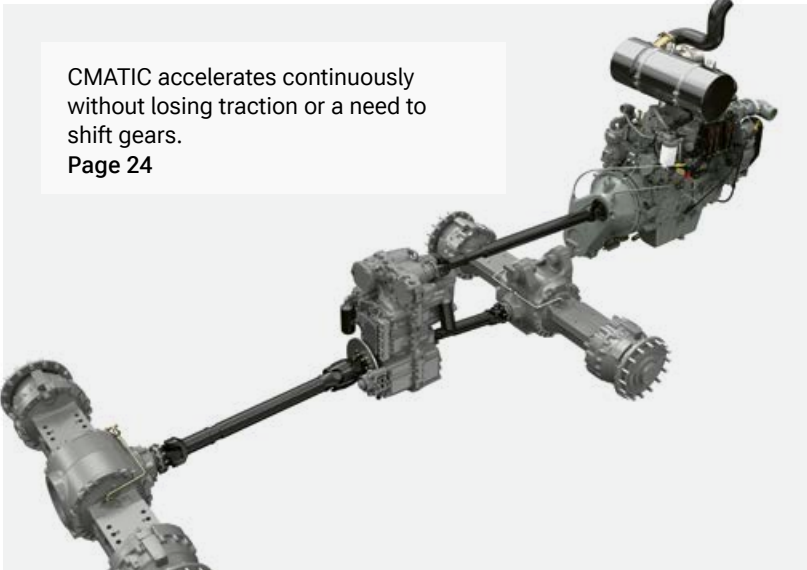
TORION 2014 / 1913.

When you've got lots to move, you need a wheel loader that can handle the high demands of your operations and fits seamlessly into your process chain. With a TORION in the large performance class, your business will become even more profitable.

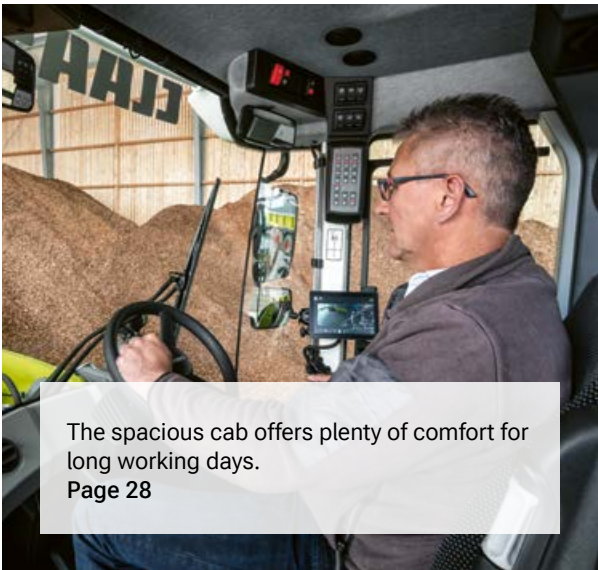
This machine offers you precisely the power and lift capacity you need to fill biogas plants efficiently, handle grains or fill loader wagons.

Make use of its strengths.

- SMART LOADING speeds up your loading cycles
- The efficient power train saves fuel
- Economical 4-cylinder engines deliver up to 183 kW / 249 hp
- DYNAMIC POWER generates up to 20% more thrust
- The CMATIC transmission ensures comfortable, continuous operation
- The cab supports you with smart functionalities and operating comfort



CMATIC accelerates continuously without losing traction or a need to shift gears.
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The spacious cab offers plenty of comfort for long working days.
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DYNAMIC POWER ensures substantially greater torque and thrust in silage clamps.
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Work more flexibly than ever with the medium TORION.



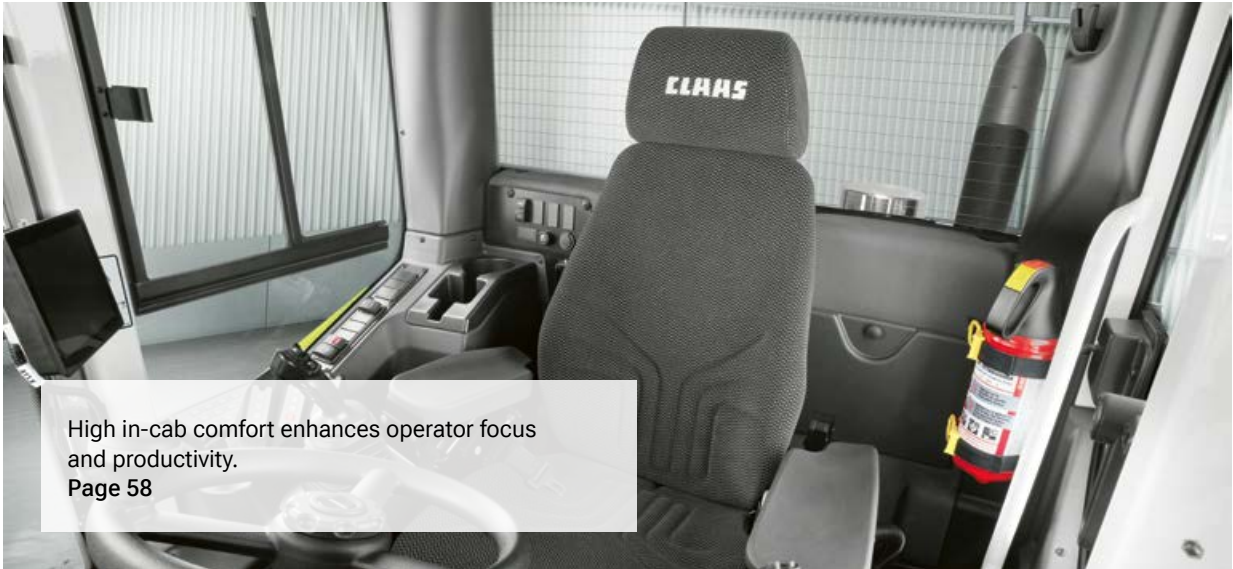
TORION 1611 P-1285.

Seamless materials handling is essential for your operations. You need to move loads across different ranges and heights, quite frequently in constrained spaces.

The TORION in the medium performance class puts a flexible all-rounder at your disposal. This machine is at home working on your yard, in the clamp, in barns and on your fields.

Make use of its versatility.

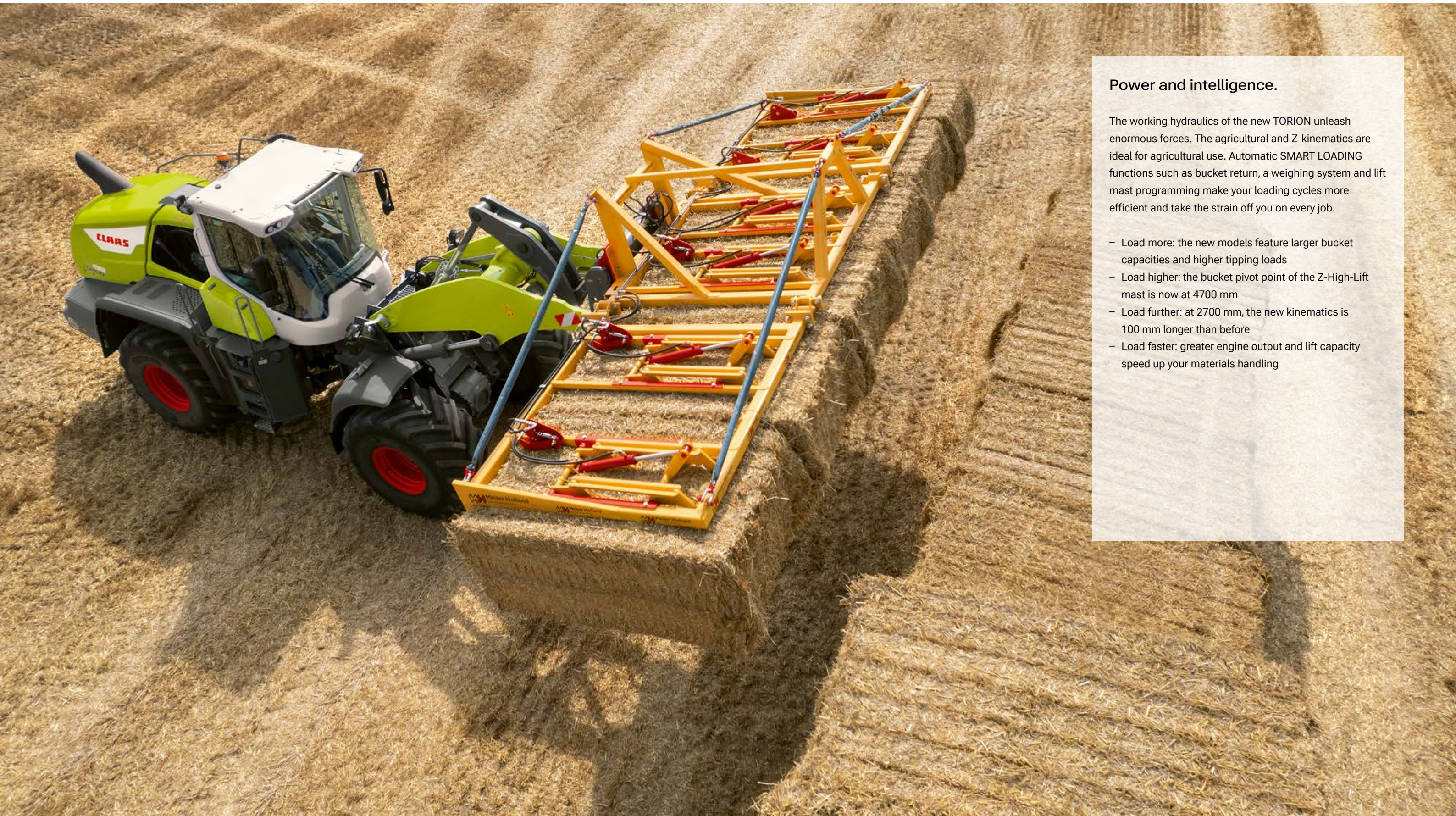
- The machine's ideal weight distribution allows you to handle materials even more efficiently
- SMART LOADING speeds up your loading cycles thanks to automated loading functions
- The infinitely variable VARIPOWER ground drive lowers your fuel consumption substantially
- DYNAMIC COOLING provides demand-driven cooling with low service requirements
- The cab offers excellent comfort for long days at work
- 360° visibility allows you to work safely in all conditions





TORION

2014 / 1913



Power and intelligence.

The working hydraulics of the new TORION unleash enormous forces. The agricultural and Z-kinematics are ideal for agricultural use. Automatic SMART LOADING functions such as bucket return, a weighing system and lift mast programming make your loading cycles more efficient and take the strain off you on every job.

- Load more: the new models feature larger bucket capacities and higher tipping loads
- Load higher: the bucket pivot point of the Z-High-Lift mast is now at 4700 mm
- Load further: at 2700 mm, the new kinematics is 100 mm longer than before
- Load faster: greater engine output and lift capacity speed up your materials handling

More power for more productivity.

Faster, higher, further.

The lift mast and kinematics of the large TORION have been fundamentally redesigned. With an impressive breakaway force, fast dumping speed and high retention forces when working in higher loading ranges, this machine ensures efficiency and safety in operation.

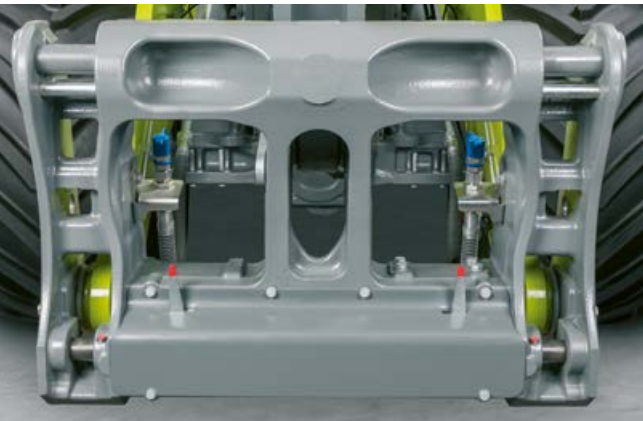
Powerful agricultural and Z-kinematics.

The large TORION is almost unstoppable. Even the two standard lift masts allow you to load further and higher than you have come to expect from your previous wheel loader. Together with a larger bucket capacity and higher tipping load, this ensures substantially greater productivity.



Extra-high lift mast.

If you need to work at extremely high unloading heights in your operations, you have the option of fitting the agricultural or Z-kinematics with a high-lift mast. This extends the maximum bucket pivot point to 4700 mm (Z-kinematics).

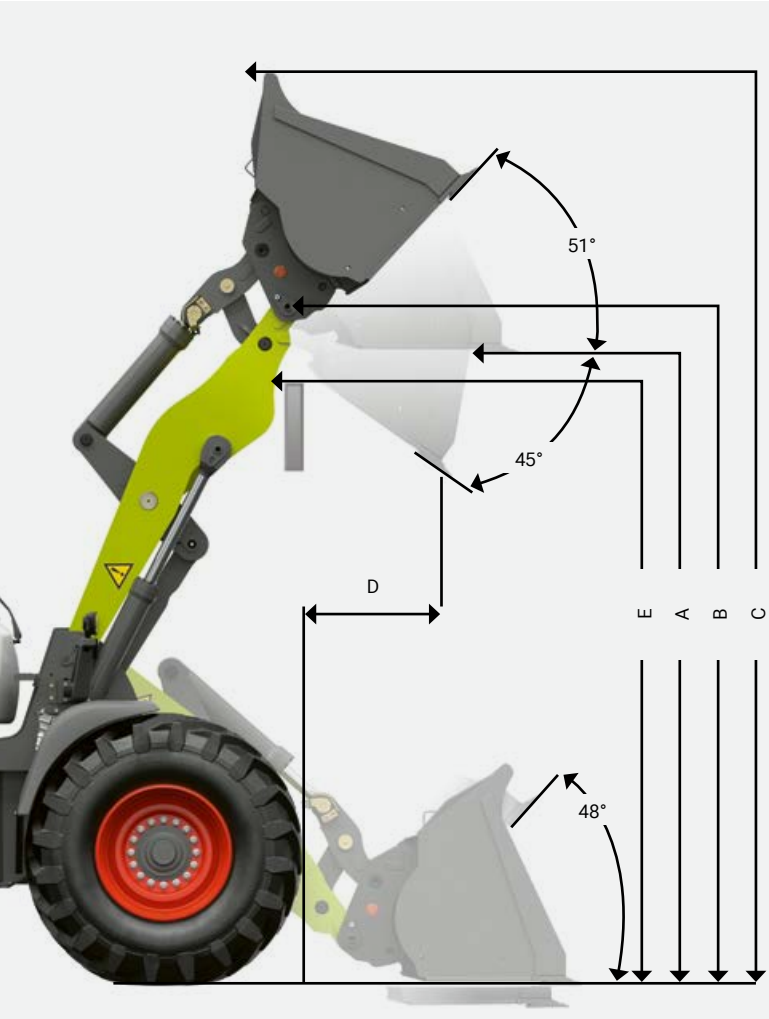


Sturdy implement carrier.

The robust implement carrier with hydraulic locking pins (50 mm) attaches all implements safely and with low wear. The optional automatic, hydraulic multi-coupler makes it even easier for you to change implements.

For people with big plans.

- A greater lifting capacity and larger bucket volume save you time in everyday operations
- The new loader unit and a longer wheelbase provide safety when loading high
- The 100 mm longer standard lift masts allow you to load further and higher
- The optional high-lift mast gives you access to even extreme unloading heights
- Benefit from a 15% greater breakaway force



Agricultural kinematics with high retention forces.

The proven agricultural kinematics is ideal for universal use in agriculture. High retention forces allow you to work easily even with large loads and heavy implements. The breakaway force is impressively high. All loads are guided precisely parallel to the ground across the full lifting range. You always enjoy an optimal view of your working area.

Z-kinematics with reliable self-levelling linkage.

The practical Z-kinematics is suitable for all loading tasks. The bucket is quick and easy to fill. The optimised self-levelling linkage holds your loads securely by tilting back slightly while you raise or lower the mast.

