

STOLL



STOLL ProfiLine



Full Power.
No compromises.

TRUE HEROES NEVER COMPROMISE.
They get the job done. With power, understanding and passion.



Home of Quality.

A close-up photograph of a brown and white cow's head and neck, looking through the vertical metal bars of a stall. The cow has a white blaze on its face and a white patch on its neck. The background is slightly blurred, showing the interior of a barn with other stalls and wooden walls. The lighting is bright, suggesting a sunny day.

POWERHOUSE
right from the start.



Top class. Made in Germany

German engineering is known all around the world for its high quality, performance and reliability. That is why we develop all STOLL front loaders with precisely these values in Germany. They combine state-of-the-art technology with innovative solutions – and this is exactly what we expect from high-quality German products.

Experience the full power of the STOLL ProfiLine. The amazing best values in all areas ensure the highest quality in lifting capacity and lifting height, stability and loading speed. In addition to this, the individually selectable accessories from the ProfiLine fit in perfectly with your needs as a farmer or contractor. True professionals for professionals.

Full power – slim design

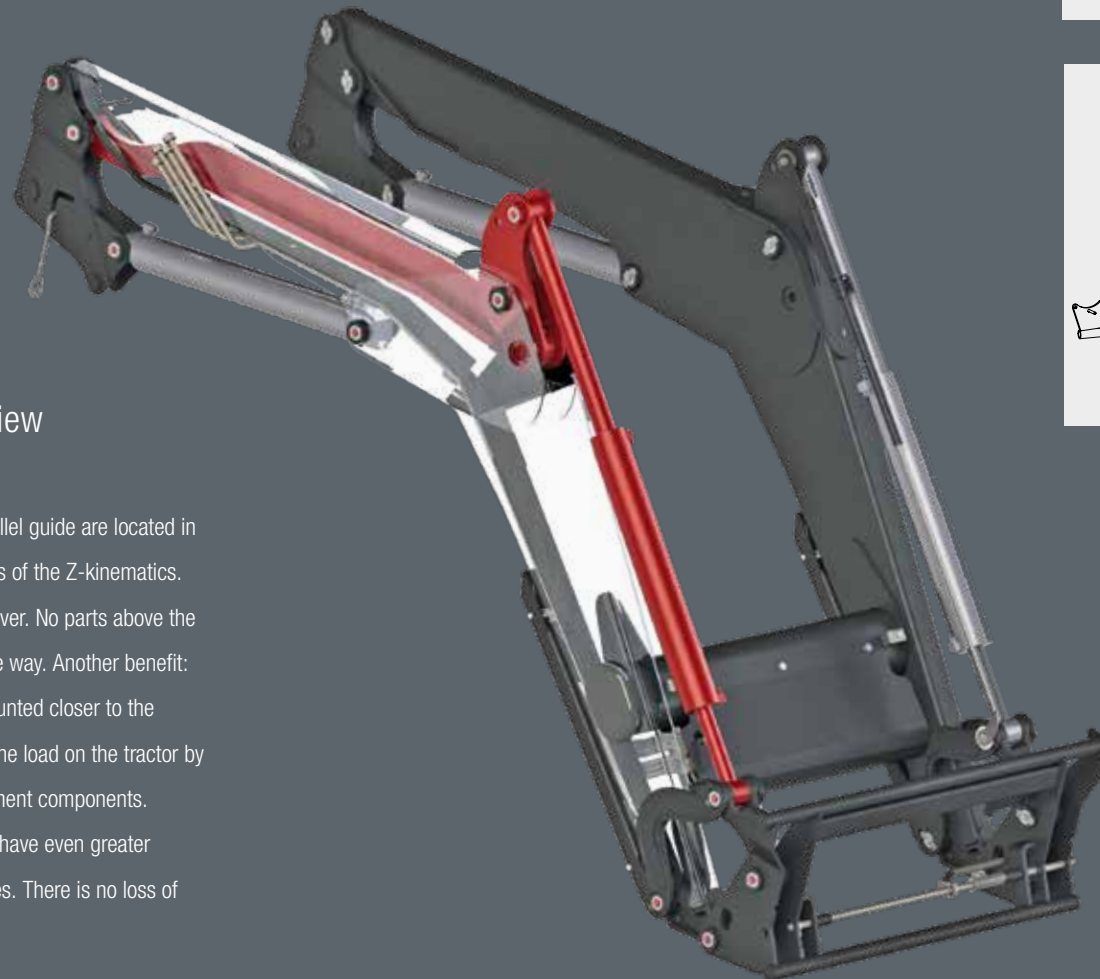
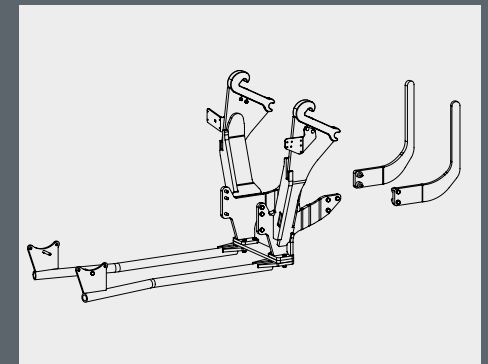
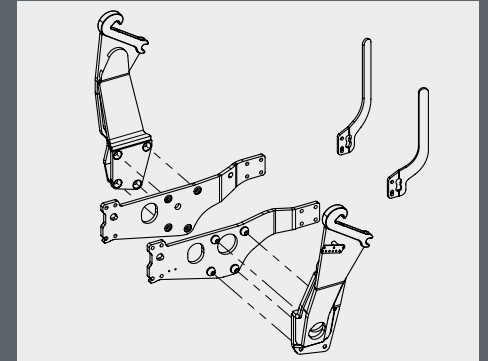
- The ProfiLine FZ front loaders are made of fine grain steel – Advantage: High stability and torsional rigidity, plus a slim and lightweight construction.
- The lifting arm boom is bent from a single piece of steel – The control rods are installed inside the beam. All the hydraulic lines are well protected but can be freely accessed under the beam.
- The tare weight of the front loader is low making it extremely powerful. Having less weight significantly reduces the loading on the front axle of the tractor, thereby extending its service life.
- In order to avoid the need to regularly replace the hose lines by the lifting arms in accordance with DIN 20066, we use wear-free steel hydraulic pipes instead.



