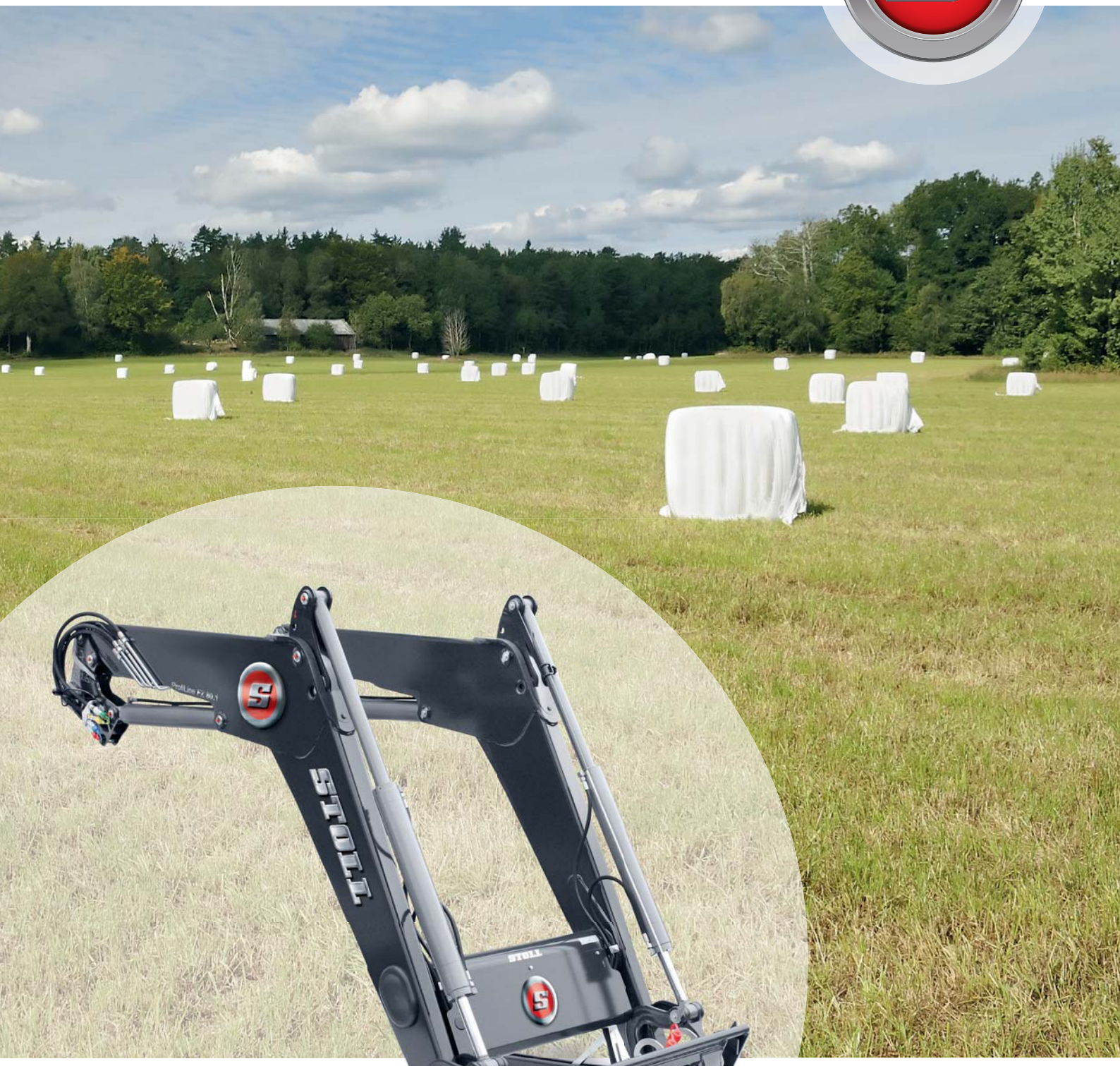
FZ/FS PROFILINE.



STOLL
The Loader Specialist.

INNOVATIVE FRONT LOADER FOR ALL HP

The Profi front loader from STOLL helps professionals work hard everyday.

"High quality is of paramount importance to me, so I decided to choose a front loader made by STOLL. It was not a problem attaching it onto my tractor because STOLL offers customised attachments. It is also easy and a pleasure to use."

CLASSES.