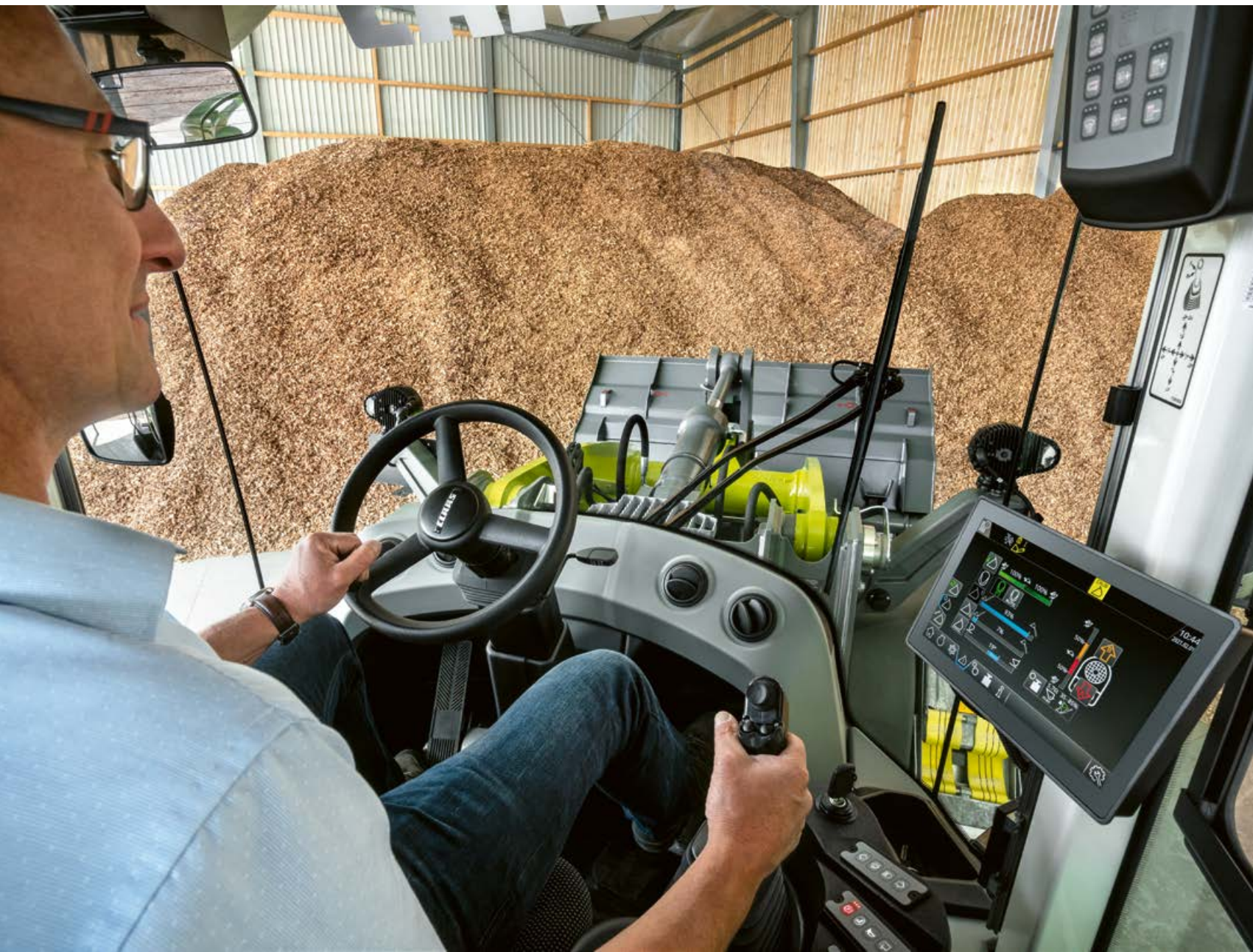
¹ Data depend on different bucket sizes. Please note the technical specifications at the end of this brochure.
STD = standard mast, HL = high-lift mast

Kinematics	TORION			
	2014		1913	

Agricultural kinematics and earthmoving bucket			STD	HL	STD	HL
A	Max. height to bucket base	m	3.86	4.38	3.86	4.38
B	Max. bucket pivot point height	m	4.14	4.66	4.14	4.66
C	Max. height to bucket top	m	5.92	6.29	5.84	6.24
D	Reach at max. lift height and 45° dumping angle	m	1.21	0.87	1.15	0.83
E	Dump-over height	m	3.70	4.10	3.70	4.10
	Max. tipping load, fully articulated	t	12.50	10.80	11.40	9.80
	Breakaway force	kN	155	175	140	150

Z-kinematics and earthmoving bucket			ST	HL	ST	HL
	Max. height to bucket base	m	3.87	4.43	3.87	3.87
	Max. bucket pivot point height	m	4.15	4.70	4.15	4.70
	Max. height to bucket top	m	5.85	6.25	5.78	6.18
	Reach at max. lift height and 45° dumping angle	m	1.07	0.89	1.02	0.84
	Dump-over height	m	3.70	4.25	3.70	4.25
	Max. tipping load, fully articulated	t	13.75	11.35	12.50	10.25
	Breakaway force	kN	175	195	165	185

High-performing pressure.



Two additional hydraulic circuits.

Two additional hydraulic control circuits with an output of up to 234 l/min are available for implements with double-acting control circuits such as bale grabs or grab buckets.

- Both control circuits are controlled independently via the joystick
- The flow rate for each control circuit is infinitely adjustable (in %)
- Continuous operation can be set conveniently via the display and actuated at the push of a button
- The hydraulic connections are housed well protected in the implement carrier

Easy to use.

The electrohydraulically pilot-operated single lever control makes operation a breeze. You have precise control over the loader unit. All hydraulic functions can be operated simultaneously. Performing different movements at the same time speeds up your work cycles.

Powerful working hydraulics.

Pushing loads at high pressure, lifting heavy weights and loading materials speedily and precisely – your operations place ultimate demands on the working hydraulics. The large TORION models feature a load-sensing system and load-independent proportional valves.

- TORION 2014: 290 l/min as standard, up to 380 bar operating pressure (agricultural kinematics)
- TORION 1913: 234 l/min as standard, up to 350 bar operating pressure (Z-kinematics)

Precisely the right pressure.

- The load-sensing system delivers exactly the pressure you need
- You control all functions precisely and conveniently via the joystick
- Two additional hydraulic circuits give you even greater flexibility



The machine is prepared for two more hydraulic connections.

SMART LOADING protects both drivers and their nerves.



At ease during routine works.

SMART LOADING is a unique assistance system that actively supports you when loading heavy weights. It precisely manages the interaction between all functions needed to optimise loading cycles. You only need to set the functions once, and they are then performed automatically.

SMART LOADING increases both your productivity and the efficiency of your work processes. Drivers enjoy significantly reduced strain, and both machine and material are protected.

- 1 Lifting and lowering height limiter (programmable)
- 2 Automatic bucket return position
- 3 Weighing system

Precise lifting and lowering height limits.

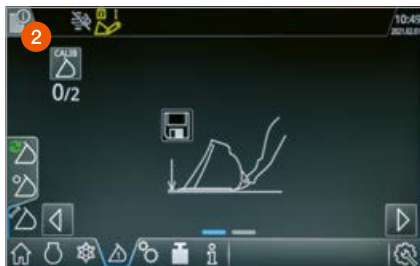
The lifting and lowering height limits make work easier if you repeatedly need to return the lift mast to specific positions. The level close to the ground and the ideal dumping height can be programmed quickly and easily. Once this is done, you only need to move the joystick to return the mast to the stored position.

Automatic bucket return.

The automatic bucket return function is ideal for loading tasks requiring the bucket to be repeatedly lowered to a position close to the ground. Here too, you can easily program two bucket positions, which can then be conveniently actuated via the joystick or at the push of a button. The TORION then moves the bucket into the stored position fully automatically.



The lifting and lowering height limits store the ideal level close to the ground and the dumping height.



The bucket return is capable of actuating two stored bucket positions automatically.



The weighing system precisely measures and documents your daily handling volumes.

A precise weighing system.

The 9" touch display in the TORION gives you access to a weighing system with numerous practical functions. When loading bulk goods, the additive memory allows you to document your daily handling volumes. Back weighing ensures precise filling of the last bucket, so that there is no need to weigh the transport vehicle again.

How SMART LOADING supports your work.

- You work more safely and precisely
- Your loading cycles are more efficient
- You protect the bucket and the machine
- Documentation is easier
- You tire less quickly

Smooth interaction between optimal components.

Top performance is only possible when all parts of your CLAAS machine are ideally matched and work together optimally. CLAAS POWER SYSTEMS combines the best components to create an intelligent drive system: drives that are suited to your applications and requirements, full engine power only when you need it, and fuel-saving technology that quickly pays off for you.

- Up to 31 hp more power: the new Stage V engines offer you great reserves
- DYNAMIC POWER controls the engine and gearbox: you can draw on up to 20% more thrust
- DYNAMIC COOLING provides demand-driven cooling: you'll save on energy and fuel
- Infinitely variable without loss of traction: CMATIC provides superior driving comfort



Treat yourself to a few hp more.



Plenty of power under the hood.

The large TORION now features even more powerful 4-cylinder Liebherr engines. The TORION 2014 gives you 183 kW (249 hp), while the TORION 1913 delivers 163 kW (222 hp). These engines reach their maximum output at an engine speed of only 1150 rpm (TORION 2014) or 1100 rpm (TORION 1913) respectively. This low-speed approach ensures that you always run your load handling operations at the optimal engine speed to save on fuel.

20% more thrust.

The DYNAMIC POWER smart drive management adjusts the engine output to your current power requirements. It releases the appropriate torque depending on the gradient angle, mast load and ground speed. You always operate at the optimal power curve and benefit of up to 20% more thrust.

Compliant with Stage V standards.

Thanks to their exhaust gas aftertreatment with SCR technology, both engines meet Stage V emissions requirements. A diesel oxidation catalytic converter (DOC), a diesel particulate filter (DPF) and selective catalytic reduction (SCR) keep exhaust gas emissions low. The urea tank is heated by the engine's cooling water so that the required levels are complied with in all weather conditions.



Greater load handling capacity per hour.

The smart power train and unique engine mounting position deliver benefits that can be felt in each and every operation. The weight is distributed optimally. You don't need to ballast the machine. The tipping load is very high, despite the machine's low operating weight. All this serves to increase your efficiency. You are able to handle more material and reduce your costs for fuel, tyres and brakes.



Fuel-saving cooling system.

A fan doesn't need to run at 100% all the time. During road transport or when handling part loads, a lower fan speed is often sufficient. DYNAMIC COOLING detects the requirements of all cooling units via thermosensors and electronically adapts fan speeds as required. The machine saves energy, and you save fuel.

Automatic radiator cleaning.

A consistently clean radiator ensures consistent power. The reversible fan automatically removes dirt and dust particles from the air intake and radiator surfaces. It regularly reverses the direction of fan rotation and simply blows dirt out. The fan reversing intervals can be set conveniently from the in-cab terminal.



Up to 31 hp more power.

- 4-cylinder engines with up to 183 kW (249 hp)
- 20% more thrust thanks to DYNAMIC POWER
- Ideal weight distribution for greater efficiency
- Energy-saving, demand-driven cooling

Top driver comfort with CMATIC.

CMATIC equals efficiency.

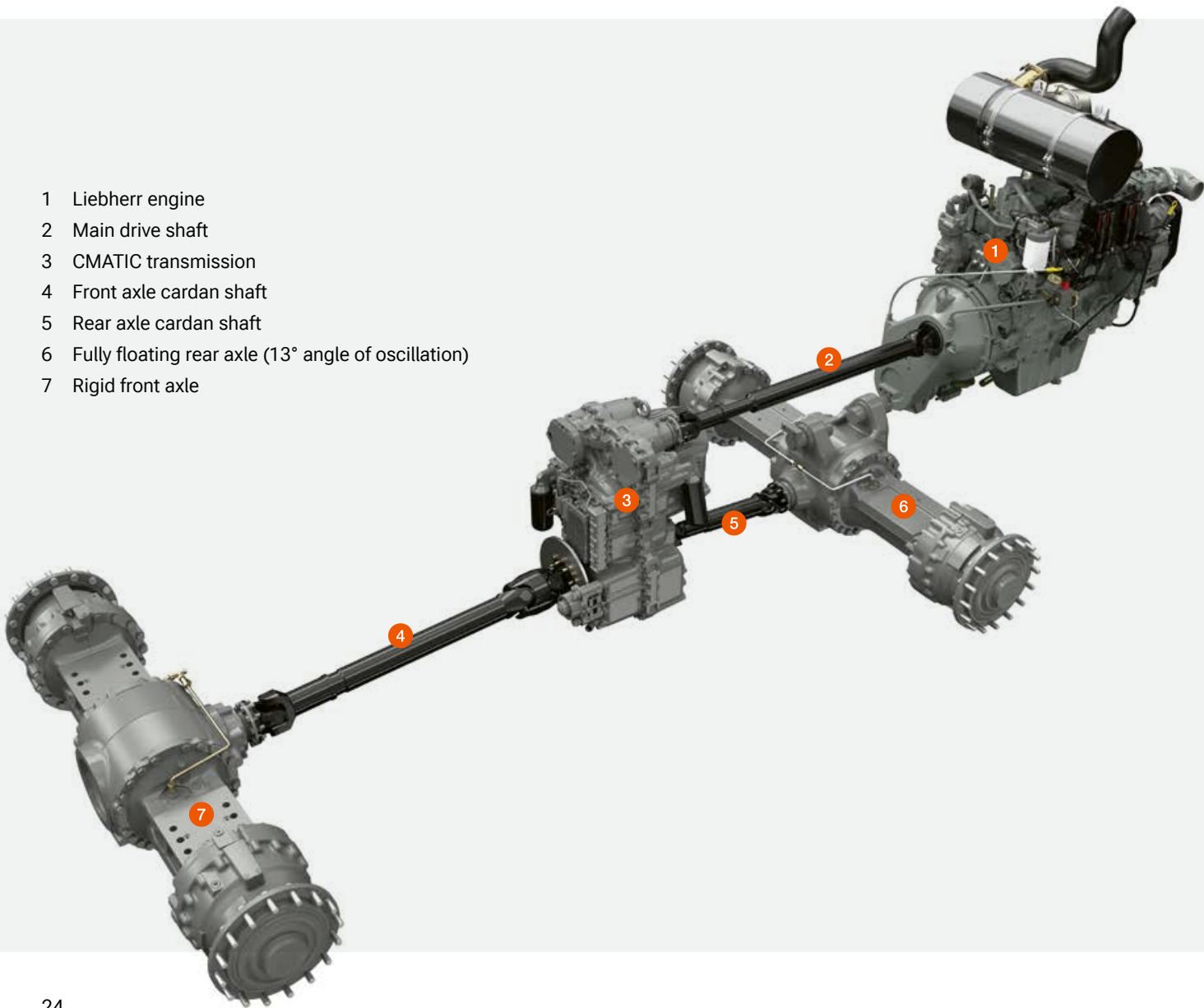
Powerful acceleration, smooth deceleration: the CMATIC engine/transmission management system supports you in all conditions and in any kinds of applications. Manoeuvring loads on the clamp or picking up heavy bulk materials, for example, calls for maximum engine power delivered to the tyres. In these applications, the largely mechanical power transmission provides outstanding efficiency and low fuel consumption. For transport operations, the hydrostatic component ensures a superbly comfortable ride with smooth, continuous acceleration and self-locking braking action.

Drivers love CMATIC.

- The machine accelerates speedily and brakes gently
- It can be operated with great precision and agility in any situation
- The engine/transmission management optimally utilises the available engine power
- You'll save on fuel when working at low engine speeds



- 1 Liebherr engine
- 2 Main drive shaft
- 3 CMATIC transmission
- 4 Front axle cardan shaft
- 5 Rear axle cardan shaft
- 6 Fully floating rear axle (13° angle of oscillation)
- 7 Rigid front axle



Continuously variable.