Our intelligent designs provide you with a variety of comfort features exclusively from STOLL.

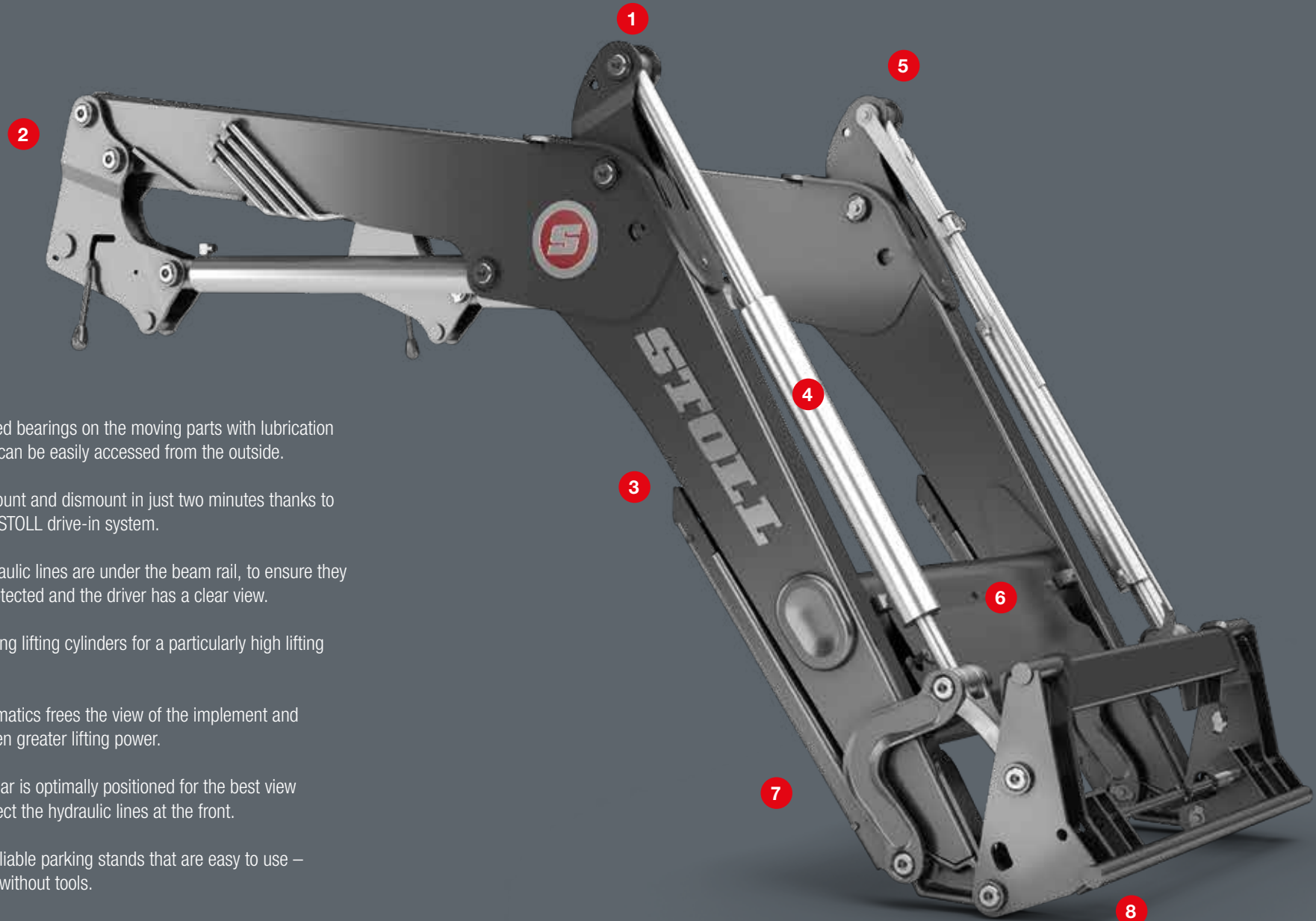
STOLL attachment components -- less load on the tractor and a greater accurate fit

- The attachment components can be installed perfectly on all common tractors – that is why the designers at STOLL individually adapt every tractor model.
- Reduced load on the front axle thanks to the optimal positioning of the attachment components close to the driver's cab.
- Often the windscreen can only be opened together with a STOLL attachment component.
- The attachment components fit perfectly as they are individually adapted to each tractor.



Z-kinematics – best view and high performance

- The rods of the mechanical parallel guide are located in the lifting arm booms – the basis of the Z-kinematics.
- This frees up the view for the driver. No parts above the lifting arms obstruct or are in the way. Another benefit: The front loader can also be mounted closer to the driver's cab – result: Reducing the load on the tractor by optimally positioning the attachment components.
- Front loaders with Z-kinematics have even greater lift capacities and breakout forces. There is no loss of lifting power.



- 1** Wide sleeved bearings on the moving parts with lubrication points that can be easily accessed from the outside.
- 2** Quick to mount and dismount in just two minutes thanks to the proven STOLL drive-in system.
- 3** All the hydraulic lines are under the beam rail, to ensure they are well protected and the driver has a clear view.
- 4** Double-acting lifting cylinders for a particularly high lifting capacity.
- 5** The Z-kinematics frees the view of the implement and ensures even greater lifting power.
- 6** The cross bar is optimally positioned for the best view and to protect the hydraulic lines at the front.
- 7** Safe and reliable parking stands that are easy to use – completely without tools.
- 8** Euro quick release frame for attaching the implement in seconds with semi-automatic or electro-hydraulic locking mechanism.