1. *The wide bushed bearing of all moving parts even withstands the toughest of stresses. The externally accessible lubrication points simplify maintenance.*
2. *The hydraulic lines are protected as they are routed under the loader arms and thus ensure a clear view of the tool and load.*
3. *Swing beams made of high-strength steel are slimmer and so will not only reduce the weight, but also provide a better view.*
4. *Z-kinematics - for the best view from the cab to the tool.*
5. *The flat, oval crossbar positioned far forward permits the best vision.*
6. *The safety support legs are adjustable. They can be operated without tools and are folded up tightly to the swing beam.*
7. *Lever made of forged steel for excellent stability and torsional rigidity.*
8. *The tool locks on automatically and even electro-hydraulically on request.*

Front loaders by professionals for professionals

Developed by professionals for professionals: mechanical parallel control with Z-kinematics, re-scooping function, rapid emptying and time-saving return-to-level function (RTL) are some of the main features of the STOLL ProfiLine front loader. In addition, it offers excellent visibility, thanks to the control rods being in the loader arm and having a flat cross tube. The protected hydraulic lines laid under the loader arm give it a smooth appearance. Every inch of this loader is well thought and exudes the highest quality.

The STOLL FZ/FS front loaders for tractors from 50 to over 300 hp bring together all the properties such enormous lifting capacity, outstanding stability, high loading capacity and modern design for a modern and innovative loader concept. The practical functionality and the many intelligent technical solutions will impress you in their daily use owing to their high loading capacity and easy operation.

POWERFUL LIFT.

The Z-kinematics ensures high lifting and breakout forces throughout the entire loading process.

Neither a control rod nor hydraulic lines interfere with the driver's field of vision.

It all depends on the kinematics

For those of you who want powerful lifting and loading properties, you need the right kinematics. This means not only a robust design, but also excellent visibility. These are exactly the properties that you may expect from a STOLL front loader. Also, STOLL is the first manufacturer to position the control rod within the swing beam. This ingenious solution improves not only the field of vision during loading, but it also simplifies the construction of the front loader as a result.

By doing away with the overhead control rods, the driver has a clear view of the load and the track he is travelling on, both forwards and to the side, making for secure and faster loading work. In addition, the Z-kinematics facilitates an enormous lifting capacity. With up to 3,000 daN (FZ 100, tool rotation point above), a STOLL front loader can reach values that can be seen.

Excellent loading performance through optimal adaptation to the tractor

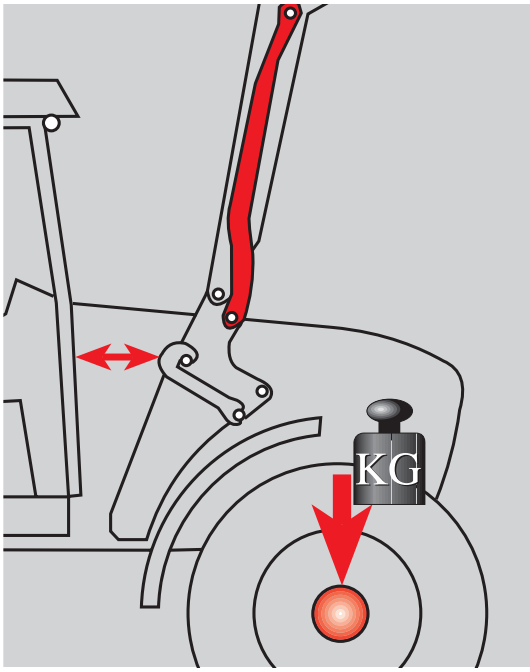
The Z-kinematics with internal control rods has a positive effect on the ideal positioning of the front loader on the tractor. Because without an overhead control rod, the front loader can move closer to the cabin, i.e. nearer to the centre of gravity of the tractor. The windshield can be opened in the majority of cases, and the load on the front axle is reduced. The tractor is under less loading, thus increasing its service life.

STOLL has the greatest experience in working with fine-grain steel for front loaders

All loaders in the FZ series are made of fine-grain steel of the highest quality. There are good reasons for this: fine-grain steel gives the front loader-arm the exceptional stability and robustness that you can expect from a loader of this quality. The design of the loader arms nested inside each other guarantees excellent stability and torsional rigidity, a strong collar-like component on the overlap especially reinforces this area. The cross-section of the rods ensures extra stability with a width of 116 mm.

Each bar of the front loader is bent from a single piece. The control rod is in the cavity, below are the hydraulic lines.

High lifting and tensile forces are guaranteed by the robust Z-kinematics.



Thanks to the specially adapted attachment parts, the front loader is positioned in such a way that the front axle of the tractor is not burdened with extra weight. At the same time, the windshield can continue to be fully open in many cases.

WHAT CANNOT BE SEEN, CANNOT HINDE

Pipes and hydraulic lines are laid out of sight for an unobstructed view.

"You notice the difference instantly: no obstructive lines and smooth inner surfaces of the struts. It protects your eyes and I can concentrate fully on my loading work. A particularly practical feature is that the hoses and fittings that may need to be worked on when servicing the unit can be quickly accessed at any time - an outstanding solution!"

R.

Concealed hydraulic lines

The engine hoods of the tractors are getting wider, so even the small distance to the load beam becomes ever more critical. STOLL offers a special solution for this problem. Ingeniously simple, logical and practical for various reasons: the metal lines are laid in a protected space beneath the loader arm.