The infinitely variable ZF transmission successfully combines the benefits of hydrostatic and mechanical power trains. The result is powerful, smooth acceleration in all speed ranges, with no gear changes or breaks in power transmission, and identical driving performance in both directions of travel.

- High efficiency for all loading operations
- Excellent power output with low fuel consumption
- High driving comfort and easy handling

Loading with kick-down.

Heavy materials are best loaded using the kick-down function, which brakes the machine down to a maximum of 8 km/h from any ground speed. Draft control is deactivated and the drive torque increased. As a result, you have maximum thrust when moving into the material to be loaded. The operating brake only has a supportive function and therefore remains almost without wear.

Braking with the inching function.

Pressing gently on the inching pedal allows the ground speed to be continuously decreased, with the engine speed remaining the same. Fully depressing the pedal regulates the ground drive down to zero and activates the service brake.

Braking with the engine.

The automatic exhaust brake brakes the wheel loader down to a standstill as soon as you take your foot off the accelerator pedal. This provides you with extra safety on steep gradients and when driving downhill. Excessive speeds are avoided.

Parking at the push of a button.

The electrohydraulically activated parking brake reliably prevents the machine from rolling away. It is conveniently activated at the push of a button on the operating panel.



Parking brake at the push of a button



Brake/inching pedal

A supremely agile powerhouse.

Dynamic steering.

For jobs with frequent or repeated steering movements, simply switch the TORION over to dynamic steering. This reduces the number of wheel turns needed to turn through to a given steering angle. As a result, the job gets done faster with no impact on operating safety.



Axles for maximum stability.

With sturdy axles and a self-locking differential with a locking factor of 45%, this machine provides maximum safety and reliability when working in difficult conditions. The cardan shafts are maintenance-free.

Oscillation damping for greater comfort.

The mast features oscillation damping to prevent the machine from bouncing and ensure that the TORION can be operated safely even in difficult conditions. This function is activated via a toggle switch.

TORION		2014	1913
Turning radius over outside bucket edge ¹ (r1)	mm	6860	6840
Inside turning radius with 23.5 R 25 tyres (r2)	mm	3540	3540
Machine width	mm	2650	2650

¹ 1913: bucket 3.4 m³, 2014: bucket 3.7 m³

Large machine. Small turning radius.

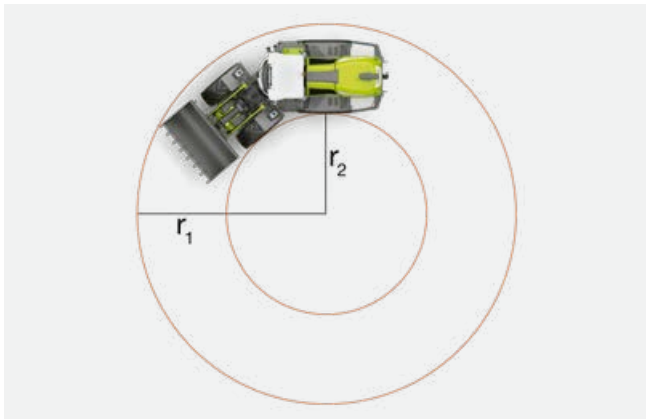
The TORION is designed to ensure that you can move vast payloads with maximum stability and resistance to tipping every day. Both its lifting capacity and its bucket volume have been increased substantially. Yet this versatile wheel loader always remains agile and easy to manoeuvre under your control.

Articulated joint with 40° angle of articulation.

In the articulated joint between the forward and rear vehicle sections, there are two double-acting steering cylinders, allowing a steering angle of 40° on both sides. The resulting small turning radius makes the TORION agile and manoeuvrable even in tight spaces. The robust, long-life joint is designed for tough operating conditions, and maintenance is simplicity itself.

20 tonnes of power and agility.

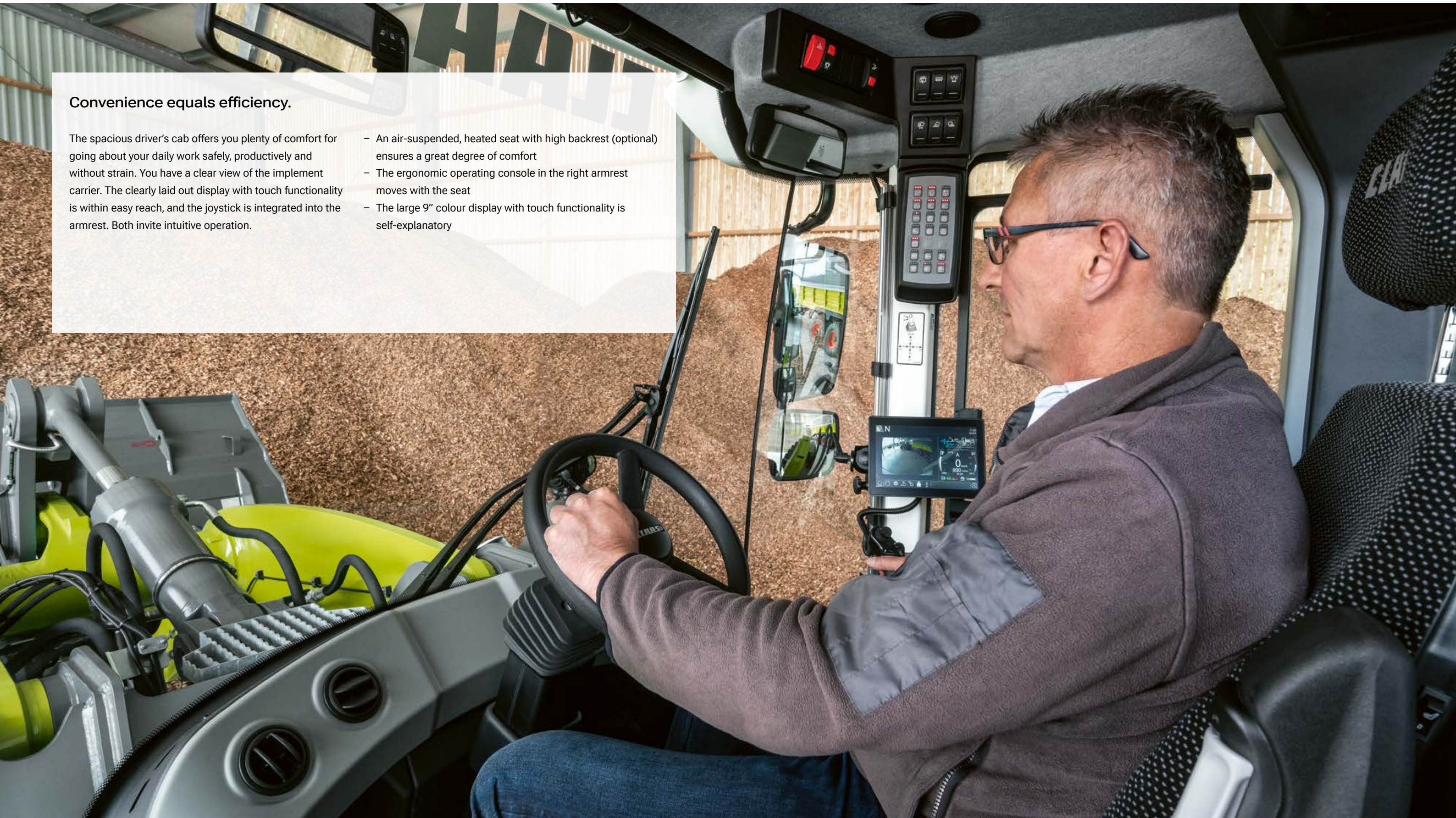
- Its outstanding flexibility is what makes the TORION so versatile
- The angle of articulation ensures a small turning radius
- The robust chassis with sturdy axles ensures great safety and reliability



Convenience equals efficiency.

The spacious driver's cab offers you plenty of comfort for going about your daily work safely, productively and without strain. You have a clear view of the implement carrier. The clearly laid out display with touch functionality is within easy reach, and the joystick is integrated into the armrest. Both invite intuitive operation.

- An air-suspended, heated seat with high backrest (optional) ensures a great degree of comfort
- The ergonomic operating console in the right armrest moves with the seat
- The large 9" colour display with touch functionality is self-explanatory



Feel comfortable every minute of your working day.



More comfort at work.

- Enjoy plenty of space and freedom to move
- The heated, air-suspended low-frequency seat (optional) ensures a high degree of comfort
- Adjust the steering wheel to your preference thanks to the three-way adjustment of the steering column
- The 9" touch display keeps you informed at a glance
- The automatic climate control maintains the temperature precisely
- The mast is conveniently controlled via the multi-function lever or joystick (optional)
- The rounded windscreen provides an unrestricted view to all sides
- Slim pillars and a slender bonnet design grant an unobstructed view of the implement carrier
- The wide-angle mirror provides added safety



For long working days.
The adjustable pneumatic lumbar support supports your back.

You always work comfortably and safely.

A cab that minimises stress boosts your productivity. The TORION cab is designed for effortless work. Its features include plenty of storage compartments and a 5.5-l cool box to keep snacks and drinks fresh. The cab interior, toggle switches and controls are subtly lit.

Only the best for your back.

Make yourself comfortable in the air-suspended, heated seat with high backrest (optional). The suspension automatically adapts to your weight. The seat cushion depth and angle and lumbar support are individually adjustable, and preferred settings can be stored. The control console is integrated into and moves with the right armrest. A left armrest can be fitted if desired.

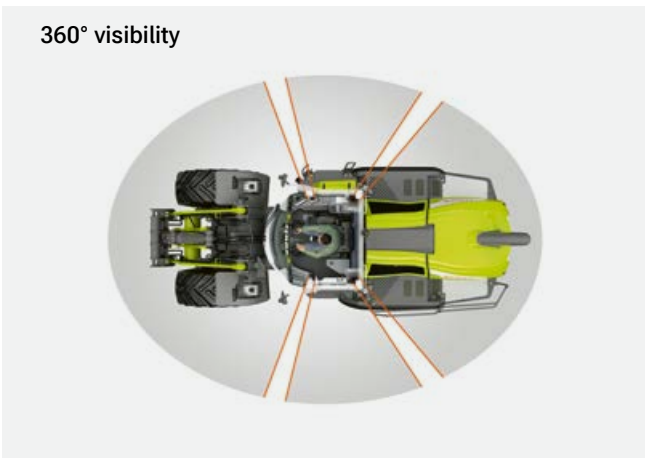


More light and safety all around.

The TORION's powerful work lamps provide 360° illumination of your surroundings. The lamps can be individually adjusted. They offer a long service life with high light output and consume little energy. Reversing automatically triggers an acoustic alert that is clearly audible even with loud background noise. The rear camera provides additional safety. Video from the camera is automatically displayed on the 9" touchscreen.

Smart work lights.

The smart light control adapts the lights to the bucket position and angle of articulation. The dimmable work lamps on the cab roof and front section illuminate your work area precisely and without glare or disruptive reflection.



360° visibility

CLAAS comfort at day or night.

- Spacious cab and extensive comfort features for fatigue-free work
- Excellent view of equipment and surroundings
- Powerful work lamps for 360° illumination when working at night

Wheel loader control, not rocket science.

A single concept for all drivers.

Regardless of whether you operate the TORION with the proven joystick or convenient multi-function lever, you need nothing more than a bit of intuition. Even new or inexperienced drivers will familiarise themselves quickly with the machine.

Proven joystick (1).

The (optional) ergonomic joystick sits firmly in your hand during any operations. It is integrated into the armrest and moves freely with it.



Convenient multi-function lever (2).

The multi-function lever with electronic pilot control moves with the armrest and allows you to operate the TORION conveniently and precisely. Its operation is simple and intuitive. The lever provides precise and sensitive control of not only the direction of travel and loader unit, but many more functions besides.



Self-explanatory display.

A 9" colour display with touch functionality acts as your central source of information. The large, bright display can be adjusted to the preferred height and tilt and remains easy to read even in poor light conditions. The icons are self-explanatory, and the system is intuitive to operate.



Optional joystick control (3).

Many routine operations demand repeated steering processes. The optional joystick control makes your work easier at speeds below 8 km/h. An optional joystick integrated into the left armrest gives you quick and effective control over the wheel loader.



The TORION makes your work a breeze.

- You control the mast conveniently via the joystick or multi-function lever
- Both control levers move with the armrest to keep hand fatigue at a minimum even during long working days
- The intuitive touchscreen provides self-explanatory information

Fast maintenance saves lots of time.



Free access to all points.

Ease of access is decisive for all maintenance works. It is all too easy to forget about or ignore anything that is difficult to reach or even just to inspect. The faster you can access maintenance points, the less time-consuming and costly your service works will be.

This lowers maintenance costs.

- All key locations are easily accessible
- The automatic central lubrication reduces wear noticeably
- The radiator and air filter have long maintenance intervals



Automatic central lubrication.

The automatic central lubrication system keeps precisely to all lubrication intervals. You can adjust lubrication cycles to your operating conditions at three levels from the display or via a button. The grease tank is located in the entry area. If the level falls below the recommended minimum, an LED display lights up in the keypad. Lubrication can be applied manually between intervals at the push of a button.

Clearly organised on-board electronics.

The electronic components are bundled. The battery and battery cut-off switch are located on the left of the rear weight, and additional fuse boards are provided in the back cab wall. An external socket is optionally available for easy jump starting.

Safe, clean maintenance.

- The electrically tilting bonnet provides easy access to the engine compartment
- Work directly on the engine from the floor for superior convenience
- The windscreen and cab filter box are easily reached from the folding ladder on the right-hand side
- Anti-slip tread on steps and robust hand rails provide safety during maintenance works
- There is plenty of space for tools on board



Easy access.

In the TORION, all key locations for daily maintenance can be checked at a glance from the entry area. All inspection points and fluid levels are easily visible. The clearly laid out components in the engine compartment are easily reached.



The on-board electronics is bundled for easy access.



TORION

1611 P / 1611 / 1285

A boost to your productivity.

TORION 1611 P

TORION 1611 P. The silage clamp pro.

P stands for power. The new model in the medium TORION series is specially designed for tough silage clamp applications. Its powerful ground drive and increased engine output and hydraulic capacity give a fresh boost to your productivity.

The excellent driving dynamics of the TORION 1611 P are particularly noticeable while travelling on roads. You'll cover even large distances in your operations effortlessly. The machine delivers impressive acceleration and masters hills with ease.

The TORION 1611 P in the clamp.

- Its excellent driving dynamics save you time in handling materials
- You'll be impressed by the breakaway force of the newly developed Z-kinematics
- With flexibly adjustable mudguards, you work collision-free in the clamp

The TORION 1611 P on the road.

- You accelerate swiftly and master hills with ease
- Automatic speed reduction during road trips reduces fuel consumption and noise emissions
- The additional fuel in the optional larger diesel tank reduces downtimes and increases the effectiveness of your work throughout the day



Power and intelligence can go hand in hand.

Loader unit

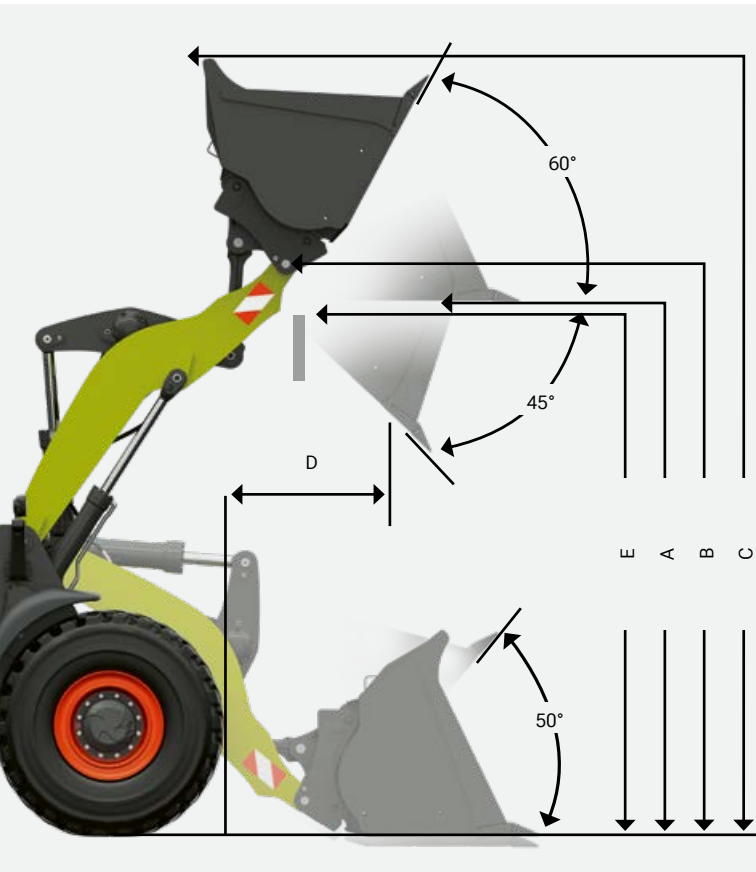


More power, less strain.