The measure of all front loaders.

Best performance in terms of lifting power and height. Top values in stability and loading speed. Comfortable to operate: the ProfiLine was specifically developed to fulfil all the needs of professionals.

High end on your farm: Big tractors are on the rise. Of course, at STOLL we also offer the front loaders to go with them. Our ProfiLine reliably surpasses the most gruelling tests. Its versatile usability is legendary. It is our pride and joy.

Great benefits for you.

- The various front loader models fit perfectly on tractors from 50 to over 300 hp.
- Best quality made from fine grain steel for a slim front loader with high torsional rigidity and stability.
- The extremely high values for the lifting capacity and height are impressive.
- Z-kinematics and the optimally positioned cross tube provide the driver with the best view of the implement.
- For maintenance work, all you need is a commercially available spanner to get to the lines.
- Best equipment for optional features so you can work with even greater efficiency: Return-to-level, rapid emptying and re-scooping.
- Depending on the loader model, quick release frames are available for other coupling systems – STOLL offers full flexibility.

BAM! JOB DONE.

The STOLL front loader can be attached and detached in just a few simple steps. This is facilitated by the tool-free parking stands and the hydraulic connection that can be coupled under pressure.



A marvel of generations

Drive-in system.

For more than three decades, customers have been able to attach STOLL front loaders to their tractors with ease. Thanks to the drive-in function. The STOLL drive-in system has constantly been further developed for you and functionally optimised. The good news: Despite all the improvements, one thing has remained consistently the same for 30 years: the drive-in principle.

Because we believe it works to your advantage. That's how your new front loader fits perfectly with our proven console. This system is now part of the basic equipment of all front loaders.

Reliable and used over 250.000 times! And by the way, it was invented by STOLL. The original from STOLL. Loyal to all generations.

Ready to use in under two minutes:



- 1** When driving in, the front loader slides along the attachment until the locking pin meets the upper end of the connection support.



- 2** With the Hydro-Fix all hydraulic lines can be connected to the tractor at the same time. The front loader is lifted slightly to hold the locking pin in position in the catch hook of the connection support.



- 3** The locking lever is pressed downwards and the front loader is securely held in position on the attachment. Then the front loader is raised higher.



- 4** The parking stands can be folded in and out without tools.



Slim solution. Unobstructed view.

Slim design thanks to the Z-kinematics
and fine grain steel

Get in and drive off with a clear view! You can see the entire field or over the roofs of the cars. Because the lifting arms are made of lighter fine grain steel, it is possible to have a particularly slim design. Furthermore, all the lines and pipes in the STOLL front loader are positioned so that they do not obstruct the driver's field of vision: Thanks to the Z-kinematics, the rods of the mechanical parallel linkage are integrated in the lifting arms, while the hydraulic accumulator of the Comfort-Drive is built in the optimally positioned cross tube.

There are some real advantages to the driver having a completely clear view:

They can see everything that happens around the tractor. They can work with greater precision and ease. Precision through safety.

The sleek design of our lifting arm is really impressive thanks to the superior fine grain steel. The real perks: Highest quality and an optimal view from the best position.

Clear view!



Like on a bed of straw.

Smooth driving even on bumpy terrain – thanks to our Comfort Drive damping system