A big plus for ease of service

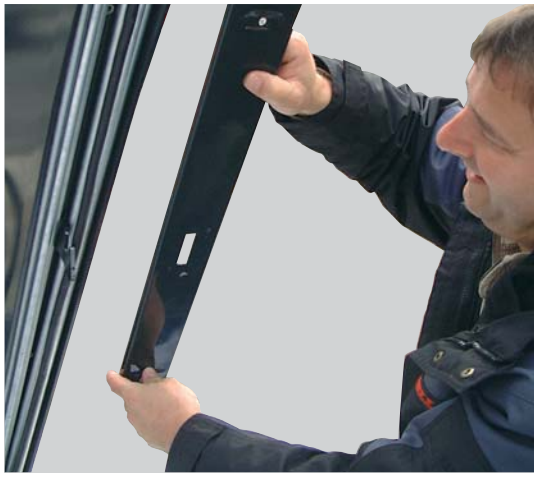
A removable protective sheet covers the lines to protect them from damage and also for aesthetic reasons. In a few simple steps, the cover is removed and all hydraulic lines are easily accessible.

Safely parked

STOLL has thought of everything when you leave your loader, you can place the hydraulic hoses, the HYDRO-FIX and the electrical connector securely into a holder provided just for this purpose. The FZ series offers practical solutions for every detail.

1 *Clean and neatly laid under the beams: the hydraulic lines of the FZ loader are still quickly accessible at any time.*

2 *Far towards the front and oval: The robust crossbar does not obstruct the driver's view.*



For the control and maintenance of the lines, the protective sheet on the underside of the struts can be quickly removed.

EVERY BEARING HAS ITS BUSH.

STOLL front loaders focus on quality in every detail.

Front loaders for professionals have bushes

Before you decide on a new ProfiLine front loader you must always cast a critical glance over the bearing points of the individual parts and components. Because this is where the hobby front loader differs from those that were designed for hard use in professional enterprises.

That is why the utmost attention has been given to the STOLL ProfiLine front loaders, even its bearings, right from the start. STOLL exclusively uses the proven DX-composite material for all bushings. The bolt diameter of the ProfiLine front loaders is, depending on the size of the loader, 30-40 mm - even an unsurpassed 40-50 mm at the pivot point! This guarantees a safe working premise for all uses. Of course, all the bearings can be lubricated as they are easily accessible from the outside.

For cost reasons, many manufacturers often only make the heavily loaded bearing mounts in the same sheet thickness used for the beams. STOLL on the contrary makes considerably higher demands on the durability of a bearing. Therefore, all bearings are reinforced on both sides with 22 mm welded bearing bushes on all new FZ loaders - further proof of the high standards of quality STOLL front loaders live up to.

Thanks to these high-quality technical solutions, with every ProfiLine front loader you can enjoy the benefits of a long service life - especially after years of hard use as a loader.

All lubrication points are easily accessible from the outside.

Robustly designed bearing bushes made of DX composite.

Each bearing is individually lubricated.

WHO INVENTED IT?

The original attachment and drive-in system from STOLL has been going strong for over 25 years.

„If you only have a tractor for all your work, you do not always need to carry the front loader around. The drive-in system is practical and, above all, fast. It only takes me just over a minute to attach it. I already had a STOLL loader 15 years ago with this drive-in feature. I was impressed by the fact that the loader is still firmly in place, even after all this time, thanks to the adjustable tension spline connection."

It could hardly be any quicker

A quicker installation and removal of the front loader has always been one of STOLL's strengths. Even in the standard version, the tractor is hydraulically connected to the front loader with four flat plug couplings. The colour coding of each connection eliminates any confusion. The arrangement in a row each behind the other improves the visibility towards the front.

One plug for all the lines

More comfort, the HYDRO-FIX hydraulic connection. Four ports are either simultaneously connected or released by means of a handle. There is also a HYDRO-FIX for the quick coupling of tools in the 3rd and 4th control circuit: the STOLL Tool-Fix. This reduces the set-up times. During the coupling and uncoupling process there are no significant leakages – that is why the Tool-Fix is also an environmentally friendly solution. If the attachment tools are changed more often, the Tool-Fix saves time and increases the ease of use.