The newly developed Z-kinematics is ideal for agricultural use. The working hydraulics delivers high power. Automatic SMART LOADING functions such as the bucket return, weighing system and programmable lift mast reduce driver strain in any operation and ensure productive work processes.

- Greater engine output and lift capacity: benefit from substantially faster materials handling
- Greater bucket volume and higher tipping load: achieve more in less time
- A 350 mm longer high-lift kinematics raises the bucket pivot point to 4520 mm so you can load higher when you need to
- A bucket shake function offers additional relief when loading sticky goods. Forage can be distributed more safely and evenly in the clamp
- Larger hydrostatic units are reflected in greater thrust and improved driving dynamics to increase your productivity and efficiency

Lift your productivity.



Z-kinematics with optimised self-levelling linkage.
The Z-kinematics is suitable for all loading works. The optimised self-levelling linkage prevents pallets from slipping off the fork.

- You work at maximum breakaway force
- The fast dumping speed increases your materials handling capacity
- The robust kinematics is designed for high loads

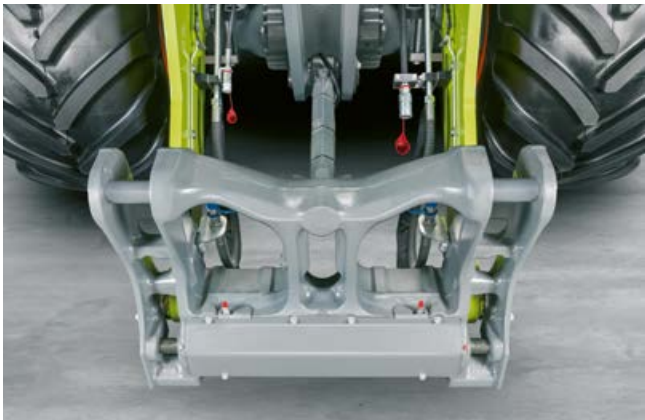
STD = standard mast, HL = high-lift mast
Max. digging angle 50°, max. dumping angle 45°

Work safely at height.

To allow you to increase your materials handling capacity, the kinematics and mast of the medium TORION series have been optimised. The machine now offers an even greater breakaway force and faster loading cycles. The high retention forces when working in the upper range ensure safe operation even with heavy loads.

Powerful kinematics.

Both the Z- and the Z-HL-kinematics handle heavy-duty applications with ease. They allow you to load further and higher than you have come to expect from your previous wheel loader. Together with a larger bucket capacity and higher tipping load, this ensures substantially greater productivity.



Robust implement carrier.

The operator has a clear view of the robust implement carrier. The carrier is supported on the mast without play, resulting in almost no wear even at high loads. Its hydraulic locking pins (50 mm) attach all implements safely to the wheel loader.

Kinematics			TORION					
			1611 P	1611		1285		
Z-kinematics and earthmoving bucket			STD	HL	STD	HL	STD	HL
A	Max. height to bucket base	m	3.72	4.26	3.72	4.26	3.61	4.20
B	Max. bucket pivot point height	m	3.98	4.52	3.98	4.52	3.87	4.46
C	Max. height to bucket top	m	5.39	5.87	5.43	5.93	5.15	5.74
D	Reach at max. lift height and 45° dumping angle	m	1.21	1.01	1.23	1.06	1.02	0.97
E	Dump-over height	m	3.54	4.07	3.54	4.07	3.45	4.01
Max. tipping load, fully articulated		t	9.40	7.60	10.25	8.54	8.00	6.10
Breakaway force		kN	115	120	130	135	100	105
Z-kinematics and loading fork (FEM III)			ST	HL	ST	HL	ST	HL
Max. lift height		m	3.78	4.31	3.78	4.31	3.67	4.25
Max. reach		m	1.71	2.05	1.71	2.05	1.64	2.08
Reach at max. lift height		m	0.79	0.65	0.79	0.65	0.70	0.65
Max. tipping load, fully articulated		t	7.19	6.15	8.08	6.95	6.32	5.10
Payload on uneven ground		t	4.30	3.65	4.80	4.15	3.75	3.00
Payload on level ground		t	5.00	4.90	5.00	5.00	5.00	4.05



Powerful high-lift mast.

If you need to work at extremely high unloading heights, your TORION can optionally be fitted with a high-lift mast. This extends the maximum bucket pivot point to 4.52 mm (1611 P / 1611) or 4.46 mm respectively (1285).

Lift anything.

- A long wheelbase and rear-mounted engine provide for greater stability
- The 100 mm longer standard lift masts allow you to load further and higher
- The optionally available high-lift mast allows you to extend your working heights even further



Get any job done.



Push, lift and load at high pressure.

Pushing loads at high pressure, lifting heavy weights and loading materials speedily and precisely – agricultural operations place high demands on a wheel loader's working hydraulics. To ensure that you always have the pressure you need, the TORION models feature a load sensing system that is optimally fine-tuned to the machine, load-sensing (LS) proportional valves and a priority valve for the steering. The electrohydraulically pilot-operated single lever control makes precise operation a breeze.

- TORION 1611 P / 1611: 200 l/min as standard, up to 350 bar operating pressure
- TORION 1285: 170 l/min as standard, up to 350 bar operating pressure



Precise single lever control.

Control the loader unit precisely and sensitively with the electrohydraulically pilot-operated single lever control. Two hydraulic mast functions can be operated simultaneously. Performing different movements at the same time speeds up your work cycles.

Two additional hydraulic circuits.

For mounted implements with double-acting control circuit, such as road sweepers or grab buckets, two additional hydraulic control circuits are available. Both control circuits are controlled independently via the joystick. The flow rate of each control circuit is infinitely adjustable via the touchscreen.

Reduced dumping speed.

If you work with large light material buckets, which place high centrifugal loads on the Z-kinematics, you can reduce the dumping speed. This not only provides extra safety when working with large loads, but also protects all mast components.



Two additional hydraulic quick-release couplers are provided at the rear.



A reduced dumping speed protects the mast components.



More power in the TORION 1611 P / 1611.

The hydraulic power has been increased together with the engine output. The TORION 1611 P / 1611 produces an output of 200 l/min as standard. This allows you to operate several functions simultaneously, quickly and evenly. You save lots of fuel in the process, as the full hydraulic output is reached at low engine speeds. You work noticeably faster and more effectively at high torques.

Hydraulics for any situation.

- The load-sensing system delivers exactly the pressure and volume you need
- You control all functions precisely via the joystick
- Two additional hydraulic circuits give you even greater flexibility

SMART LOADING handles routine tasks for you.



Make your loading cycles easier.

If you load heavy weights, SMART LOADING provides active support. This unique assistance system precisely manages the interaction between all functions needed to optimise loading cycles. You only need to set the functions once, and they are then performed automatically.

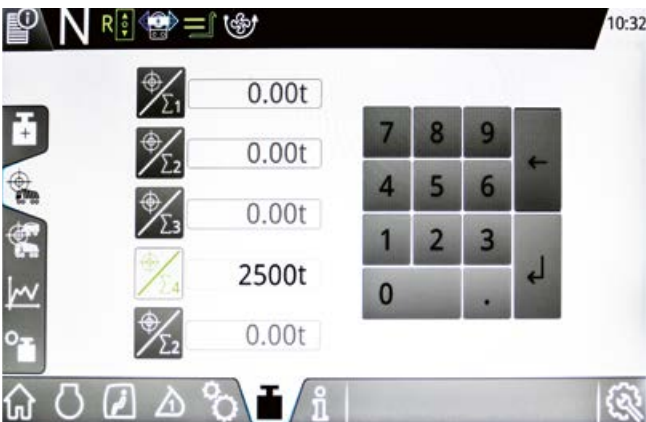
Three support functions for greater ease.

- The bucket return function actuates the stored bucket position automatically
- The lifting and lowering height limits store the ideal level close to the ground and the dumping height
- The weighing system precisely measures and documents your daily handling volumes



Automatic bucket return.

Use the automatic bucket return function for loading tasks requiring the bucket to be repeatedly lowered to a position close to the ground. To make your work easier, you can program a suitable bucket position and then actuate it conveniently via the joystick or at the push of a button. The TORION moves the bucket into the stored position fully automatically.



Precise lifting and lowering height limits.

If you repeatedly need to return the mast to specific positions, the lifting and lowering height limits are your best support. The level close to the ground and the ideal dumping height can be stored quickly and easily. Once this is done, you only need to move the joystick to return the mast to the stored position.

A precise weighing system.

The weighing system in the 9" touch display supports you with numerous practical functions. When loading bulk goods, the additive memory allows you to document your daily handling volumes. Back weighing ensures precise filling of the last bucket, so that there is no need to weigh the transport vehicle again.

Bucket shake function.

To make it easier to empty the bucket when working with sticky materials or to distribute materials more evenly and reduce trickle losses, the machine is equipped with a bucket tipping assistant. This function is activated via a push button on the joystick.

SMART LOADING supports you in many ways.

- You increase your productivity
- Your loading cycles are more efficient
- You work more safely and precisely
- Your documentation becomes easier
- Your operator workload is substantially reduced
- The bucket and machine are protected
- You tire less quickly
- You work in high comfort



Smooth interaction between optimal components.

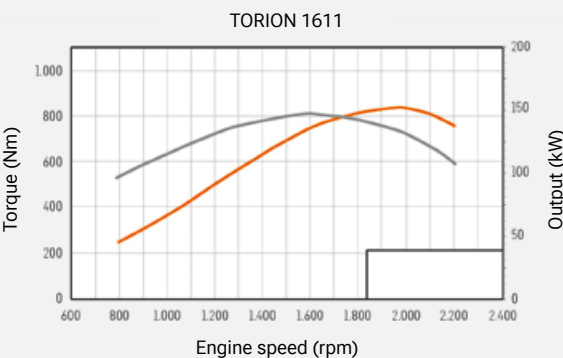
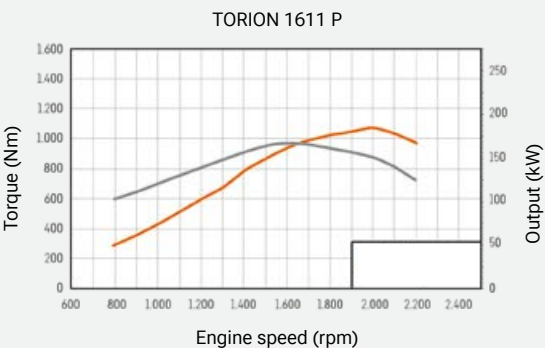
Top performance is only possible when all parts of your CLAAS machine are ideally matched and work together optimally. CLAAS POWER SYSTEMS combines the best components to create an intelligent drive system: drives that are suited to your applications and requirements, full engine power only when you need it, and fuel-saving technology that quickly pays off for you.

- More power: the 4 and 6-cylinder engines offer you great reserves
- Exhaust gas aftertreatment with SCR technology: you work with substantially reduced emissions
- Demand-driven cooling: DYNAMIC COOLING saves both energy and fuel
- Infinitely variable and economical: the VARIPOWER ground drive offers excellent driver comfort

CPS | CLAAS
POWER
SYSTEMS

Powerful, economical and clean.

Handle everything that comes your way. In the medium TORION series, robust 6 and 4-cylinder DPS engines provide the output you need for a wide range of applications. All engines comply with the Stage V emission standard.



Rated output acc. to ECE R 120:

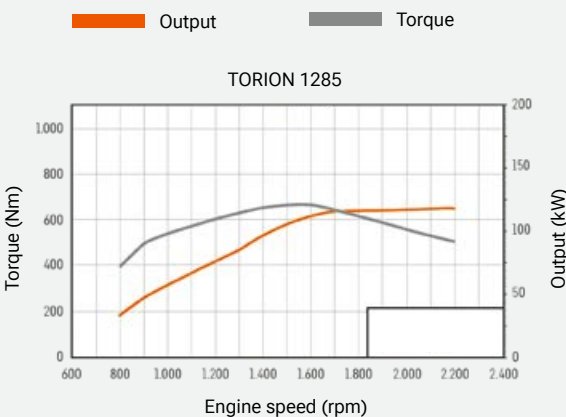
- 1611 P: 168 kW / 228 hp at 2200 rpm
- 1611: 138 kW / 188 hp at 2200 rpm
- 1285: 116 kW / 158 hp at 2200 rpm

Maximum available output:

- TORION 1611 P: 185 kW / 252 hp at 2000 rpm
- TORION 1611: 152 kW / 207 hp at 2000 rpm
- TORION 1285: 116 kW / 158 hp at 2200 rpm

Maximum torque:

- TORION 1611 P: 970 Nm at 1600 rpm
- TORION 1611: 809 Nm at 1600 rpm
- TORION 1285: 667 Nm at 1600 rpm



More powerful engines.

The TORION 1611 P and 1611 feature high-torque 6-cylinder engines with 6.8 l displacement, whereas the 1285 model is equipped with a robust 4-cylinder engine with 4.5 l displacement.

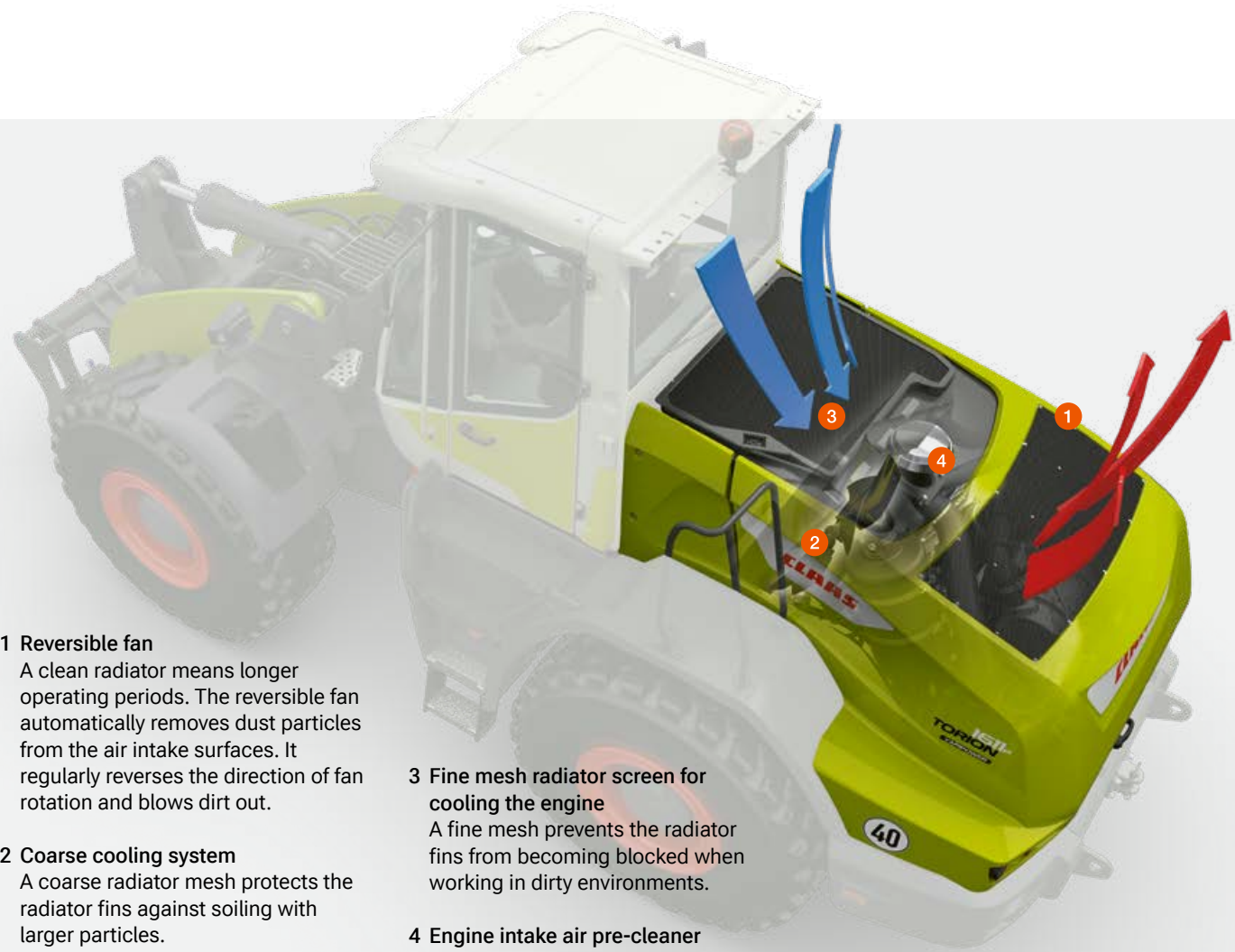
Unique engine mounting position.