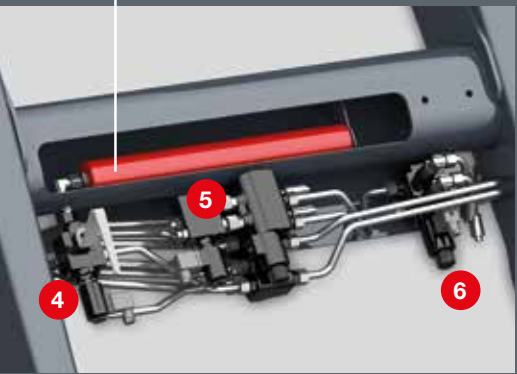
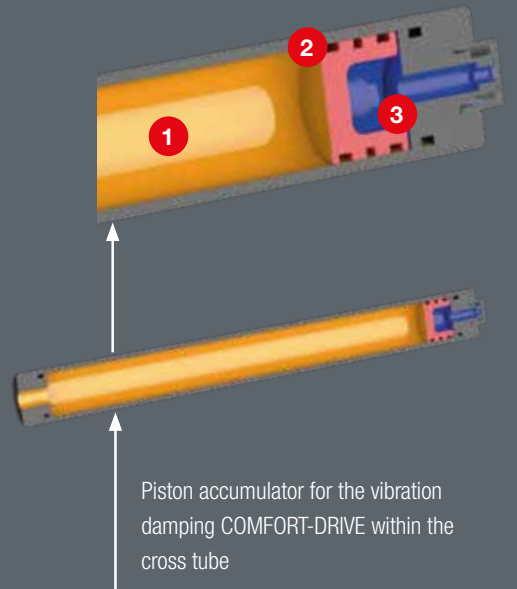
- Whether on roads or fields: Wherever the ground is uneven, Comfort Drive smoothly absorbs the bumps.
- This accessory feature reduces the impact of the loader and implement – a plus point: the vehicle is protected. The driver's back is also very grateful.
- Good to know: Because the hydraulic accumulator used, is built into the traverse of the lift arm, the external parts do not cause any obstructions. A free view for you.
- Conclusion: Comfort Drive is a high-level solution from STOLL.

How does Comfort Drive work?

A piston accumulator is installed in the front loader's cross tube – directly above the central hydraulic block. This is filled both with oil and nitrogen. This cushions any vibrations that arise when the tractor is in motion, as the nitrogen spreads out and pushes back the oil. Comfort Drive is particularly stable and effective for everyday use.

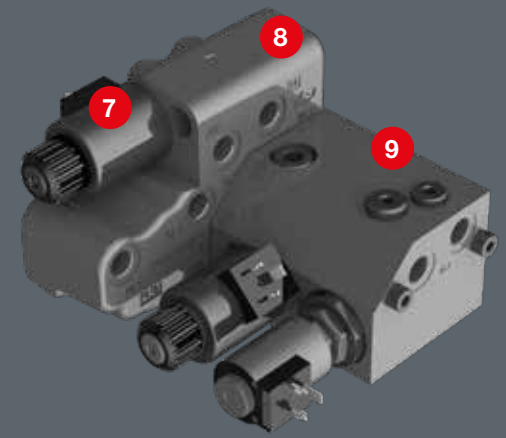
The advantage: Comfort Drive is particularly stable and effective for everyday use.





Piston accumulator for the vibration damping COMFORT-DRIVE within the cross tube

- 1** Oil
- 2** Piston accumulator is at the stop
- 3** Nitrogen
- 4** Mech. or electro-hydr. cut-off valve for COMFORT-DRIVE
- 5** Electro-hydr. implement locking mechanism
- 6** 4th hydraulic circuit
- 7** 3rd hydraulic circuit
- 8** Central hydraulic block
- 9** Extension block



The accessory function Comfort-Drive reduces the impact between the loader and the implement – Result: Both man and machine suffer less wear and tear! Thanks to technology!



INTELLIGENT OPERATION.



Manual or automated. Our technology
always works for people, with people.
You stay in complete control.



Everything under control.

Ergonomically shaped and easy to handle – everything is under control with the STOLL control units. Customers have lots of requests when it comes to the controls: Some drivers want to work manually and be in control of everything, while other drivers prefer to have an automated control system. Our practical STOLL models offer tailor-made features for every need. Find the right candidate for you.



Base Control

- Greater operating comfort safely guiding the loader with precision.
- Integrated push-button switch for additional functions.
- Five basic functions: Lifting, lowering, scooping, dumping, float position.
- Locking function when driving on the road.