Connection of the loader

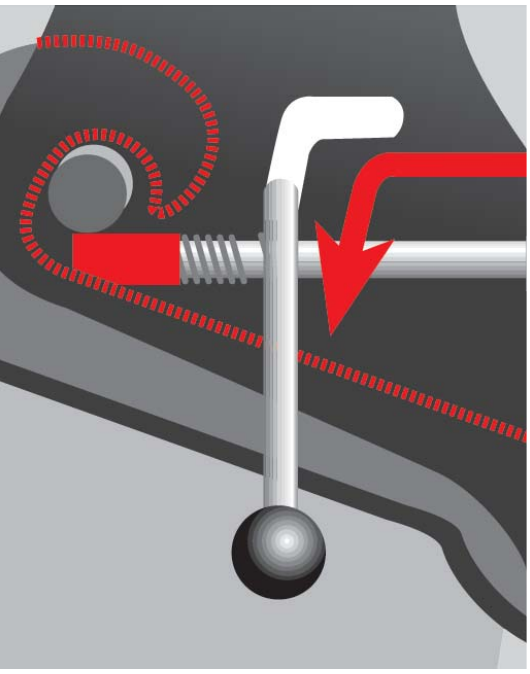
The original STOLL drive-in system is also used in the ProfiLine front loaders. The loader is compatible for older model years with hook connections.

Safety parking supports

The front loader is secure on the strong, self-locking parking supports. The locking and unlocking mechanism is intelligently triggered and effortless to handle. The parking supports fold up during use and cover the hydraulic lines installed in the loader arm.

Visual display for positioning the tool

Anything that could facilitate and improve the loading has actually been implemented in the new ProfiLine front loaders. Even the visual display for the tool has been completely revised. This can now be adjusted with greater ease and can be seen better.



Easy drive-in and lock the loader securely in place with a single hand movement.

The sturdy die-forged uptake connections of the STOLL drive-in loader system. Stable and no wear.

The loader is quickly is attached and locked. It only takes just over a minute - and the tractor is turned into an agricultural „loading machine".

DRIVING SAFELY IN GREAT COMFORT.

STOLL COMFORT-DRIVE eliminates any annoying vibrations and pitching movements.

It is all a question of hydraulics

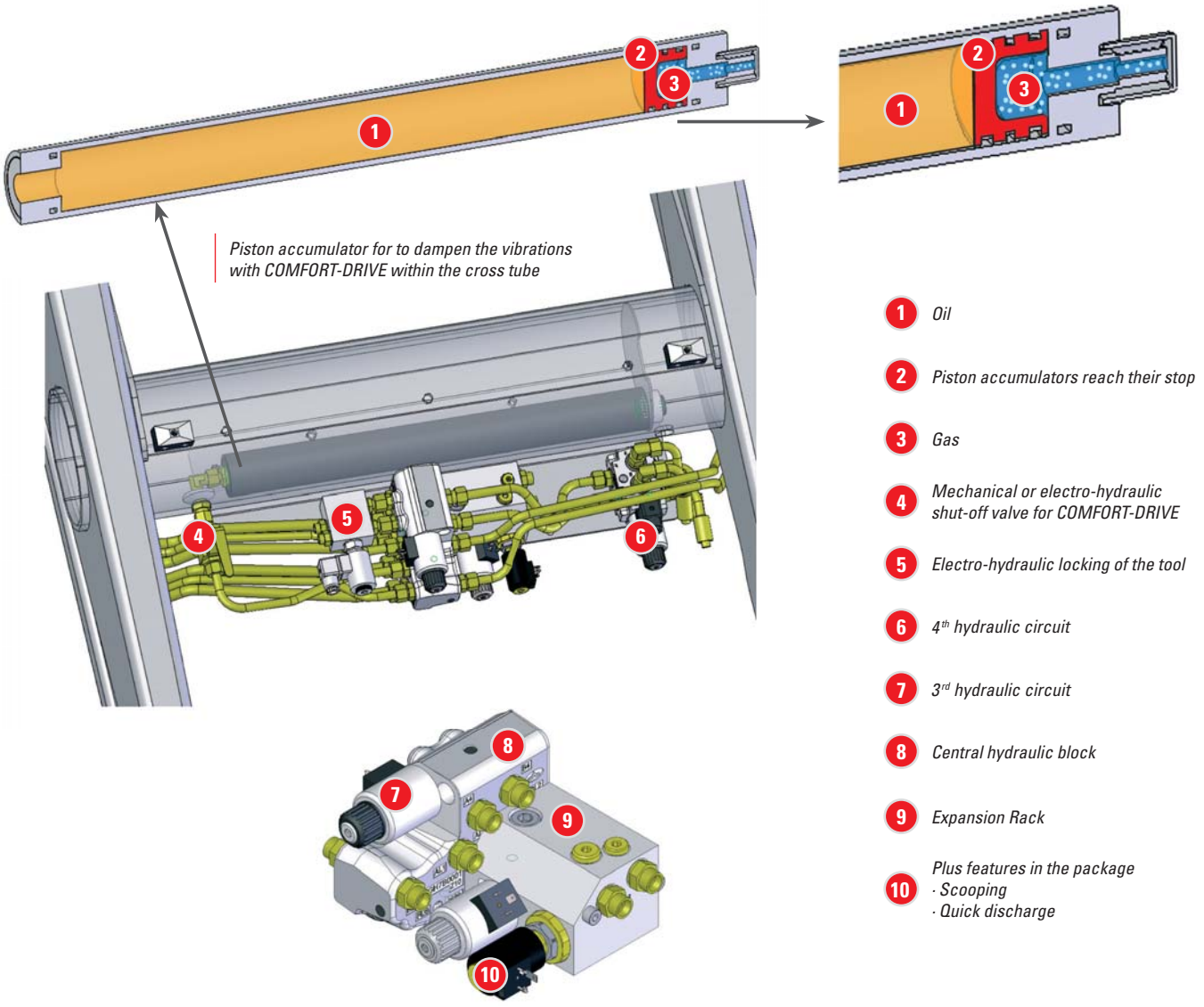
With the new ProfiLine-loaders almost everything has been completely redesigned and improved in every detail. The central hydraulics of the front loader were not excluded from this scrutiny.