The engine in the TORION is installed far to the rear and also serves as a counterweight. This shifts the machine's centre of gravity downwards and towards the rear, producing a high tipping load without the need to carry additional ballast.

Clean exhaust gas aftertreatment.

TORION exhaust gases are subjected to aftertreatment with SCR technology. A diesel oxidation catalytic converter (DOC), a diesel particulate filter (DPF) and selective catalytic reduction (SCR) keep emissions low.

The urea tank is heated by the engine's cooling water so that the required levels are complied with in all weather conditions.



1 Reversible fan

A clean radiator means longer operating periods. The reversible fan automatically removes dust particles from the air intake surfaces. It regularly reverses the direction of fan rotation and blows dirt out.

2 Coarse cooling system

A coarse radiator mesh protects the radiator fins against soiling with larger particles.

3 Fine mesh radiator screen for cooling the engine

A fine mesh prevents the radiator fins from becoming blocked when working in dirty environments.

4 Engine intake air pre-cleaner

An (optional) air filter cyclone prefilters the engine intake air.

Demand-driven cooling.

A fan doesn't need to run at 100% all the time. During road transport or when handling part loads, a lower fan speed is sufficient. DYNAMIC COOLING detects the requirements of all cooling units via thermosensors and electronically adapts fan speeds (100–1050 rpm) accordingly. The machine saves energy, and you save fuel.

DYNAMIC COOLING provides demand-driven cooling for the air conditioning condenser, radiator, intercooler, gearbox oil cooler, hydraulic oil cooler and fuel cooler.

Economise on fuel but not on power.

- Robust 4 and 6-cylinder engines produce a higher output than their predecessors
- The rear-mounted engine acts as a counterweight and makes additional ballasting redundant
- DYNAMIC COOLING provides demand-driven cooling and saves energy and fuel
- With 185 kW / 252 hp, the TORION 1611 P is the top model in the medium series

The TORION takes care of gear changes for you.

Infinitely variable hydrostatic VARIPOWER ground drive.

In the medium TORION series, the smart VARIPOWER ground drive makes your job easier. With this infinitely variable hydrostatic drive you operate the TORION comfortably at any speed and set the amount of thrust you need with precision.

You accelerate seamlessly across all speed ranges without ever losing thrust. Thrust and speed are continuously optimised against each other.

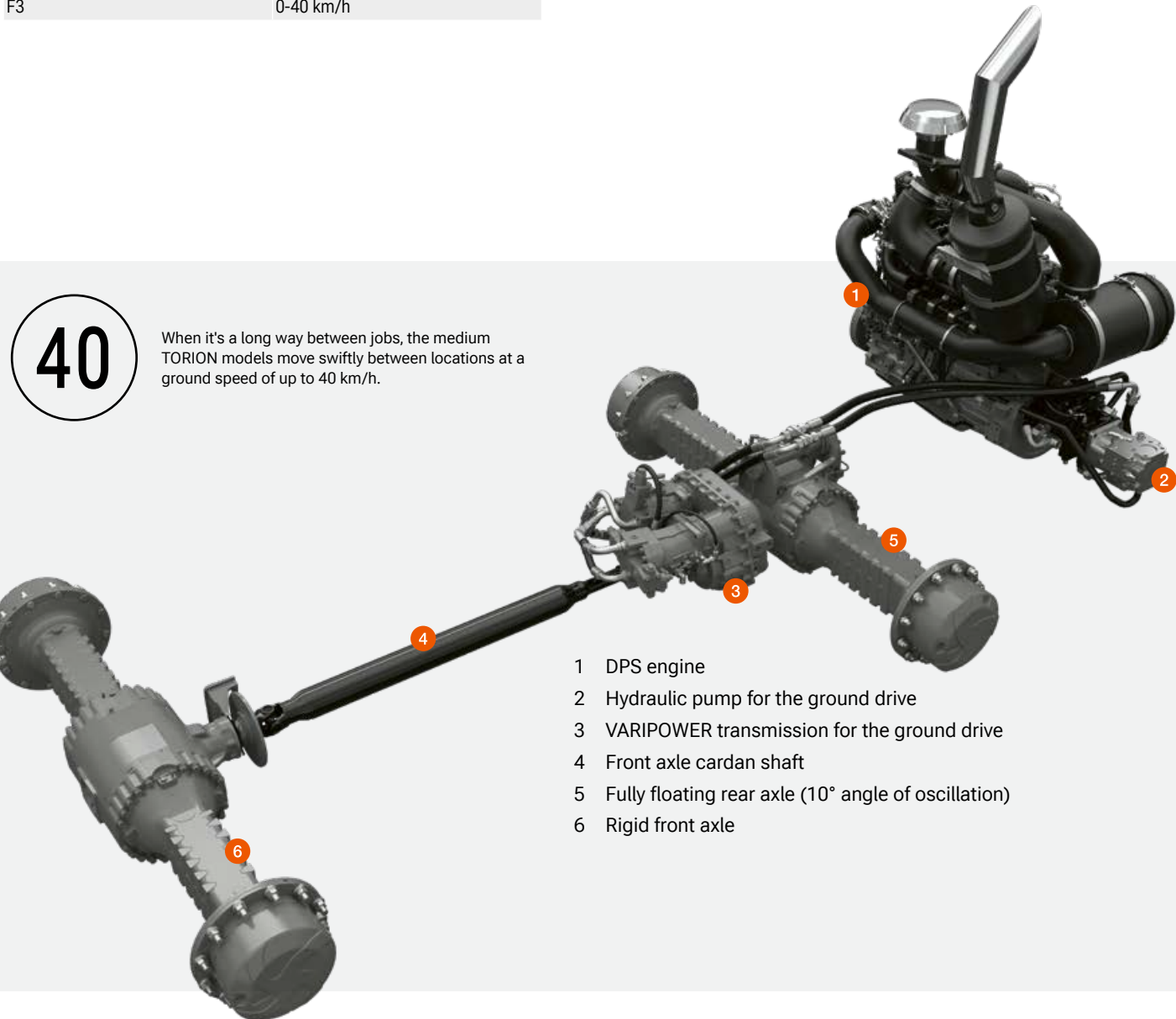
Driving range	Speed ranges
F1	0-8 km/h
F2	0-16 km/h
F3	0-40 km/h

VARIPOWER for greater efficiency.

At ground speeds of up to 16 km/h, two axial piston motors are in operation, delivering maximum thrust for loading operations. At speeds of more than 16 km/h, the second motor is disconnected from the drive train to reduce fuel consumption during road travel. As the VARIPOWER ground drive brakes autonomously at any speed, the service brake suffers almost no wear.

40

When it's a long way between jobs, the medium TORION models move swiftly between locations at a ground speed of up to 40 km/h.

- 
- 1 DPS engine
 - 2 Hydraulic pump for the ground drive
 - 3 VARIPOWER transmission for the ground drive
 - 4 Front axle cardan shaft
 - 5 Fully floating rear axle (10° angle of oscillation)
 - 6 Rigid front axle



Oscillation damping for greater safety.

To ensure that the TORION can be operated safely even in difficult conditions, the mast features oscillation damping to prevent the machine from bouncing. This function can be activated via a toggle switch at any speed.

Inching pedal for greater comfort.

Pressing gently on the inching pedal allows the ground speed to be continuously decreased, with the engine speed remaining the same. Fully depressing the pedal regulates the ground drive down to zero and activates the service brake. The electrohydraulically operated parking brake is conveniently activated at the push of a button.



Automatic speed reduction for lower diesel consumption.

You will be thrilled with the driving dynamics, especially on roads. The machine accelerates powerfully and achieves higher speeds on hills. This saves you lots of time, especially if you need to cover large distances in your operations or between the silage clamp and biogas plant.

Thanks to this function you also save money in the process. This intelligent system consistently reduces the engine speed during road transport. You still enjoy a dynamic driving experience, but use a lot less fuel.

- A good match.**
- VARIPOWER accelerates seamlessly, powerfully and conveniently
 - Automatic speed reduction to save fuel

Size and agility can go hand in hand.

Only 6 m turning radius.

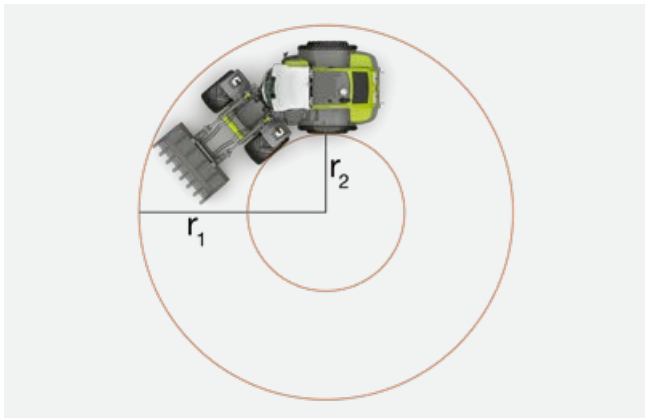
With the TORION, you can move vast payloads with maximum stability and resistance to tipping every day. This versatile wheel loader now boasts a substantially increased lifting capacity and larger bucket volume. Yet it always remains agile and easy to manoeuvre under your control. Its strengths also come into its own in tight spaces.

Articulated joint with 40° angle of articulation.

Thanks to its small turning radius, the TORION remains agile in any situation. In the articulated joint between the front and rear vehicle sections, there are two double-acting steering cylinders, allowing a steering angle of 40° on both sides. The robust, long-life joint is designed for tough operating conditions, and maintenance is simplicity itself.

Axles for maximum stability.

With sturdy axles and a self-locking differential with a locking factor of 45%, this machine provides maximum safety and reliability when working in difficult conditions. The front features a rigidly mounted planetary axle and the rear a fully floating planetary axle with an oscillation angle of 10° on each side. The cardan shafts are maintenance-free.



Radius		1611 P	1611	1285
Turning radius over outside bucket edge ¹ (r1)	mm	6100	6200	5990
Inside turning radius with 20.5 R 25 tyres (r2)	mm	2835	2835	2775
Machine width	mm	2480	2480	2480

¹ 1611 P: 2.4 m³ bucket, 1611: 2.8 m³ bucket, 1285: 2.0 m³ bucket



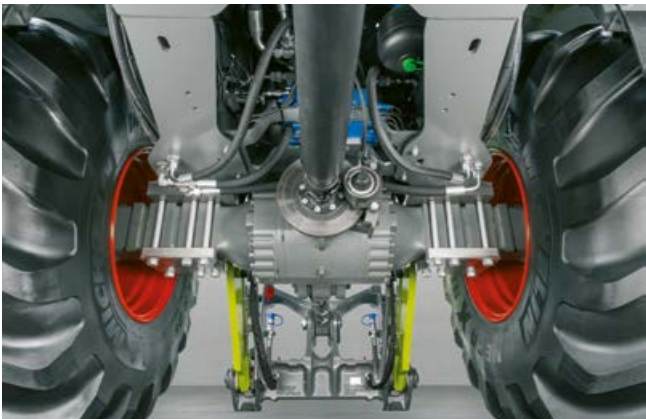
To allow even very large tyres to be used in agricultural applications, the oscillation travel of the rear axle can be limited.



All mudguards on all TORION models in the medium series are optionally available adjustable to improve visibility of the wheels, especially when working along silage clamp walls.



The articulated joint with a 40° angle of articulation makes the TORION agile and easy to manoeuvre.



Agile and safe.

- The 40° angle of articulation ensures high agility and a small turning radius
- The stable chassis provides high safety every working minute

A 16-t wheel loader needs 360° all-round visibility.

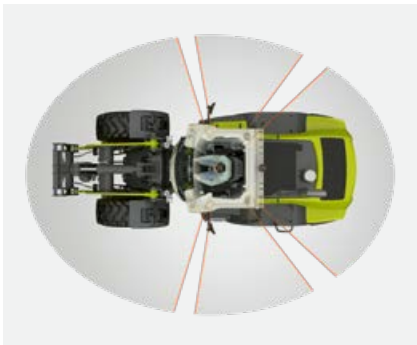


Unparalleled visibility.

No other wheel loader in this category offers as good all-round visibility. The slim pillars do not block out anything. The rounded windscreen provides an unobstructed view of the implement carrier. The 9" touch display is located within easy reach, and the joystick is integrated into the armrest. Both are intuitive and safe to control.

- The spacious, elastically mounted, air-conditioned and soundproofed cab ensures your comfort, freedom of movement and productivity
- The steering column and driver's seat can be individually adjusted
- An air-suspended, heated seat with high backrest (optional) protects your back and makes your work more comfortable

Feel safe every minute of your working day.



In the TORION, you always have 360° visibility of your working environment.



The slim pillars grant an unobstructed view of the implement carrier.



The rear camera is activated automatically as soon as you shift into reverse.

Keep track – Keep control.

Operators needing to manoeuvre a wheel loader in constrained spaces know just how important it is to have a clear all-round view. In the TORION, you have an unobstructed view of your implements even with a fully raised mast and can work with precision at the maximum height.

We have your back.

In the air-suspended, heated seat with high backrest (optional) even long working days feel short. The suspension automatically adapts to your weight. The seat cushion depth and angle and lumbar support are individually adjustable, and preferred settings can be stored. The control console is integrated into and moves with the right armrest. A left armrest can be fitted upon request.

Safety for your environment.

The rounded windscreen and slim pillars set towards the rear give you full all-round visibility. You always have a good view even of the area behind the machine. Reversing automatically triggers an acoustic alert that is clearly audible even with loud background noise. You are also alerted visually and acoustically if there are people or obstacles in the danger zone behind the machine.

A rear camera provides additional safety. No extra monitor is required, as its images are automatically displayed in the 9" touchscreen.

LED lights for night work.

The TORION's powerful work lamps provide 360° illumination of your surroundings. The lamps can be individually adjusted. They offer a long service life with high light output and consume little energy.

Adaptive work lights.

The smart light control adapts lights to the bucket position and angle of articulation. The dimmable work lamps on the cab roof and front section illuminate your work area precisely and without glare or disruptive reflection.

Safety at day or night.

- Unparalleled all-round view of equipment and the work environment
- Powerful work lamps for 360° illumination when working at night
- Spacious cab and extensive comfort features for fatigue-free work



More comfort at work.

- The rounded windscreen provides an unrestricted view to all sides
- Slim pillars and a slender bonnet design grant an unobstructed view of the implement carrier
- The mast is conveniently controlled via the multi-function lever or joystick (optional)
- The wide-angle mirror provides added safety
- Enjoy plenty of space and freedom to move
- The heated, air-suspended low-frequency seat (optional) ensures a high degree of comfort
- Adjust the steering wheel to your preference thanks to the three-way adjustment of the steering column
- The 9" touch display keeps you informed at a glance
- The automatic climate control maintains the temperature precisely

Drivers without computing degrees welcome.