Pro Control

- The loader operation is purely electrical making it particularly light and comfortable.
- Six basic functions: Lifting, lowering, scooping, dumping, float position, float position for implements.
- Membrane keys for additional functions (rapid emptying, 3rd/4th pilot circuit, lock function for driving on the road, implement locking mechanism, ComfortDrive and halved speed).



Trac Control

- The front loader is operated with the tractor's own proportional single-lever control units.
- The ergonomic Trac Control replaces the original tractor joystick without push-buttons for the electric functions.
- Five basic functions: Lifting, lowering, scooping, dumping, float position.

RTL. Return-to-Level.

Optimum positioning of the implement at the push of a button – thanks to Return-to-Level.

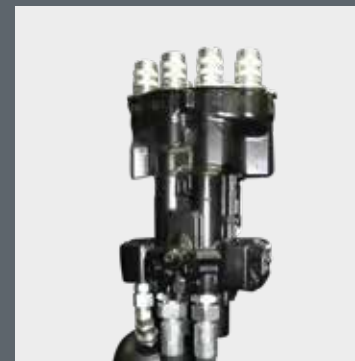
- There is now an end to finding the right position for the implement. Can't see the setting for the implement in the lowest position? No problem! The implement automatically repositions itself back to the preset position at the touch of a button.
- All it takes is the push of a button – and once the implement is set, it will return to the same position again and again with the selectable level control: This saves on time and patience.
- It is extremely easy to use and works off a mechanical basis: Loosen, adjust and tighten the lever.
- The highlight: Because the return-to-level is integrated into the lifting arms, the driver can always access this function, even if they have mounted the front loader onto another tractor.
- The electric selectable rapid emptying feature is available as standard with the Return-to-Level.
- Clear advantage: Thanks to the automatic levelling and rapid emptying, it is faster and more efficient to load.





HYDRO-FIX – the fast hydraulic connection

- All the hydraulic lines can be quickly connected and disconnected – with just one hand.
- The Stoll Hydrofix (rectangular, 4-way coupling) can be coupled or uncoupled under high pressure as a standard feature.
- Stoll provides further Hydro-Fixes for common makes of tractors.
- The cover mechanism installed as standard protects the system from large dirt particles. The system must always be kept clean to ensure it works properly.



All the switches in the right place – thanks to the valve

- The new valve block is characterised by its compact design – this saves on space and weight and makes it easier for the workshop to install. It was specially designed for front loader operation and can be easily installed directly below the Hydro-Fix.
- In conjunction with the Pro Control joystick, the switches for the additional functions of the front loader are positioned directly on the joystick.
- The valve block is available for both the Pro Control as well as for the Base Control control system.

Fits every time!

Implement filled to the brim – thanks to the largest possible tilt angle and the rescooping function

- Nothing falls out: There are no trickle losses.
- Maximum tilt angle: Between 40° and 46° on the ground – up to 69° by rescooping when lifting.
- The rescooping function is an exclusive STOLL feature! The shovel is always full, no trickle losses.
- When loading, more fits into the implement – and it stays where it is supposed to.

Result: The loading performance increases noticeably.



This is what it looks like in action: A full bucket remains full even when it is being lifted, thanks to the rescooping function. The result: No trickle losses, high loading capacity. The system is as simple as it is ingenious. After the bucket has been lifted, it can be tilted 24° again while the loader is lifting. This keeps the load in the bucket.

Attaching implements is child's play.
Full speed ahead!

Attaching the implement... just a quick pit stop



1 Drive in and hook into the front loader.



2 Tilt the implement – the locking mechanism automatically slots into place.



3 Plugging in the hydraulic connection.

Every implement fits – even those from other manufacturers

- The customer can attach all implements to a STOLL front loader with Euro-frame
- Coupling systems from other manufacturers also fit on a STOLL front loader – with our combi-change frame



Tenias adapter



Euro



Euro + Alö



Euro + (MX) - FR



Euro + SMS

From innovation comes function.



