

FENDT

Fendt Square balers





Model	Bale size (width x height)
990	80 cm x 90 cm
1270	120 cm x 70 cm
1290	120 cm x 90 cm
1290 XD	120 cm x 90 cm
12130	120 cm x 1300 cm

A high output with absolute reliability.

The first square baler left the factory in Hesston, Kansas, over 35 years ago. It laid down the foundation for one of the greatest success stories in harvesting technology. The Fendt square balers have been produced here, in the sole possession of the AGCO Corporation, since 2000. Based on decades of experience in development and production, they are distinguished by stability, durability and perfected technology. Thanks to continual, practice-driven improvements, Fendt can offer you a choice of five high-capacity balers today.

POWER PICKUP

The basis for perfectly compressed bales.



Additional centring augers ensure uniform crop pick up and well-shaped bales.

Power Pickup for higher output

The powerful pickup is positioned low over the ground for excellent windrow pickup. A flat feed angle permits the crop to be guided straight into the baler. Characteristic for Fendt square balers is the large clearance between the drawbar and the pickup – designed for large windrows.

Windrows picked up completely

The 2.26 metre wide pickup gently picks up even the widest windrows very quickly and with little loss. The new roller pressure pad and deflector ensure smooth crop flow. Four tine bars on a double cam track ensure the clean pickup. A large spiral spring, on which the

working depth can be adjusted quickly and easily, reduces the load on the pickup. Gauge wheels prevent the pickup from being lowered too far. They can be removed for transport.

Uniformly shaped bales

Two centring augers on both sides compress the crop efficiently from the very beginning and feed it into the pre-compression chamber in the width of the channel. Uniform distribution of the material over the entire width means that bales are optimally compressed during the baling process, even on the outsides.

Longer life

Effective and robust. That is the motto that applies to the entire baler. On the pickup, this is evident in the cam track, which is supported and guided on both sides. This guarantees safe and smooth running. The tines, which are permanently subjected to high loads, have been additionally strengthened and hardened. The frame and the bale chamber have also been reinforced, so the Fendt square balers can stand up to the highest pressure without a problem.



The gauge wheels prevent the pickup from lowering too far and ensure clean crop pickup. They can be removed for transport.



The lowering height is set without tools, simply by lifting the pickup and inserting a splint in the desired hole.



A new roller pressure pad and a large deflector plate ensure uniform crop flow into the baler.

HIGHLY COMPRESSED, PERFECT BALES

One bale like the other.

Uniform shape and density

The decisive factor for uniformly dense bales is the pre-compression chamber. It is continually filled by the rake feeder. Only when the pre-compression chamber is full is the sensor flap on the bottom end of the chamber pressed down. At the same time, the fingers are pulled back and open the way to the main baling channel.

High throughput guaranteed

The precompressed flake is baled to a highly dense bale in the bale chamber. Inside the main baling channel, fingers and flaps ensure there is adequate resistance. The plunger speed of 47 strokes per minute (33 strokes for 12130) guarantees high output and smooth running.

Constant, optimum baling density

To guarantee a uniform bale density under all kinds of harvesting conditions, the load in the plunger arms is measured for each stroke of the plunger. If, for example, the measured load is too low in relationship to the preset value, the resistance in the bale chamber is automatically increased by upping the oil pressure to the hydraulic cylinders for the bale chamber flaps. The baling density is therefore controlled fully automatically. Operators only need to set the desired load for the load arms and then drive off. At the same time, the automatic indicates if it is necessary to drive further to the right or left in order to produce uniformly shaped bales.

High output – simply economical

The bales are heavy thanks to the uniquely high baling density. Furthermore, square bales are always uniformly rectangular and can be stacked easily.

The pre-compression chamber is continually filled by the packer. Only when the pre-compression chamber is full does the sensor flap in the pre-compression chamber floor trigger the feed rake. The packer fingers are pulled back and open the way to the main baling channel.