Intuitive operation.

A convenient multi-function lever, a self-explanatory 9" touch display – you need nothing more than a bit of intuition to operate the TORION productively. Even new or inexperienced drivers will familiarise themselves quickly with the machine. Within the shortest of time, they deliver the high-precision work your business needs.

Subtle cockpit lighting.

Even if you need to work late, the machine is always safe and comfortable to operate. All toggle switches and many controls are backlit. The terminal brightness can be adjusted to five levels according to individual preferences.



Self-explanatory display.

A 9" colour display with touch functionality bundles all functions and information needed for operating the machine. The bright display can be adjusted to the preferred height and tilt and remains easy to read even in poor light conditions. The icons are self-explanatory, and the system is intuitive to operate.

Convenient multi-function lever.

The multi-function lever with electronic pilot control moves with the armrest and allows you to operate the TORION intuitively, conveniently and precisely. The lever provides precise control of not only the direction of travel and loader unit, but many more functions besides. You can, for example, easily control a third and fourth hydraulic control circuit with precision.



Dynamic steering.

For jobs with frequent or repeated steering movements, simply switch the TORION over to dynamic steering. This reduces the number of wheel turns needed to turn through to a given steering angle. As a result, the job gets done faster, with no impact on operating safety. This noticeably reduces strain during routine tasks.



Optional joystick control.

For repetitive processes, it is recommended to control the TORION via the joystick, which is integrated into the armrest and moves freely with it. This ensures fatigue-free work with your hand even on long working days. In addition to the steering, you can also use the joystick to control the other wheel loader functions as usual:

- Raise and lower the lift mast
- Fill and dump the implement
- Switch controlling driving direction (forwards, neutral, reverse)

The TORION makes your work a breeze.

- You control the wheel loader intuitively via the joystick or multi-function lever
- The easily readable 9" touchscreen provides information via self-explanatory icons

Heavy machine – easy maintenance.



Unobstructed access saves time.

Ease of access is decisive for all maintenance works. It is all too easy to forget about or ignore anything that is difficult to reach or even just to inspect. The faster you can access maintenance points, the less time-consuming and costly your service works will be.

Good accessibility.

All key locations for daily maintenance are readily accessible. All inspection points and fluid levels are easily visible. The clearly laid out components in the engine compartment are within easy reach.

- Open the single-piece bonnet for unobstructed access to the entire engine compartment
- All points requiring maintenance can be accessed from the ground
- Non-slip steps provide safety



Automatic central lubrication.

Thanks to the automatic central lubrication system, all lubrication intervals are kept precisely. You can adjust lubrication cycles to your operating conditions at three levels from the display or via a button. If the grease tank level falls below the recommended minimum, an LED display lights up in the keypad. Lubrication can be applied manually between intervals at the push of a button.

Clearly organised on-board electronics.

The electronic components are bundled for easier maintenance. The battery and battery cut-off switch are located on the left of the rear weight, and additional fuse boards are provided in the back cab wall. An external socket is optionally available for easy jump starting.



Lower your maintenance costs.

- The maintenance intervals are very long
- All key locations are easily accessible
- The single-piece electrically operated bonnet gives you free access to the engine compartment
- The automatic central lubrication reduces wear noticeably
- All electronic components are conveniently bundled



You simply handle more material.

Seamless materials handling is what every TORION excels in. It effortlessly moves materials weighing anything from tens of kilos to several tonnes across a range of distances and heights – often in constrained spaces.

The large TORION offers you precisely the power and lift capacity you need to fill biogas plants efficiently, handle grains or fill loader wagons.

TORION 2014 / 1913.

- Powerful engines with up to 183 kW / 249 hp boast large reserves during work
- The unique engine mounting position ensures high stability and resistance to tipping

- DYNAMIC POWER ensures substantially greater torque and thrust in silage clamps
- The CMATIC transmission ensures comfortable, continuous operation
- SMART LOADING automates loading functions and reduces operators' workload every minute of the day
- With the high-lift mast your bucket pivot point is at 4700 mm
- The spacious cab offers plenty of smart comfort for long working days
- Even new drivers will familiarise themselves quickly with the intuitive operating concept
- The smart light control illuminates 360° of your surroundings



With the TORION in the medium series you always have a true specialist for your applications, whether on your yard, in the clamp or in your fields.

TORION 1611 P / 1611 / 1285.

- The new TORION models are your powerful specialists for use in silage clamps and materials handling
- More powerful 4 and 6-cylinder engines deliver up to 185 kW / 252 hp
- High tipping loads allow the use of larger tools, giving you greater productivity
- The machine's ideal weight distribution allows you to handle materials even more efficiently

- The infinitely variable VARIPOWER ground drive increases your efficiency
- SMART LOADING speeds up your loading cycles thanks to automated loading functions
- The bucket pivot point of the high-lift mast is at 4520 mm so you can load even higher
- With 360° all-round visibility, the elastically mounted comfort cab is unique in this class of wheel loaders
- Thanks to the intuitive operating concept, even new drivers will familiarise themselves quickly with the machine
- The precisely tuned working hydraulics allow the mast to be controlled with great precision and safety

On call for you.

Parts
and services?

We're here for you – together, we can achieve the best possible results.

At CLAAS, your operational readiness is our top priority. With our comprehensive range of services, spare parts and operating resources, we ensure that your machines always perform optimally.

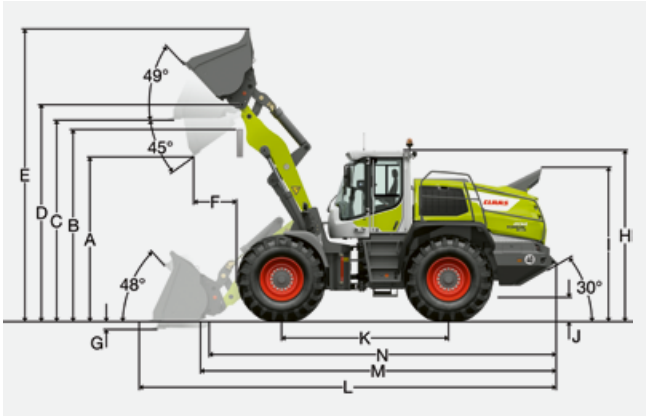
Our support includes a wide range of maintenance and repair services available from your dealer, an extensive line-up of ORIGINAL parts and consumables as well as digital tools which support your planning and decision-making. Confidence comes from knowing you are always ready for action.

Fully covered with MAXI CARE service agreements.

MAXI CARE gives you all-round cover for repairs and maintenance. A comprehensive range of packages ensures that your machines are always ready for action, allowing you to focus fully on your core tasks. CLAAS offers four MAXI CARE service agreements tailored to the needs of your business.

Everything, at
the right time.





TORION 2014 / 1913.

With agricultural kinematics, implement carrier with quick-attachment system and earthmoving bucket¹.

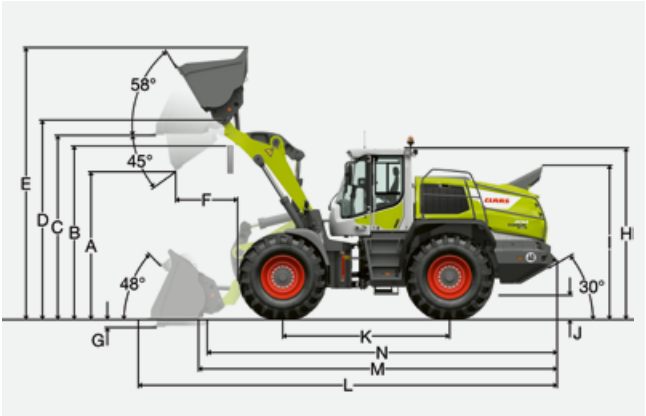
		TORION 2014			TORION 1913		
		STD	HL	HL	STD	HL	HL
Loading geometrics		IND-SW	IND-SW	IND-SW	IND-SW	IND-SW	IND-SW
Cutting tool		Z	Z	Z	Z	Z	Z
Mast length	mm	2700	3000	3000	2700	3000	3000
Bucket capacity according to ISO 7546 ²	m ³	3.4	2.8	3.1	3.1	2.6	2.8
Material density	t/m ³	1.8	1.8	1.6	1.8	1.8	1.6
Bucket width	mm	2880	2880	2880	2880	2880	2880
Dumping height at max. lift height and 45° dumping angle (A)	mm	2870	3490	3440	2920	3525	3490
Dump-over height (B)	mm	3700	4100	4100	3700	4100	4100
Max. height to bucket base (C)	mm	3865	4385	4385	3865	4385	4385
Max. height to bucket pivot point (D)	mm	4145	4665	4665	4145	4665	4665
Max. height to bucket top (E)	mm	5925	6290	6365	5845	6240	6290
Reach at max. lift height and 45° dumping angle (F)	mm	1210	870	920	1150	835	870
Digging depth (G)	mm	100	105	105	100	105	105
Height above cab (H)	mm	3370	3370	3370	3370	3370	3370
Height above exhaust (I)	mm	3020	3020	3020	3020	3020	3020
Ground clearance (J)	mm	490	490	490	490	490	490
Wheelbase (K)	mm	3500	3500	3500	3500	3500	3500
Overall length (L)	mm	8865	9075	9145	8785	9025	9075
Turning radius over outside bucket edge	mm	6895	7000	7020	6875	6980	7000
Breakaway power (SAE)	kN	155	175	165	140	150	145
Tipping load, straight ³	kg	14300	12400	12300	12900	11200	11100
Tipping load, fully articulated ³	kg	12500	10800	10700	11400	9800	9700
Operating weight ³	kg	20,200	20300	20,350	19200	19,300	19,350
Tyre size		23.5R25 L3			23.5R25 L3		

¹ Earthmoving bucket with short, straight base for quick-attachment system.

² The bucket capacity can be approx. 10% greater in practice than as calculated according to ISO 7546. The bucket filling level depends on the material.

³ The values shown apply for the tyres specified above, including all lubricants, full fuel tanks, ROPS / FOPS cab and driver. Tyre size and additional equipment change the operating weight and tipping load (fully articulated tipping load according to ISO 14397-1).

STD = standard mast, HL = high-lift mast, IND-SW = industrial mast with self-levelling linkage incl. quick-attachment system, Z = welded-on tooth adapters with attached tooth tips



TORION 2014 / 1913.

With Z-kinematics, implement carrier with quick-attachment system and earthmoving bucket¹.

		TORION 2014				TORION 1913			
		STD	STD	HL	HL	STD	STD	HL	HL
Loading geometrics		ZK	ZK	ZK	ZK	ZK	ZK	ZK	ZK
Cutting tool		Z	Z	Z	Z	Z	Z	Z	Z
Mast length	mm	2700	2700	3100	3100	2700	2700	3100	3100
Bucket capacity according to ISO 7546 ²	m ³	3.7	4.1	3.1	3.4	3.4	3.7	2.8	3.1
Material density	t/m ³	1.8	1.6	1.8	1.6	1.8	1.6	1.8	1.6
Bucket width	mm	2880	2880	2880	2880	2880	2880	2880	2880
Dumping height at max. lift height and 45° dumping angle (A)	mm	2970	2900	3670	3575	3020	2970	3715	3670
Dump-over height (B)	mm	3700	3700	4250	4250	3700	3700	4250	4250
Max. height to bucket base (C)	mm	3875	3875	4430	4430	3875	3875	4430	4430
Max. height to bucket pivot point (D)	mm	4150	4150	4700	4700	4150	4150	4700	4700
Max. height to bucket top (E)	mm	5855	5960	6255	6340	5785	5855	6185	6255
Reach at max. lift height and 45° dumping angle (F)	mm	1075	1145	890	945	1025	1075	840	890
Digging depth (G)	mm	80	80	95	95	80	80	95	95
Height above cab (H)	mm	3370	3370	3370	3370	3370	3370	3370	3370
Height above exhaust (I)	mm	3020	3020	3020	3020	3020	3020	3020	3020
Ground clearance (J)	mm	490	490	490	490	490	490	490	490
Wheelbase (K)	mm	3500	3500	3500	3500	3500	3500	3500	3500
Overall length (L)	mm	8625	8725	9070	9150	8555	8625	9000	9070
Turning radius over outside bucket edge	mm	6860	6885	7045	7070	6840	6860	7025	7045
Breakaway power (SAE)	kN	175	165	195	185	165	155	185	175
Tipping load, straight ³	kg	15,600	15,400	13000	12900	14,050	13950	11700	11600
Tipping load, fully articulated ³	kg	13750	13550	11350	11250	12500	12400	10250	10150
Operating weight ³	kg	19,600	19700	19,800	19,850	18,550	18,650	18,750	18,800
Tyre size		23.5R25 L3		23.5R25 L3		23.5R25 L3		23.5R25 L3	

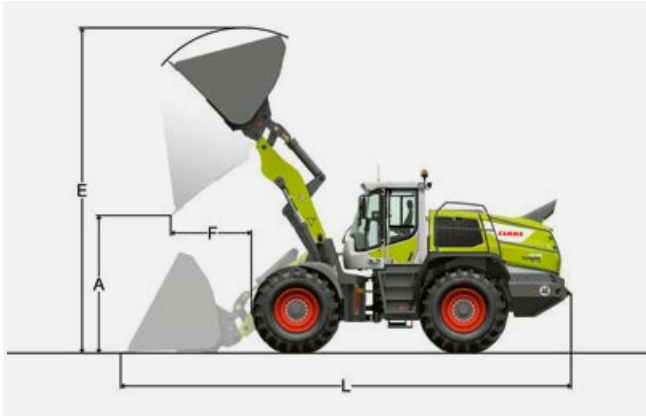
¹ Earthmoving bucket with short, straight base for quick-attachment system.

² The bucket capacity can be approx. 10% greater in practice than as calculated according to ISO 7546. The bucket filling level depends on the material.

³ The values shown apply for the tyres specified above, including all lubricants, full fuel tanks, ROPS / FOPS cab and driver. Tyre size and additional equipment change the operating weight and tipping load (fully articulated tipping load according to ISO 14397-1).

STD = standard mast, HL = high-lift mast, ZK = Z-kinematics, Z = welded-on tooth adapters with attached tooth tips

Dimensions.



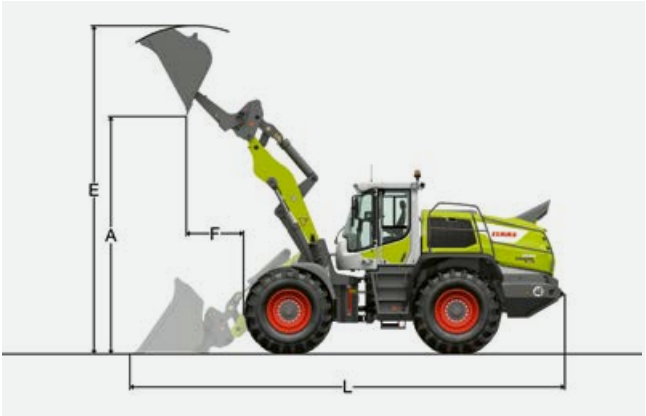
TORION 2014 / 1913.

With agricultural kinematics, implement carrier with quick-attachment system and light material bucket.