3rd and 4th pilot circuit (here as a plug-in coupling)
For the easy operation of hydraulic implements such as silage tongs, bale grabbers or bale stackers.



Implement Fix
2-way coupling for the 3rd and 4th pilot circuit.



Implement locking mechanism at the touch of a button, making it even more convenient to change the implement without having to get out of the cab – with HYDRO-LOCK.



To connect the hydraulic lines even more quickly, Hydro-Fix is also available for mounting the implements.

When we develop our innovations, we keep one very important thing at the forefront of our minds: How it will help you in your everyday jobs. We are only satisfied when we know that you can get the best out of yourself and your machines out on the field or in the stables.



Anti-lowering guard

- Protection against unintended lowering of the front loader.
- Complies with the requirements of EN 12525/A1.

Does not meet the legal requirements with regard to work baskets.



Comfort hydraulics

- Pre-selection switch for activating the front loader or rear hydraulics; it is not possible to trigger them both at the same time.

The possibility of the system being activated externally must be eliminated by a correct installation.



The real third pilot circuit: REAL³

- Third pilot circuit for controlling the implements independently of the front loader control.
- The implement is supplied directly by the tractor's hydraulic pump.
- Optimum use of the implement through the simultaneous execution of its functions.



For a great view: The camera system

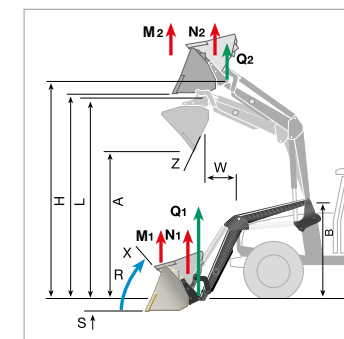
- Targeted and precise work – the driver can see better thanks to the camera system.
- Greater comfort and improved efficiency when working with the implement.

Obsessed with technology?

Here's an overview of all the data!

In addition to the day-to-day business on an emotional level, many of our customers also have a sound knowledge of numbers, data and facts. We will gladly offer you the transparency of info you need.

FS / FZ ProfiLine			8		10		20		30		40		50		60		80.1		100	
			8.1		10.1		20.1		30.1		40.1	45.1	50.1	60.1	80.1	100				
Type			FZ	FS	FZ	FS	FZ	FS	FZ	FS	FS	FZ	FZ	FZ	FZ	FZ	FZ	FZ	FZ	FZ
Suitable for tractors with kW/hp		kW hp	35-65 50-90		50-75 70-100		50-80 70-110		65-90 90-120		65-105 90-140		90-130 120-180		110-170 150-230		130-200 180-270		> 184 > 250	
Lifting force in the implement's pivot point	below above	Q1 Q2	daN daN	2,060 1,590	2,120 1,590		2,620 1,960		2,380 1,830		2,730 2,100		2,900 2,360	3,030 2,600	3,190 2,730	3,690 3,160				
Lifting force (blade) 300 mm before the pivot point	below above	N1 N2	daN daN	2,060 1,590	1,740 1,320	2,120 1,590	1,810 1,330	2,620 1,960	2,250 1,640	2,380 1,830	2,060 1,550	2,360 1,780	2,730 2,100	2,900 2,360	3,030 2,600	3,190 2,730	3,690 3,160			
Lifting force (pallet) 900 mm before the pivot point	below above	M1 M2	daN daN	2,060 1,590	1,320 980	2,120 1,590	1,400 1,010	2,620 1,960	1,730 1,240	2,380 1,830	1,620 1,190	1,870 1,300	2,730 2,100	2,900 2,360	3,030 2,600	3,190 2,730	3,690 3,160			
Breakout force 900 mm before the pivot point		R	daN	1,950	1,730	2,690	1,770	2,690	2,240	2,690	2,460	2,460	2,950	3,510	3,490	3,770	4,850			
Maximum lift height in the implement's pivot point		H	mm	3,450		3,740				4,070				4,260	4,460	4,760	5,020			
Overloading height (H-210)		L	mm	3,240		3,530				3,860				4,050	4,250	4,550	4,810			
Dump height		A	mm	2,380		2,690				3,010				3,210	3,410	3,700	3,970			
Dump width		W	mm	670		700				785				785	800	840	880			
Digging depth		S	mm	210		210				210				210	210	210	210			
Pivot point of lifting arms		B	mm	1,660		1,780				1,930				1,930	2,030	2,170	2,430			
Tilt angle	below	X	°degree	40		46				46				46	46	46	42			
	re-scooped	X1	°degree	51	-	65	-	65	-	68	-	-	68	68	69	69	69			
Dump angle	below	V	°degree	94	158	93	154	93	154	103	154	154	103	103	150	154	146			
	above	Z	°degree	61		59				59				59	59	54	54			
Pump output rate			l/min.	50		50				60				70	70	80	80			
Stroke time			sec.	4.4		4.8		5.9		4.9		5.7		5.5	6.2	7	8			
Tilting time, implement			sec.	0.6	0.5	1.3	0.6	1.3	0.8	1.1	0.7	0.7	1.2	1.3	1.3	1.4	1.0			
Dumping time, implement			sec.	1.7	1.6	2.2	2.2	2.2	2.6	1.9	2.5	2.5	2.1	2.1	2.1	2.3	2.0			
Weight, lifting arms without implement			kg	406	356	465	420	475	425	540	470	480	580	680	790	850	1,250			