The result is impressive

The central hydraulic block with the extension block has been compactly placed behind the cross tube. Here, nothing hinders the view of the tools and cargo. The entire hydraulic unit is protected by a sturdy cover against dirt and damage. A double-acting pressure relief valve (PRV), which responds at 210 bar, secures the cylinder tool from overloading with heavy loading work.

No pitching, no swinging

The damping system of the COMFORT-DRIVE (electrically operated as an option) almost completely eliminates the annoying pitching of the tractor during transport when the front loader is attached. The front loader is spring-mounted by a virtually indestructible piston accumulator, which is built into the cross tube. STOLL thus rids the system of nitrogen bubbles. With a large volume and a low pre-load pressure, this system even dampens at low loads. In addition, the piston accumulators can be subsequently charged at specialist stores for higher pressures. A 3rd control circuit is already fitted in the central hydraulic block for the attachment of hydraulically operated tools.

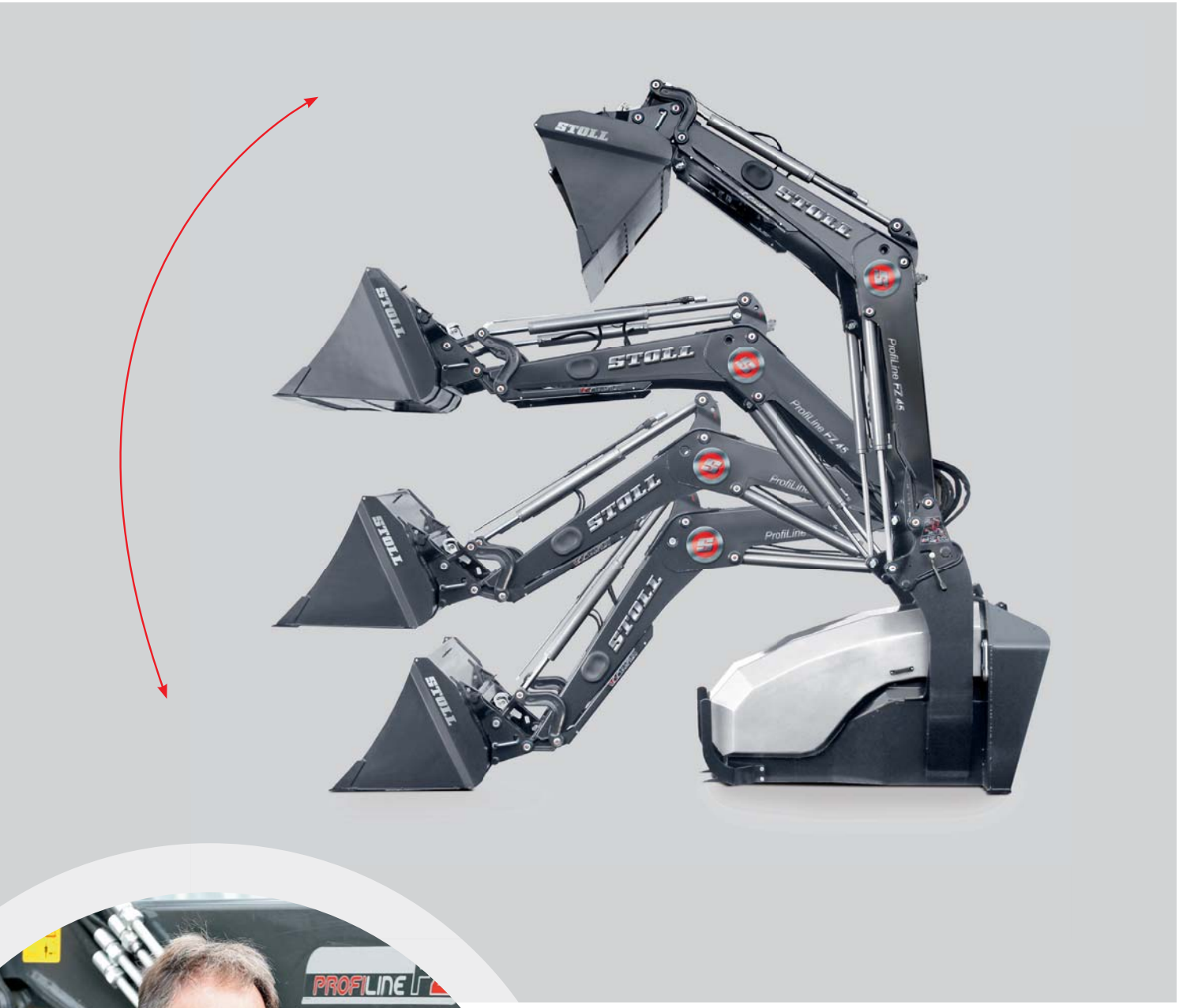


Piston accumulator for to dampen the vibrations with COMFORT-DRIVE within the cross tube

1. *Oil*
2. *Piston accumulators reach their stop*
3. *Gas*
4. *Mechanical or electro-hydraulic shut-off valve for COMFORT-DRIVE*
5. *Electro-hydraulic locking of the tool*
6. *4th hydraulic circuit*
7. *3rd hydraulic circuit*
8. *Central hydraulic block*
9. *Expansion Rack*
10. *Plus features in the package*
    · Scooping
    · Quick discharge

FASTER MORE CONVENIENT LOADING.

Automatic return-to-level (RTL) and re-scooping function to increase the load capacity.



„The STOLL front loader offers me the best opportunities for my tasks. Whether I am putting straw bales in the barn or loading grain. The automatic return-to-level (RTL) has particularly impressed me. Loading could not be any simpler.“

Higher loading capacity

The easier it is to operate the loader, the higher the loading efficiency, i.e. the more that can be loaded per hour. Professional enterprises and contractors, in particular, where various drivers have to operate tractors and front loaders, find that the re-scooping function, quick tool emptying feature and automatic return-to-level (RTL function) provide for excellent results.

At ground level with the push of a button

By pressing a button, the bucket automatically returns to ground level after discharging its load. This makes it easier for the driver when he is working for hours on end. For continuously repeating loading work in particular, the automatic level system can considerably increase the loading performance. The driver can basically concentrate on the working processes, such as precise approach to sideboard, loading wagons and hoppers. The component parts of the automatic level system are installed in the front loader. Thus, the STOLL return-to-level feature can be used independently of the single lever control system.