High bulk material density (1 t/m³)		TORION 2014		TORION 1913	
		STD	HL	STD	HL
Loading geometrics		IND-SW	IND-SW	IND-SW	IND-SW
Cutting tool		USM	USM	USM	USM
Bucket capacity	m³	5.5	5.0	5.0	4.5
Bucket width	mm	2950	2950	2950	2950
Dumping height at max. lift height (A)	mm	2530	3145	2630	3190
Max. height to bucket top (E)	mm	6040	6490	5975	6560
Reach at max. lift height (F)	mm	1500	1185	1420	1120
Overall length (L)	mm	9105	9330	8970	9245
Tipping load, straight¹	kg	13600	11800	12200	10600
Tipping load, fully articulated¹	kg	11700	10200	10600	9200
Operating weight¹	kg	20,500	20600	19500	19,600
Tyre size		23.5R25 L3		23.5R25 L3	

Low dumping weight (0.5 t/m³)		TORION 2014		TORION 1913	
		STD	HL	STD	HL
Loading geometrics		IND-SW	IND-SW	IND-SW	IND-SW
Cutting tool		USM	USM	USM	USM
Bucket capacity	m³	10.0	9.0	9.5	8.5
Bucket width	mm	3400	3400	3400	3400
Dumping height at max. lift height (A)	mm	2300	2870	2320	2910
Max. height to bucket top (E)	mm	6245	6760	6240	6730
Reach at max. lift height (F)	mm	1740	1475	1740	1435
Overall length (L)	mm	9435	9730	9415	9670
Tipping load, straight¹	kg	13300	11300	11900	10200
Tipping load, fully articulated¹	kg	11500	9700	10200	8800
Operating weight¹	kg	21,100	21,200	20100	20,200
Tyre size		23.5R25 L3		23.5R25 L3	

¹ The values shown apply for the tyres specified above, including all lubricants, full fuel tanks, ROPS / FOPS cab and driver. Tyre size and additional equipment change the operating weight and tipping load (fully articulated tipping load according to ISO 14397-1).
STD = standard mast, HL = high-lift mast, USM = grader blade, IND-SW = industrial mast with self-levelling linkage incl. quick-attachment system



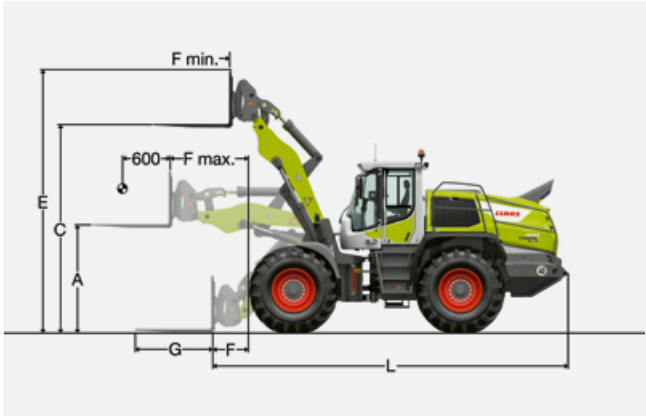
TORION 2014 / 1913.

With agricultural kinematics, implement carrier with quick-attachment system and high-tip bucket.

High bulk material density (1 t/m³)		TORION 2014		TORION 1913	
		STD	HL	STD	HL
Loading geometrics		IND-SW	IND-SW	IND-SW	IND-SW
Cutting tool		USM	USM	USM	USM
Bucket capacity	m³	5.0	4.5	4.5	4.00
Bucket width	mm	2700	2700	2700	2700
Dumping height at max. lift height (A)	mm	4570	5190	4645	5235
Max. height to bucket top (E)	mm	6920	7400	6865	7360
Reach at max. lift height (F)	mm	1750	1445	1685	1400
Overall length (L)	mm	9350	9610	9250	9545
Tipping load, straight¹	kg	13600	11300	11900	10100
Tipping load, fully articulated¹	kg	11800	9600	10300	8700
Operating weight¹	kg	20,400	21,000	19900	20,000
Tyre size		23.5R25 L3		23.5R25 L3	

Low dumping weight (0.5 t/m³)		TORION 2014		TORION 1913	
		STD	HL	STD	HL
Loading geometrics		IND-SW	IND-SW	IND-SW	IND-SW
Cutting tool		USM	USM	USM	USM
Bucket capacity	m³	9.5	8.5	9.0	8.0
Bucket width	mm	3400	3400	3400	3400
Dumping height at max. lift height (A)	mm	4290	4895	4335	4955
Max. height to bucket top (E)	mm	7135	7560	7090	7505
Reach at max. lift height (F)	mm	1760	1470	1720	1420
Overall length (L)	mm	9470	9750	9410	9670
Tipping load, straight¹	kg	12800	10900	11400	9700
Tipping load, fully articulated¹	kg	11000	9300	9800	8300
Operating weight¹	kg	21,500	21600	20,500	20600
Tyre size		23.5R25 L3		23.5R25 L3	

¹ The values shown apply for the tyres specified above, including all lubricants, full fuel tanks, ROPS / FOPS cab and driver. Tyre size and additional equipment change the operating weight and tipping load (fully articulated tipping load according to ISO 14397-1).
STD = standard mast, HL = high-lift mast, USM = grader blade, IND-SW = industrial mast with self-levelling linkage incl. quick-attachment system



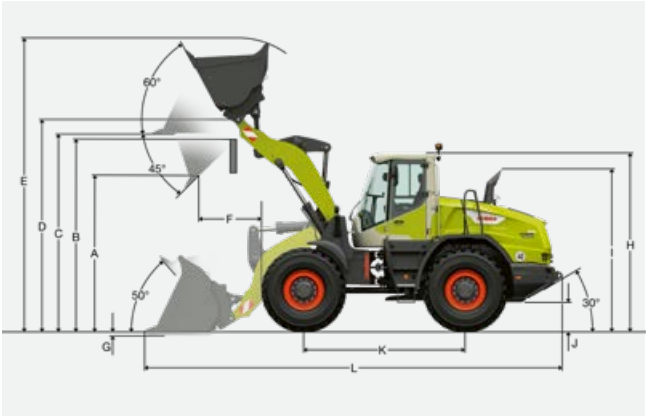
TORION 2014 / 1913.

With agricultural kinematics, implement carrier with quick-attachment system and pallet fork.

FEM IV loading fork		TORION 2014	TORION 1913
Loading geometrics		IND-SW	IND-SW
Lift height at max. reach (A)	mm	1805	1805
Max. lift height (C)	mm	3905	3905
Max. height to over fork carrier (E)	mm	4895	4895
Reach in loading position (F)	mm	1080	1080
Maximum possible reach (F max.)	mm	1710	1710
Reach at max. lift height (F min.)	mm	715	715
Fork tine length (G)	mm	1500	1500
Basic machine overall length (L)	mm	7570	7570
Tipping load, straight ¹	kg	11200	10000
Tipping load, fully articulated ¹	kg	9800	8700
Permissible payload capacity on uneven ground = 60% of the articulated static tipping load ²	kg	5880	5220
Permissible payload capacity on level ground = 80% of the articulated static tipping load ²	kg	7840	6960
Operating weight ¹	kg	19,480	18500
Tyre size		23.5R25 L3	23.5R25 L3

¹ The values shown apply for the tyres specified above, including all lubricants, full fuel tanks, ROPS / FOPS cab and driver. Tyre size and additional equipment change the operating weight and tipping load (fully articulated tipping load according to ISO 14397-1).

² According to EN 474-3.
IND-SW = industrial mast with self-levelling linkage incl. quick-attachment system
Payload limited by the FEM IV fork carrier and forks

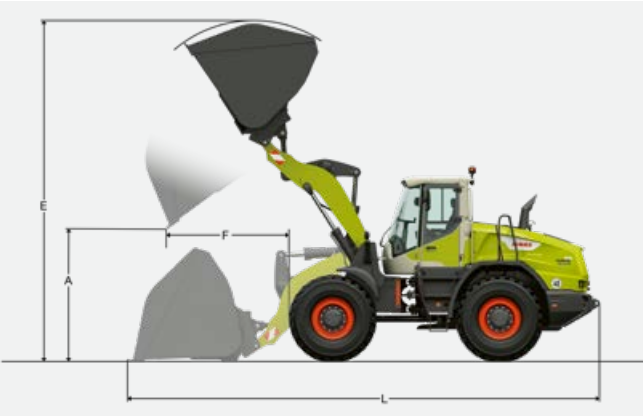


TORION 1611 P-1285.

With Z-kinematics, implement carrier with quick-attachment system and earthmoving bucket.

		1611 P		1611		1285	
		STD	HL	STD	HL	STD	HL
Cutting tool		Z	Z	Z	Z	Z	Z
Mast length	mm	2650	3000	2650	3000	2550	3000
Bucket capacity according to ISO 7546 ¹	m³	2.4	2.2	2.8	2.6	2.0	2.0
Material density	t/m³	1.8	1.6	1.8	1.6	1.8	1.5
Bucket width	mm	2520	2520	2720	2720	2520	2520
Dumping height at max. lift height and 45° dumping angle (A)	mm	2830	3415	2860	3370	2815	3400
Dump-over height (B)	mm	3540	4070	3540	4070	3450	4015
Max. height to bucket base (C)	mm	3720	4260	3720	4260	3615	4200
Max. height to bucket pivot point (D)	mm	3980	4520	3980	4520	3875	4460
Max. height to bucket top (E)	mm	5390	5870	5430	5930	5150	5740
Reach at max. lift height and 45° dumping angle (F)	mm	1210	1010	1235	1060	1020	975
Digging depth (G)	mm	100	120	100	120	100	120
Height above cab (H)	mm	3250	3250	3250	3250	3250	3250
Height above exhaust (I)	mm	2950	2950	2950	2950	2950	2950
Ground clearance (J)	mm	430	430	430	430	440	440
Wheelbase (K)	mm	3025	3025	3025	3025	2975	2975
Overall length (L)	mm	7810	8200	7850	8260	7600	8160
Turning radius over outside bucket edge	mm	6100	6300	6200	6400	5990	6260
Breakaway power (SAE)	kN	115	120	130	135	100	105
Tipping load, straight ²	kg	10700	8900	11600	9700	9350	7200
Tipping load, fully articulated ²	kg	9400	7600	10250	8540	8000	6100
Operating weight ²	kg	15,200	15360	15,810	16000	13570	13870
Tyre size		20.5 R 25 (L3)		20.5 R 25 (L3)		20.5 R 25 (L3)	

¹ The bucket capacity can be approx. 10% greater in practice than as calculated according to ISO 7546. The bucket filling level depends on the material.
² The values shown apply for the tyres specified above, including all lubricants, full fuel tanks, ROPS / FOPS cab and driver. Tyre size and additional equipment change the operating weight and tipping load (fully articulated tipping load according to ISO 14397-1).
STD = standard mast, HL = high-lift mast, Z = welded-on tooth adapters with attached tooth tips, USM = grader blade



TORION 1611 P-1285.

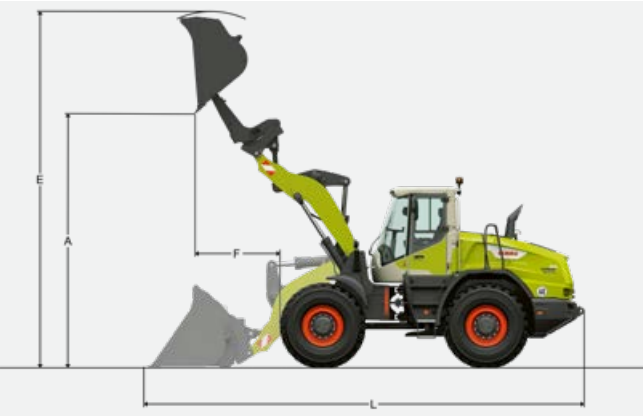
With Z-kinematics, implement carrier with quick-attachment system and light material bucket.

High dumping weight		1611 P		1611		1285	
		STD	HL	STD	HL	STD	HL
Cutting tool		USM	USM	USM	USM	USM	USM
Bucket capacity	m³	4.00	4.00	4.5	4.5	3.50	3.50
Material density	t/m³	1.0	0.8	1.0	0.8	1.0	0.8
Bucket width	mm	2700	2700	2700	2700	2700	2700
Dumping height at max. lift height (A)	mm	2520	3060	2440	2985	2490	3080
Max. height to bucket top (E)	mm	5610	6160	5730	6280	5400	5970
Reach at max. lift height (F)	mm	1490	1340	1570	1420	1320	1270
Overall length (L)	mm	8080	8530	8190	8640	7890	8450
Tipping load, straight¹	kg	10300	8500	11200	9240	8900	6800
Tipping load, fully articulated¹	kg	8900	7200	9560	7820	7590	5720
Operating weight¹	kg	15,520	15,730	16,120	16,330	13890	14,190
Tyre size		20.5 R 25 (L3)	20.5 R 25 (L4)	20.5 R 25 (L5)	20.5 R 25 (L6)	20.5 R 25 (L7)	20.5 R 25 (L8)

Low dumping weight		1611 P		1611		1285	
		STD	HL	STD	HL	STD	HL
Cutting tool		USM	USM	USM	USM	USM	USM
Bucket capacity	m³	6.5	5.5	7.5	6.5	5.5	4.5
Material density	t/m³	0.5	0.5	0.5	0.5	0.5	0.5
Bucket width	mm	2700	2700	3000	2700	2700	2700
Dumping height at max. lift height (A)	mm	2190	2850	2160	2730	2210	2925
Max. height to bucket top (E)	mm	6080	6440	6110	6625	5800	6210
Reach at max. lift height (F)	mm	1830	1555	1855	1680	1610	1430
Overall length (L)	mm	8550	8830	8590	8995	8300	8670
Tipping load, straight¹	kg	9800	8100	10600	8900	8500	6610
Tipping load, fully articulated¹	kg	8400	6800	8960	7450	7170	5540
Operating weight¹	kg	15,920	15,970	16,620	16,650	14200	14350
Tyre size		20.5 R 25 (L8)	20.5 R 25 (L8)	20.5 R 25 (L8)	20.5 R 25 (L8)	20.5 R 25 (L8)	20.5 R 25 (L8)

¹ The values shown apply for the tyres specified above, including all lubricants, full fuel tanks, ROPS / FOPS cab and driver. Tyre size and additional equipment change the operating weight and tipping load (fully articulated tipping load according to ISO 14397-1).
STD = standard mast, HL = high-lift mast, USM = grader blade

Dimensions.



TORION 1611 P-1285.

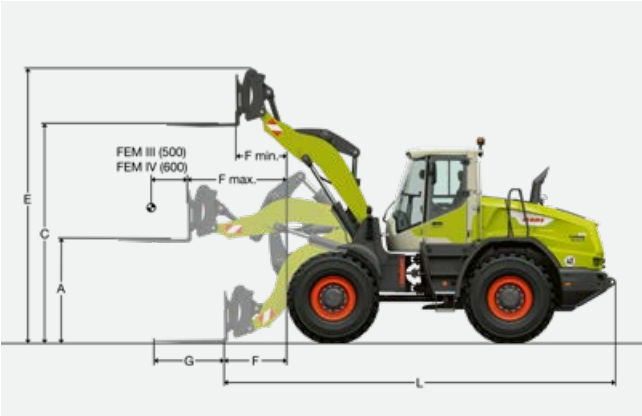
With Z-kinematics, implement carrier with quick-attachment system and high-tip bucket.

High dumping weight		1611 P		1611		1285	
		STD	HL	STD	HL	STD	HL
Cutting tool		USM	USM	USM	USM	USM	USM
Bucket capacity	m³	3.50	3.50	4.00	4.00	3.0	3.0
Material density	t/m³	1.05	0.8	1.05	0.8	1.05	0.8
Bucket width	mm	2700	2700	2700	2700	2700	2700
Dumping height at max. lift height (A)	mm	4680	5220	4605	5145	4600	5200
Max. height to bucket top (E)	mm	6550	7090	6600	7140	6350	6940
Reach at max. lift height (F)	mm	1470	1325	1560	1420	1350	1300
Overall length (L)	mm	8140	8580	8260	8700	8030	8580
Tipping load, straight¹	kg	9600	7800	10500	8600	8100	6100
Tipping load, fully articulated¹	kg	8100	6500	8850	7160	6830	5030
Operating weight¹	kg	16,100	16,300	16,700	16,910	14,460	14,770
Tyre size		20.5 R 25 (L3)	20.5 R 25 (L4)	20.5 R 25 (L5)	20.5 R 25 (L6)	20.5 R 25 (L7)	20.5 R 25 (L8)

Low dumping weight		1611 P		1611		1285	
		STD	HL	STD	HL	STD	HL
Cutting tool		USM	USM	USM	USM	USM	USM
Bucket capacity	m³	6.0	5.0	7.0	6.0	5.0	4.00
Material density	t/m³	0.5	0.5	0.5	0.5	0.5	0.5
Bucket width	mm	2700	2700	3000	2700	2700	2700
Dumping height at max. lift height (A)	mm	4385	5000	4365	4925	4360	5080
Max. height to bucket top (E)	mm	6910	7300	6950	7440	6660	7070
Reach at max. lift height (F)	mm	1750	1510	1770	1600	1560	1360
Overall length (L)	mm	8510	8825	8540	8945	8300	8660
Tipping load, straight¹	kg	9500	7800	10400	8550	8100	6200
Tipping load, fully articulated¹	kg	8000	6500	8720	7130	6780	5100
Operating weight¹	kg	16,250	16,350	16,880	16,970	14,590	14,750
Tyre size		20.5 R 25 (L8)	20.5 R 25 (L8)	20.5 R 25 (L8)	20.5 R 25 (L8)	20.5 R 25 (L8)	20.5 R 25 (L8)

¹ The values shown apply for the tyres specified above, including all lubricants, full fuel tanks, ROPS / FOPS cab and driver. Tyre size and additional equipment change the operating weight and tipping load (fully articulated tipping load according to ISO 14397-1).
STD = standard mast, HL = high-lift mast, USM = grader blade

Dimensions.