Packer

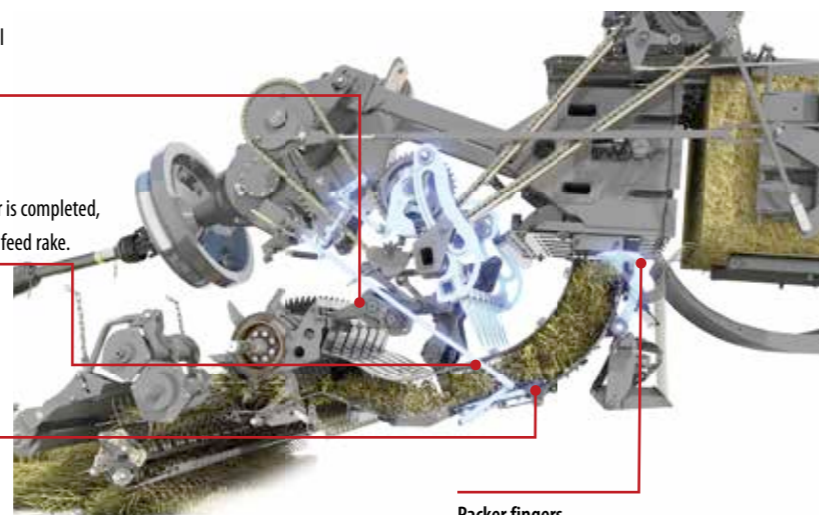
The packer transports the crop material into the pre-compression chamber.

Sensor flap

After compression in the pre-compression chamber is completed, pressure is exerted on the flap, which activates the feed rake.

Precompression chamber

The packer ensures uniform filling of the pre-compression chamber, where the crop undergoes the first stage of compression.



Packer fingers

Fingers prevent the crop from immediately entering into the main baling channel.



The baler is equipped with its own internal hydraulic circuit. The pump supplies the bale chamber flaps and the traverse-impeller fan with oil.



The bale chamber flaps are automatically controlled by the double-acting hydraulic cylinders in the baling channel.

PROCUT TABLE

You decide how short you want it.

ProCut – and the cut is just right

The new ProCut table with maximum cutting performance: The combination of a newly designed rotor cutter and an easily accessible knife drawer makes the balers more precise, faster and highly efficient. The result is perfect fodder or short bedding material.

The heart of the table: the rotor cutter

The v-shaped arrangement of the rotor tines sets up the crop for a perfect cut – with a uniform, efficient cutting process and no load peaks. The new rotor cutter runs at a speed of 120 rpm and has 6 rotor tines per rotor ring. This ensures a high cutting frequency and increases the throughput rate, resulting in lower fuel consumption. The rotor tines are hardened with carbon and especially robust and durable.

Variable cutting length

There are 26 knives (17 knives for 990 S) available to produce an ideal cutting length of 43.5 mm for straw and silage. With the push of a button, you can halve the number of knives: the group engagement for the knives, which swings every other knife forward and backward hydraulically, is controlled in the Varioterminal. This gives you a cutting length of 87 mm. All knives are hardened with tungsten carbide and can be replaced individually.

Quick change

If you want to change the number of knives or exchange a knife, simply open the knife drawer. The knife bed is then lowered and the drawer can be pulled out with one hand movement. The double hydraulic knife protection, which secures the knives on both sides with two hydraulic cylinders, ensures safety. If necessary, the rotor tines can be unscrewed and replaced.

Models	990	1270	1290	1290 XD
ProCut table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diameter rotor cutter (mm)	650	650	650	650
No. of knives	17	26	26	26
Cutting length (mm)	43.5	43.5	43.5	43.5
Group engagement of knives	0, 8, 17	0, 13, 26	0, 13, 26	0, 13, 26
Lowerable knife floor	■	■	■	■
Pull-out knife drawer	■	■	■	■

Standard and optional equipment
Standard: ■
Optional: □



The lowered knife drawer can be pulled out on the left side of the machine to change knives.



V-shaped rotor cutter with bolted tines segments. A high speed of 120 rpm means a high cutting frequency for enhanced threshing performance with the best quality of cut.

TYING

Double knots and securely packed.

Secure tying

The double knotter system in the Fendt square balers was developed in Hesston and has been continually optimised over 35 years and is one of the best knotter systems in the industry today. Each bale is tied securely with six knotters on a 120 cm wide channel and four knotters on an 80-cm wide channel. Two knots are produced during each tying procedure. Through the double knotter system, the twine holder and the needle are only subject to loads during the knotting process. This guarantees less wear and higher operational security.