Always a full bucket

Previously the parallel guide could not be switched off with bucket loading work that had a mechanically guided parallel loader. This inevitably resulted in trickle losses and an inadequate filling of the bucket. The ProfiLine front loaders can re-scoop, thanks to the use of the residual stroke of 63 mm in the lifting cylinder of the tool.

The bucket can be tilted a further 24 degrees, to reach a tilt angle of up to 69 degrees: Thus, the load is scooped into the bucket when lifting. This has the positive effect of eliminating the trickle losses, it means the bucket is always full and it increases the loading performance. Benefits you will quickly experience in practice and will not want to miss out on. In the 10-100 PLUS loaders you can enable this function quickly and easily by pressing a button on the lever.

The bucket is filled.

Thanks to the re-scooping function, the trickle losses are as good as gone

Time saving by quick dump.

EXTENSIVE SELECTION OF QUALITY ATTA AND QUICK-CHANGE FRAMES.

Tool change in under 30 seconds.

CHMENT TOOLS

Productive work

To optimize the work, both, frontloader and implements together result in a perfectly matched unit. STOLL has developed the right tool range for professional use. Here the user will find quality tools for work involving moderate to severe stress. The range includes all the standard tools: buckets, tools for cutting silage, bale handling, loading pallets and forestry tools. All implements are equipped with a EURO quick-fit frame for quick mounting and dismounting.

Changing the attachment tools quickly and safely

The EURO quick-change frame for STOLL attachment tools is a proven STOLL design and creates a stable and secure connection from the loader arm to the attachment tool. The automatic locking mechanism fixes the tool automatically in place when it is taken up. Both locking pins are released in one movement to set the tool down.

There is also a locking mechanism with a convenient electro-hydraulic operation, which saves you having to dismount. The attachment tools can thus be easily changed within about 30 seconds. So you can be productive in your work.

The quick-change frame tool, compliant with ISO/FDIS 23206, is compatible with all Euro tools that are equipped with a 40-shaft and 20-pin.

The quick-change frame can be safely and easily operated from outside: the driver no longer has to either bend over the beams or reach in through the beams to get to the release. A significant contribution to accident prevention and safety at work.

The attached equipment can be safely released from the side.

Simply drive towards to the tool with the quick-release frame ...