Lifting arm type	Lifting arm width
8/10/20/30/40/45/50/60	Standard lifting arms (916 mm lifting arm width)
8.1/10.1/20.1/30.1/40.1/45.1/50.1/60.1/80.1	Wide lifting arms (1100 mm lifting arm width)
100	Wide lifting arms (1460 mm lifting arm width)

The values given are averages. Depending on the type of tractor, these values may deviate up or down.
 * Due to the risk of the tractor tipping, front loader work may only be carried out when there is a suitable weight positioned at the rear.

Calculated at 195 bar hydraulic pressure!



FZ lifting arms with mechanical parallel linkage:
Powerful solutions for professionals by professionals



FS lifting arms without parallel linkage: For
tough jobs with the best price-performance ratio

Standard equipment FZ / FS ProfiLine	FZ loader	FZ loader / Return-to-level	FS loader
Front loader lifting arms made from fine grain steel	•	•	•
Z-kinematics, internal control rod	•	•	–
Concealed hydraulic pipes with service access	•	•	•
Dual-action hydraulic cylinders	•	•	•
Implement cylinder, synchronisation	•	•	–
Visual display	•	•	•
DX bushings for all loader pivot points	•	•	•
Automatic mech. implement locking mechanism	•	•	•
Optional equipment FZ/FS ProfiLine			
Electric hydr. implement locking mechanism	•	•	•
HYDRO-FIX: Quick hydraulic connection	•	•	•
3rd and 4th pilot circuit	•	•	•
Single-lever control, Bowden cable	•	•	•
Proportional elec. single-lever control unit	•	•	•
ECO-Pro proportional control	•	•	•
COMFORT-DRIVE (also elec. switchable)	•	•	•
Re-scooping function	•	–	–
Implement rapid-emptying	–	•	–
Simultaneous raising of the lifting arm and emptying of the implement	–	•	–
Rapid emptying	–	–	•
Return-to-level (level automatic)	–	•	–

Subject to change without notice. Illustrations shown partly with special equipment. Front loaders must always be stored on the ground with a suitable implement. For the purposes of presentation, some illustrations have been omitted. The STOLL accessories and the components offered are intended exclusively for the purpose of the normal use with STOLL front loaders.



Wilhelm STOLL Maschinenfabrik GmbH
Bahnhofstr. 21 | 38268 Lengede
Phone: +49 (0) 53 44 / 20-222
Fax: +49 (0) 53 44 / 20-49182

www.stoll-germany.com