Everything is clean

A new integral traverse-impeller fan, which is standard on every Fendt square baler, optimises the results of the double knotter. A constant air stream blows any dirt that has entered the knotting area out again. The traverse-impeller fan, which is driven by the baler hydraulic system, can be easily folded up to insert the twine.

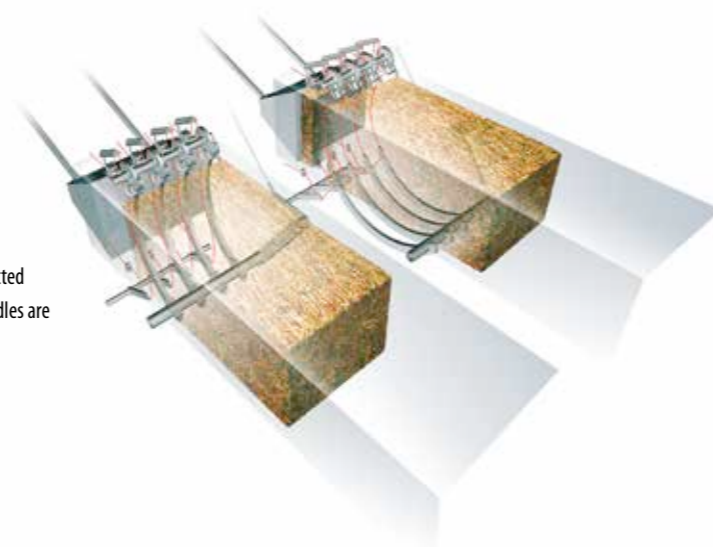
Durable and protected

The bearings in the knotter area are sealed and protected. They have a long lifetime and low maintenance requirement. The knotter is supplied with oil through the centralised lubrication system. The duration and intervals for the lubrication can be adjusted to the prevailing conditions using the Varioterminal in the tractor.

Always the same length

A spur gear, which is positioned in the middle of the bale chamber, constantly measures the bale length – precisely and independent of the baling conditions. Its synchronous movement with the baler permits highly accurate measurement, so the bale length is always uniform.

Nothing is left to chance. Even when the unexpected occurs, a safety mechanism ensures that the needles are not damaged.



The time-tested double knotter in the Fendt square balers and guarantees reliable tying, even under high pressure.



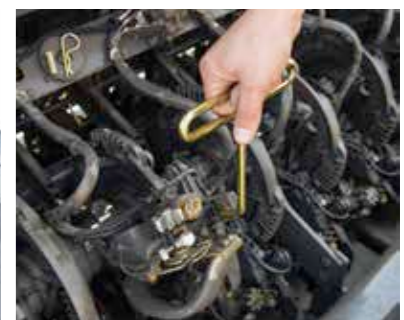
A large maintenance bonnet and foldable traverse-impeller fan guarantee easy access to the knotters.



The twine is guided through the knotter brakes for uniform twine feed to the knotter.



The standard specification cross-flow fan maintains a constant flow of air over the entire knotter area, which thoroughly clears all debris from the knotter area.



The baler has large bonnets and knotters that can be lifted up individually. This ensures optimum access for maintenance and servicing.

TYING

Maximum twine supply.

Smart and good-looking

The Fendt square baler is not only good-looking, it is also very functional. Large side panels that open provide an optimum overview of the fill level of the twine box. A twine storage capacity of 30 rolls ensures there is enough material for long work days. The balls of twine are stored at a 30-degree angle, which means the twine cannot slip or catch.

Easy-Fill – guarantees easy filling

With the unique "Easy Fill" storage system, it is easy to fill the twine box. A V-shaped insert and a 30-degree tilt prevent the balls of twine from slipping when driving. The optimum position of the balls of twine means the knots are tied quickly. A mesh screen, fitted in advance, prevents the twine from unravelling by itself.

Optimum overview

The flat storage position of the balls of twine also gives you a perfect overview of the filling level. Refilling is also easy. Because of the flat storage position, the balls of twine are simply pushed in and can then be knotted directly – rearranging is a thing of the past. Thanks to a smart lighting concept, filling and knotting is no trouble in the dark.