... it locks in place automatically when the tool is tilted.

STOLL ALWAYS HAS THE APPROPRIATE M

STOLL offers quick-change frame for all the major systems.

"We have several tractors on the farm, but all of them only use one make of front loader… We have been able to rely on STOLL for 25 years. I was truly impressed by the extensive range of tools. At STOLL I can get everything I need - from the standard bucket to sophisticated hydraulic tools."

OUNTING FRAME.

Securely connected

The quick-change frame creates a secure and fast connection between the tool and the front loader. In this case, the Euro model represents the most widely used system. In different regions, there are a variety of other quick-change frame systems and various associated hooks on the tools. For these cases, STOLL offers other quick-change frames in addition to the Euro model. Thus, existing work tools can still be used.

Euro

Euro + Alö

Euro - Fr

Euro + SMS

The hydraulic tool locking mechanism HYDRO-LOCK is available on request.

A HYDRO-FIX on the quick-release frame is also available for the hydraulically actuated tools.

CONTROLS ON COMMAND.

Control lever suitable for all uses and tractors.

Modern joystick with additional function

The new ProControl II joystick allows the operation of the additional optional ancillary and operating functions of the ProfiLine front loader via a built-in keypad on the control lever. The driver controls the additional functions such as COMFORT-DRIVE, tool locking mechanism, on-off switch for travelling on roads, changeover switch on 3rd control circuit for convenient quick emptying at the touch of a button.

The new membrane keypad unit not only requires less space for installation, but also reduces the effort involved since all the buttons are already pre-installed with their connections. The communication between the buttons is ensured between the joystick and the task controller via the integrated bus system. So during the loading work, the driver has the loader fully under his control with the ProControl II joystick.

Everything in one box

What do you do with all the connections? This is a question that every mechanic asks themselves when mounting a front loader. STOLL engineers turned their thoughts to the specialised trade and, with the new switch box, have made a significant difference in reducing the assembly time required to mount a front loader.

All the connections needed to mount and use the front loader are now clearly stowed away together in a box. The box, which can be positioned anywhere in every tractor cab contains all the switches that are needed to connect the front loader. So when you install it, you can do away with the tedious search for mounting options, plus the effort of cabling and the connection of the functions is reduced to a minimum.

The ergonomic control levers of the Bowden single-lever control unit is mounted within easy reach for the driver in the tractor cab.

The Trac Control joystick to operate the loader with the tractor's proportional single-lever control. The Trac Control joystick to operate the loader with the tractor's proportional single-lever control.

The Pro Control joystick operates the load purely by means of electricity making it therefore particularly smooth and comfortable.

TECHNICAL DATA.