TORION 1611 P-1285.

With Z-kinematics, implement carrier with quick-attachment system and loading fork.

Pallet fork			1611 P		1611		1285		1611 P		1611	
		STD	HL	STD	HL	STD	HL	STD	HL	STD	HL	
Loading fork type		FEM III	FEM III	FEM III	FEM III	FEM III	FEM III	FEM IV	FEM IV	FEM IV	FEM IV	
Mast length	mm	2650	3000	2650	3000	2550	3000	2650	3000	2650	3000	
Lift height at max. reach (A)	mm	1780	1780	1780	1780	1700	1700	1740	1740	1740	1740	
Max. lift height (C)	mm	3780	4310	3780	4310	3675	4250	3740	4270	3740	4270	
Max. height to over fork carrier (E)	mm	4705	5250	4705	5250	4605	5190	4740	5285	4740	5285	
Reach in loading position (F)	mm	1070	1510	1070	1510	1030	1590	1090	1530	1090	1530	
Maximum possible reach (F max.)	mm	1710	2050	1710	2050	1640	2080	1690	2030	1690	2030	
Reach at max. lift height (F min.)	mm	790	650	790	650	700	650	770	630	770	630	
Fork tine length (G)	mm	1200	1200	1200	1200	1200	1200	1500	1500	1500	1500	
Basic machine overall length (L)	mm	6670	7120	6670	7120	6590	7150	6700	7140	6700	7140	
Tipping load, straight ¹	kg	8300	7150	9350	8100	7350	6000	7900	6800	8900	7700	
Tipping load, fully articulated ¹	kg	7190	6150	8080	6950	6320	5100	6780	5780	7650	6560	
Permissible payload capacity on uneven ground = 60% of the articulated static tipping load ²	kg	4300	3650	4800	4150	3750	3000	4000	3450	4550	3900	
Permissible payload capacity on level ground = 80% of the articulated static tipping load ²	kg	5000 ³	4900	5000 ³	5000 ³	5000 ³	4050	5400	4600	6100	5200	
Operating weight ¹	kg	15,680	14,870	15,190	15,400	13110	13410	14,920	15130	15,450	15,660	
Tyre size		20.5 R 25 (L3)										

¹ The values shown apply for the tyres specified above, including all lubricants, full fuel tanks, ROPS / FOPS cab and driver. Tyre size and additional equipment change the operating weight and tipping load (fully articulated tipping load according to ISO 14397-1).

² According to EN 474-3.

³ Load capacity limited to 5000 kg by FEM III fork carriage and tines.

STD = standard mast, HL = high-lift mast

TORION		2014	1913	1611 P	1611	1285
Loader unit						
Operating weight ¹	kg	20,000	19,000	15,200	15,810	13570
Kinematics variants available		Agricultural / Agricultural High Lift / Z / Z-High-Lift	Agricultural / Agricultural High Lift / Z / Z-High-Lift	Z / Z-High-Lift	Z / Z-High-Lift	Z / Z-High-Lift
Tipping load, fully articulated (max.) ²	kg	12700	11500	9400	10250	8000
Tipping load, straight ²	kg	14,600	13200	10700	11600	9350

Work cycle time						
Lifting at rated load		5.4	5.4	5.5	5.5	5.0
Dumping Z-kinematics		1.0	1.0	1.5	2.2	1.2
Dumping agricultural kinematics		2.2	2.2	–	–	–
Lowering (empty)		2.9	2.9	4.9	4.9	3.9

Engine						
Manufacturer		Liebherr	Liebherr	DPS	DPS	DPS
		Stage V (Tier 5)	Stage V (Tier 5)	Stage V (Tier 5)	Stage V (Tier 5)	Stage V (Tier 5)
Type		D944 A7	D934 A7	6068HB551	6068HB551	4045HB551
Layout / number of cylinders		R 4	R 4	S 6	S 6	R 4
Cubic capacity	l	7.96	7.01	6.80	6.80	4.50
Bore / stroke	mm	130 / 150	122 / 150	106 / 127	106 / 127	106 / 127
Rated output acc. to ISO 14396, ECE R 120	kW / hp	183 / 249 (at 1800 rpm)	163 / 222 (at 1800 rpm)	168 / 228 (at 2200 rpm)	138 / 188 (at 2200 rpm)	116 / 158 (at 2200 rpm)
Max. torque acc. to ISO 14396, ECE R 120	Nm	1403 (at 1150 rpm)	1248 (at 1100 rpm)	970 (at 1600 rpm)	809 (at 1600 rpm)	667 (at 1600 rpm)
Air filter system		Dry-type air filter with preseparator, main and safety element / maintenance indicator				
Exhaust aftertreatment		DPF + DOC + SCR	DPF + DOC + SCR	DPF + DOC + SCR	DPF + DOC + SCR	DPF + DOC + SCR

Electrical system						
Operating voltage	V	24	24	24	24	24
Battery	Ah	2 x 140	2 x 140	2 x 135	2 x 135	2 x 135
Alternator	V / A	28 / 140	28 / 140	24 / 100	24 / 100	24 / 100

Hydraulic system						
LS pump, load-sensing (LS) valves (Z-kinematics)	l/bar	290 / 350	234 / 350	200 / 350	200 / 350	170 / 350
LS pump, load-sensing (LS) valves (Agricultural kinematics)	l/bar	290 / 380	234 / 380	–	–	–
Cooling system		Hydraulic oil cooling via thermally controlled fan and oil cooler				
Filtration		Return filter in hydraulic oil tank				
Control		Electrohydraulically pilot-controlled single-lever operation				



Articulated tipping load.

The articulated tipping load is the load at the implement's load centre that will cause the wheel loader to tip over the front axle. In this situation the machine is in its least stable position with the lift mast extended horizontally and the wheel loader fully articulated.

Payload.

According to ISO 14397-1, the payload must not exceed 50% of the articulated tipping load. This is equivalent to a safety factor of 2. The permitted payload can be calculated as follows:

Payload (t) = articulated tipping load (t) / 2

Bucket size.

Calculate the maximum usable bucket size based on the payload:

Bucket size = payload (t) / specific material weight (t/m³)

TORION		2014	1913	1611 P	1611	1285
Driver's cab						
Version		Hydraulically mounted, sound-insulated, air-conditioned cab		Flexibly mounted, sound-insulated, air-conditioned cab		
Steering column		Infinitely variable				
Driver's seat		Vibration-damped comfort driver's seat, 6-way adjustable				
Hand-arm vibration acc. to ISO 5349-1:2001	m/s ²	<2.5				
Whole body vibration acc. to ISO/TR 25398:2006	m/s ²	0.31 - 1.28				
In-cab sound pressure level acc. to ISO 6396	dB(A)	68		69		

Ground drive						
Transmission type		Infinitely variable CMATIC ground drive, fully automatic		Infinitely variable hydrostatic VARIPOWER ground drive, fully automatic		
Driving ranges	km/h	0-40 (can be limited)		0-8 / 0-16 / 0-40		
Max. top speed ³	km/h	40	40	40	40	40

Tank capacity overview						
Fuel tank – diesel	l	280	280	205	205	205
Urea tank	l	67.50	67.50	20.00	20.00	20.00
Hydraulic oil – total quantity	l	180	175	180	180	170

Axles						
Front axle		Full floating with 13° oscillation angle on each side		Rigid		
Rear axle ⁴				Full floating with 10° oscillation angle on each side		
Front differential lock		Automatic self-locking differentials		45° self-locking differential in both axles		
Angle of articulation (on each side)	degrees	40	40	40	40	40
Track width	mm	2003	2003	1900	1900	1900
Wheelbase	mm	3500	3500	3025	3025	2975

Service brake						
Design		Hydraulic pump accumulator brake system (multi-disc brake, two separate brake circuits)				
Location		Front and rear axle final drive		Differential housing on the front and rear axle		

Parking brake						
Design		Electrohydraulically operated spring disc brake				
Location		Transmission		Front axle		

SMART LOADING						
Set lifting and lowering heights		●	●	○	○	○
Automatic bucket return position		●	●	○	○	○
Weighing system		○	○	○	○	○

¹ The values shown vary according to tyres, earthmoving bucket (bucket capacity in accordance with ISO 7546, may be up to 10% more in practice, bucket filling level depends on the type of material), kinematics variant, includes all lubricants, full fuel tank, ROPS/FOPS cab and driver. Tyre dimensions and supplementary equipment will affect the operating weight and tipping load.

² In accordance with ISO 14397-1

³ The TORION 2014-1285 models are available for registration as self-propelled work machines with maximum ground speed limitation to 20 km/h or 25 km/h.

⁴ The oscillation angle is limited depending on the tyres used.

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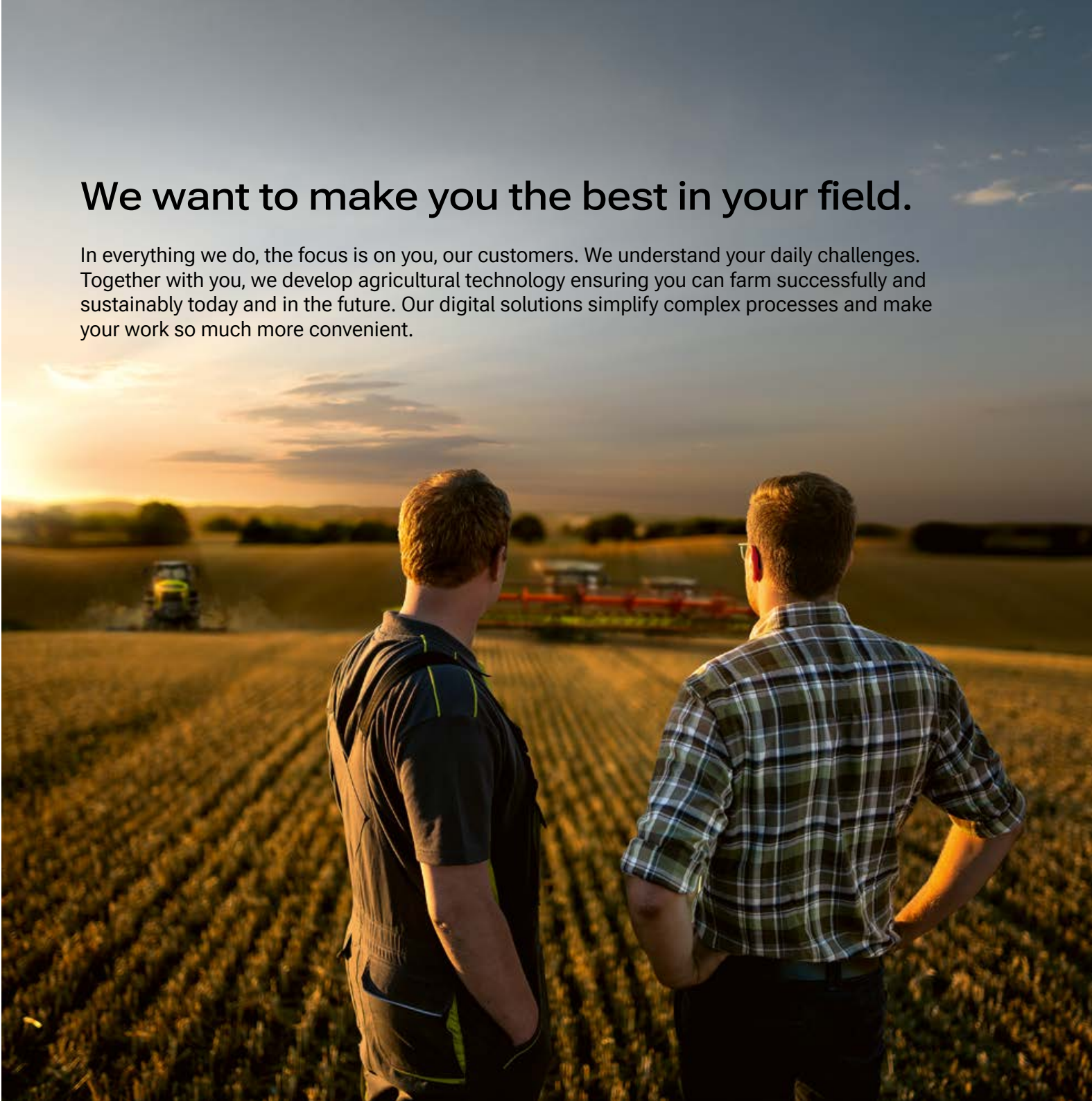
TORION		2014	1913
Tyres¹	Vehicle width²		
23.5 R 25 Michelin XHA 2, I	mm	2650	2650
23.5 R 25 Bridgestone EM VJT, I	mm	2670	2670
23.5 R 25 Goodyear RT-3B, I	mm	2670	2670
23.5 R 25 Goodyear TL-3A+, I	mm	2670	2670
23.5 R 25 Michelin XTLA, I	mm	2650	2650
650 / 75 R 32 Michelin Mega X Bib, AS	mm	2710	2710
650 / 75 R 32 Trelleborg TM 2000, AS	mm	2670	2670
750 / 65 R 26 Michelin Cerex Bib, AS	mm	2890	2890
750 / 65 R 25 Bridgestone EM VTS, I	mm	2880	2880
750 / 65 R 25 Michelin XHA 2, I	mm	2870	2870
750 / 65 R 25 Goodyear TL-3A+, I	mm	2910	2910

TORION		1611 P	1611	1285
Tyres¹	Vehicle width²			
17.5 R 25 Bridgestone EM VJT (L3), I	mm	–	–	2440
17.5 R 25 Michelin XHA2 (L3), I	mm	–	–	2460
17.5 R 25 Michelin XTLA (L2), I	mm	–	–	2460
17.5 R 25 Goodyear RT-3B (L3), I	mm	–	–	2460
17.5 R 25 Goodyear TL-3A+ (L3), I	mm	–	–	2460
20.5 R 25 Bridgestone VSDL (L5)	mm	2480	2480	2480
20.5 R 25 Michelin XHA2 (L3), I	mm	2480	2480	2480
20.5 R 25 Michelin XTLA (L2), I	mm	2510	2510	2510
20.5 R 25 Nokian Hakkapeliitta	mm	2490	2490	2490
20.5 R 25 Goodyear RT-3B (L3), I	mm	2490	2490	2490
20.5 R 25 Goodyear TL-3A+ (L3), I	mm	2500	2500	2500
620 / 75 R 26 Michelin Mega X Bib, AS	mm	2600	2600	–
620 / 70 R 26 Michelin Cerexbib	mm	2620	2620	2620
620 / 75 R 26 Trelleborg TM 2000, AS	mm	2640	2640	–
750 / 65 R 26 Michelin Mega X Bib, AS	mm	2850	2850	–
750 / 65 R 26 Mitas SFT	mm	2880	2880	–

¹ The values shown are indicative and may differ in practice.

² Over tyres.

I = industrial tread, AS = field tread



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