Twine box with maximum capacity

During the season, one should only have to deal with as little maintenance work as possible. With 30 balls of twine on board, it is possible to continue baling on long days without stops. When the twine runs out, suitable twine can be delivered through AGCOParts on short notice.



Flat storage of the twine makes filling easy and fast.



Everything is stowed away securely with the safety net.

XD – “XTRA DENSITY”

Xtra Density – the high-output baler.

Extra heavy

The lowest possible transport cost per kilogramme crop is one of the most important yardsticks for profitable farming. Fendt offers the perfect solution for this – the new Xtra Density square balers. Completely reinforced drivelines and enhanced stability of the bale chamber enable up to 20 percent heavier bales than standard models.

35 percent heavier main gearbox

In order to achieve a higher bale weight with a higher throughput, many things have been optimised in the XD. Strengthening the drives, such as the main gearbox, chains and gears stood in the foreground during development. In particular, the new XD flywheel, which weighs 545 kg, is almost twice as heavy as the standard version. New plunger arms ensure safe transfer of the higher forces. All together, this makes it possible to exert more force on the plunger.

The counter piece, the bale chamber, also has several improvements that increase friction. These include a 40-cm longer bale chamber, stronger hydraulic cylinders and optimised bale chamber flaps. Another example would be that the turning point of the side walls has been positioned further back to generate more friction on the sides.

More weight – lower costs

The benefit of more weight per bale is in the savings in costs per bale. More weight means fewer bales and less time required to collect the bales in the field, as well as higher utilisation for transport and savings in storage capacity. The Fendt 1290 XD offers you more economy.



The 545 kg flywheel enables uniform and smooth running, while ensuring high power transfer.



A new high-capacity gearbox is used in the XD baler. Overall, the XD gearbox is 35% heavier than the standard model and can therefore generate even more compression pressure.

CONTROLS

Everything under control with the Varioterminal.



Ready to go with the ISOBUS

The Fendt square balers are compatible with the ISOBUS as standard. This allows the baler to be operated directly through the Varioterminal or a terminal of an ISOBUS-compliant tractor. You only need to connect one cable and your familiar user interface already appears on the monitor in the cab. Additional control units can further simplify machine operation, depending on the tractor.

Smart features, perfect operation

Just as in the Varioterminal, the baler menu can be viewed in full screen or partial screen modes. Here the target values for the achievable plunger load can be set. Then the machine controls the bale chamber flaps automatically. An electric bale length adjustment facility is available as an option. Operators set the desired length for the bale; then the automated function triggers the knotting procedure when the bale has reached the target length. Electric adjustment permits fast changes between different lengths, which is of particular interest for contract work. Using the terminal, operators can also set the lubrication interval for the knottter lubrication system as well as create jobs, read out the number of bales and operate the bale chamber manually.

An electric bale scale is available as an option. It tells the operator in real-time, if the desired bale weight has been reached. If this is combined with the AgCommand™ telemetry system, customers or bale collectors can see the number, weight and position of the bales on their PC. The C1000 is the standard-equipped terminal. If no ISOBUS-compliant tractor is available or operators prefer an additional terminal, they can fall back to the C1000 terminal at any time. All functions are also available in this terminal.



A control terminal should be one thing most of all – user-friendly. It is optimally integrated in the overall operating concept; you can operate your Fendt square baler via the Fendt Varioterminal. The straightforward menu has a logical structure and is therefore extremely easy to use.



Thanks to ISOBUS compatibility, the machine can be conveniently controlled in the Fendt Varioterminal.



The C1000 colour terminal is fitted as standard. If the tractor is not ISOBUS-compliant or operators desire a separate terminal, it is possible to fall back to the C1000 at any time.

INTELLIGENT DESIGN AND SERVICE

Typical Fendt – everything in place and top-level service.



Ease of maintenance was a main focus during the development of the Fendt square balers. Large opening side panels and grease-sealed bearings significantly reduce the time required for maintenance.

Well-thought out design

At Fendt, innovations are not only found in key technology, but also in the details and the ease of maintenance. The large bonnets permit perfect access to the machine for maintenance work. When it turns dark, additional lights under the bonnet aid the operator. In addition to the long-life design of the chain and drives, the automatic knotter lubrication and new automatic chain lubrication are further maintenance-friendly features of the square baler.