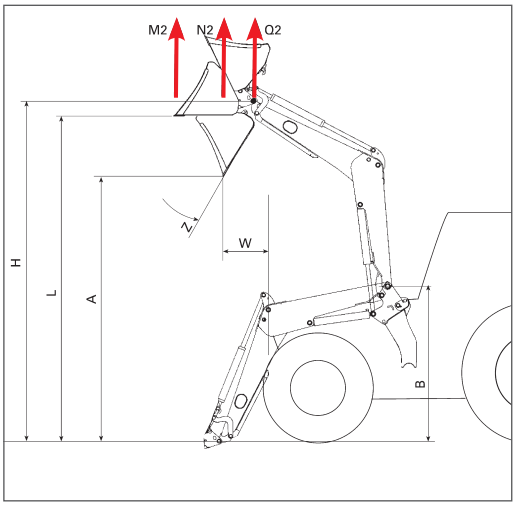
FZ Frontloader

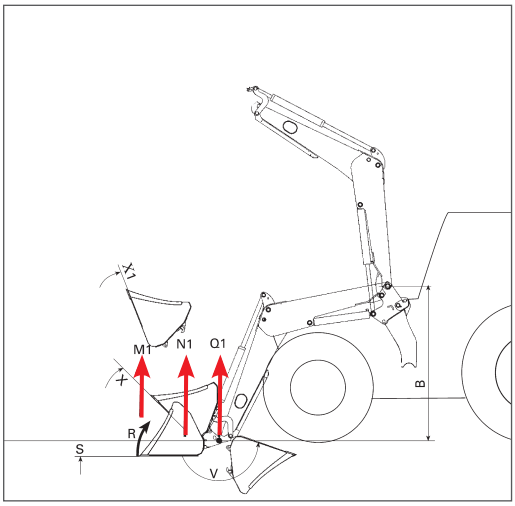
FS Frontloader

Table Equipment for the FZ/FS ProfiLine				
	FZ-Frontloader	**FZ-Frontloader Plus-Function**	**FZ-Frontloader Level-Automatic**	**FS-Frontloader**
Standard Equipment				
Frontloader arm made from fine-grain steel	•	•	•	•
Z-kinematics, internal control rod	•	•	•	–
Concealed hydraulic lines with service access	•	•	•	•
Double acting hydraulic cylinder	•	•	•	•
Cylinder tool, synchronised	•	•	•	–
Visual display	•	•	•	•
DX bushing for all loader pivots	•	•	•	•
Automatic mech. tool lock	•	•	•	•
Optional equipment				
Electric. hydr. tool lock	•	•	•	•
HYDRO-FIX: quick hydraulic connection	•	•	•	•
3rd and 4th hydr. control circuit	•	•	•	•
Single-lever control unit, Bowden	•	•	•	•
Proportional electro. single-lever control unit	•	•	•	•
ECO-Pro proportional control	•	•	•	•
COMFORT-DRIVE (also electric. switchable)	•	•	•	•
Rescooping function by electric. switchable	–	•	–	–
Rapid emptying of the tool	–	•	•	–
Simultaneously lift of arm and emptying of tool empty	–	•	•	–
Speed valve	–	–	–	•
Return-to-level (level-automatic)	–	–	•	–

Illustrations and figures are approximate and not binding - Subject to change.

FS/FZ ProfiLine	Size			8		10		20 • 20.1		30 • 30.1		40 • 40.1	45 • 45.1	50 • 50.1	60 • 60.1	80.1	100
	Type			FZ	FS	FZ	FS	FZ	FS	FZ	FS	FS	FZ	FZ	FZ	FZ	FZ
Suitable for tractors with kW/hp output		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	130-220 180-300	>200
Pump capacity		l/min.		50						60				70			80
Lifting time, top to bottom		sec.		4.4		4.8		5.9		4.9		5.7		5.5	6.2	7	8
Tilting, tool		sec.		0.6	0.5	1.3	0.6	1.3	0.8	1.1	0.7	1.2	0.7	1.3	1.3	1.4	1.0
Quick emptying of the bucket		sec.		1.7	1.6	2.2	2.2	2.2	2.6	1.9	2.5	2.1	2.5	2.1	2.1	2.3	2.0
Quick dump		sec.		-	0.8	-	0.8	-	0.8	-	0.8	-	0.8	-	-	-	-
Weight, loading arm without tools		kg		406	356	465	420	475	425	540	470	580	480	680	790	850	1.250
Lifting force in the tool pivot point	below above	Q1 Q2	daN daN	1,960 1,510		2,020 1,510		2,490 1,860		2,260 1,730		2,616 2,010	2,590 1,990	2,750 2,240	2,880 2,470	3,020 2,590	3,500 3,000
Load capacity at bucket centroid 300 mm	below above	N1 N2	daN daN	1,960 1,510	1,650 1,250	2,020 1,510	1,720 1,260	2,490 1,860	2,130 1,560	2,260 1,730	1,950 1,470	2,590 1,990	2,240 1,690	2,750 2,240	2,880 2,470	3,020 2,590	3,500 3,000
Payload of forks 900 mm at the front	below above	M1 M2	daN daN	1,960 1,510	1,250 930	2,020 1,510	1,330 960	2,490 1,860	1,640 1,180	2,260 1,730	1,540 1,130	2,590 1,990	1,770 1,300	2,750 2,240	2,880 2,470	3,020 2,590	3,500 3,000
Breakout force 900 mm before tool pivot point		R	daN	1,850	1,650	2,550	1,680	2,550	2,130	2,550	2,340	2,828	2,340	3,330	3,310	3,580	4,600
Maximum lift height in the tool pivot point		H	mm	3,450		3,740				4,070				4,260	4,460	4,760	5,020
Overhead loading height (H-210)		L	mm	3,240		3,530				3,860				4,050	4,250	4,550	4,810
Discharge height		A	mm	2,380		2,690				3,010				3,210	3,410	3,700	3,970
Discharge distance		W	mm	670		700				785				785	800	840	880
Digging depth		S	mm	210		210				210				210			210
Loader arm pivot point		B	mm	1,660		1,780				1,930				1,930	2,030	2,170	2,430
Tilting angle	below	X	°degr	40		46				46				46			42
	res-cooped	X1	°degr	51	-	65	-	65	-	68	-	68	-	68	69	69	69
Tipping angle	below	V	°degr	94	158	93	154	93	154	103	154	103	154	103	150	154	146
	above	Z	°degr	61		59				59				59			54





Please also take a look at our large range of implements.

STOLL

The Loader Specialist.

Wilhelm Stoll Maschinenfabrik GmbH
Bahnhofstr. 21 | 38268 Lengede
Phone: +49 (0) 53 44 / 20-0 | Fax: +49 (0) 53 44 / 20-182
E-Mail: vkf@stoll-germany.com | Internet: www.stoll-germany.com

P 1514EN-11.13-3493180
Printed in Germany – Imprimé en Allemagne
www.trio-b.com – STLL101-438