A hydraulically actuated bale ejector and foldable bale chute facilitate bale handling. With a transport speed of up to 60 km/h, operators move ahead faster. An optionally available hydraulic support foot is available, which makes hooking and unhooking the baler even easier.

Tyre options

Fendt has an answer for reducing soil compaction. With 620/40-22.5 tyres, the machine now has a larger contact area on the field and remains under a transport width of 3.30 m. The large tyres are combined with a tandem steering axle for fast and short turning manoeuvres. The steering axle is also gentle on the grass sward when making turns in grassland.

Fendt Service

In addition to innovative technology and high quality, Fendt also offers first-class service for vehicles and operators. We strive to offer customers maximum profitability and competitiveness in a dynamic market.

The hydraulic bale ejector and hydraulic foldable bale chute require a minimum of time when changing to road transport.

The steerable tandem axle with new optional 620/40-22.5 tyres guarantees a large contact area and a high degree of manoeuvrability.



The optional hydraulic support foot permits easy and fast hooking and unhooking to the tractor.

Automatic chain lubrication of all the most important drive chains is new. The lubrication intervals can be conveniently set via the terminal.

Pre-wiring and a camera port in the terminal are standard. This permits a camera to be installed at the end of the baling chamber, where it provides a convenient view all around the machine.

Convincing technology
at a glance.



- | | |
|---|--|
| 1. Top and bottom hitching | 11. Stuffer forks for filling the main bale chamber |
| 2. Height adjustable for smooth running PTO | 12. Sensor flap |
| 3. Flywheel | 13. Pre-compression chamber with 0.285 m ³ fill volume |
| 4. Flywheel brake | 14. Sensors for the travel direction indicators |
| 5. Self-contained hydraulics | 15. Packer fingers |
| 6. Oil reservoir | 16. Cross-flow fan with constant air flow |
| 7. Bevelled spur gear drive | 17. Double-acting hydraulic cylinder for automatic baling pressure control |
| 8. Optimal crop flow through intake augers | 18. Lighting for maintenance at dusk |
| 9. V-shaped, six-row rotor cutter ProCut rotor cutter | 19. Steerable tandem axle |
| 10. Packer for filling the pre-compression chamber | 20. Knotter needles |

FENDT SQUARE BALERS

Technical Specifications.



Standard and optional equipment
 Standard: ■
 Optional: □

Standard and optional equipment
 Standard: ■
 Optional: □

Square balers		990	1270	1290	1290 XD	12130
Bale size	Width	0.8	1.2	1.2	1.2	1.2
	Altitude	0.9	0.7	0.9	0.9	1.3
	Max. length	2.74	2.74	2.74	2.74	2.74
Weights and dimensions	Overall width – single/tandem axle (incl. pickup wheels)	3.0	3.0	3.0	3.0	3.30
	Overall width – tyres 620/40x22.5)	3.0	3.23	3.23	3.23	3.23
	Overall length – bale chute, folded in	8.30	8.33	8.33	8.73	8.82
	Overall height – to top of hand railing, folded in	2.97	2.69	2.69	2.87	3.32
	Overall height – to top of hand railing, standing	3.27	3.27	3.27	3.27	3.58
	Weight: Single/tandem axle, without cutter unit	6840 / 7440	8460 / 9210	8940 / 9690	9830 / 10580	10520 / 11030
	Weight: Tandem axle, with cutter unit	8360	10230	10710	11600	
Main drive	Diameter flywheel	7500	8700	8700	9900	8700
	Width flywheel	1100	1300	1300	2500	1300
	Weight flywheel	170	290	290	545	290
	Overload protection	Slip clutch, overrunning clutch and shear bolt				
	Transmission type	Enclosed, double reduction				
Pickup	Overall width – without pickup wheels	2.60	2.60	2.60	2.60	2.60
	Effective width	2.26	2.26	2.26	2.26	2.26
	Number of tine bars	4 tine bars with central bar				
	Number of tines	128	128	128	128	128
	Tine spacing	66	66	66	66	66
	Drive protection	Slip and overrunning clutches				
	HD spiral spring	■	■	■	■	■
	Roller pressure pad with deflector plate	■	■	■	■	■
Feeding system	Packer	Fork type				
	Packer tines (hardened)	6	6	6	6	6
	Overload protection	Slip clutch with splined profile				
ProCut cutter (optional)	Number of knives	17	26	26	26	
	Knife protection	hydraulic				
	Rotor diameter	650	650	650	650	
	Group engagement of knives	0, 8, 17	0, 13, 26	0, 13, 26	0, 13, 26	0, 13, 26
	Theoretical cutting length (standard)	43.5	43.5	43.5	43.5	
	Pull-out knife drawer	■	■	■	■	

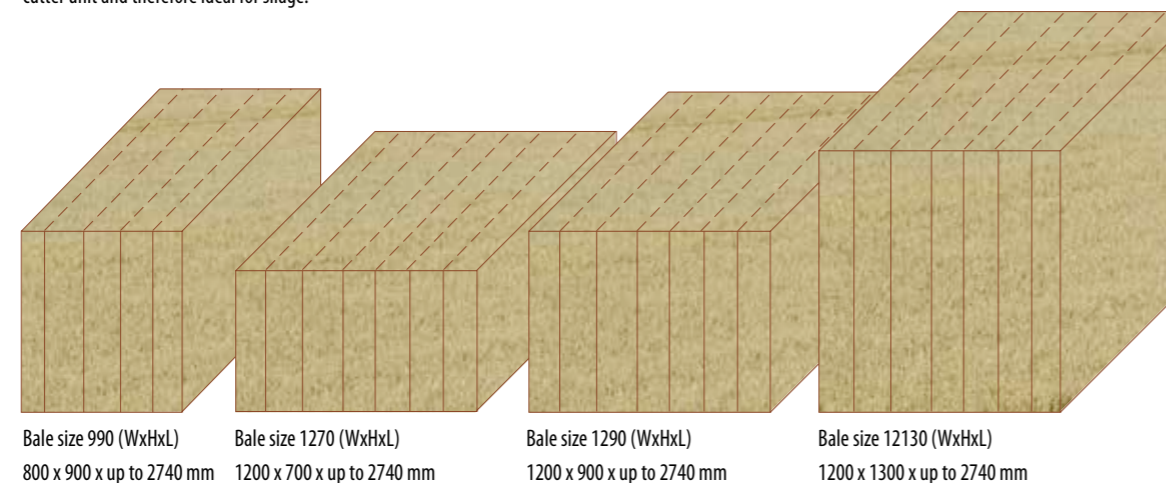
Square balers		990	1270	1290	1290 XD	12130
Plunger / bale chamber	Plunger speed	47	47	47	47	33
	Piston strokes/min					
	Piston stroke	74	74	74	74	82
Knotting system / tying	Twine tying	Double knotter	Double knotter	Double knotter	Double knotter	Double knotter
	Number of knotters	4	6	6	6	6
	Twine storage capacity – high-grade polypropylene (rolls)	30	30	30	30	30
	Cleaning fan (hydraulically driven)	■	■	■	■	■
	Automatic knotter lubrication					
Bale ejector	Number of teeth	8	8	8	10	10
	Number of tine rows that can be engaged/disengaged	3	3	3	3	3
	Controls	Independent hydraulic controls at rear of baler				
Bale chute	Heavy-duty bale chute	■	■	■	■	■
	Eject indicator	■	■	■	■	■
	Pivoting system for road transport	Hydraulic cylinder can be operated at rear of baler				
Axles and tyres	Single axle tyre size	600/50-22.5	700/50-22.5	700/50-22.5		28Lx26
	Single axle max. perm. speed ¹⁾	40	40	40		40
	Tandem axle tyre size (standard)	500/50-17	500/45-22.5	500/45-22.5	500/45-22.5	500/45-22.5
	Tandem axle tyre size (optional)	620/40-22.5	620/40-22.5	620/40-22.5	620/40-22.5	620/40-22.5
	Tandem axle max. perm. speed ¹⁾	60	60	60	60	60
Operation / control and monitoring system	C1000 – colour terminal	■	■	■	■	■
	ISOBUS	Compliant with ISOBUS 11783				
Tractor requirements	Recommended PTO power – packer	150/112	160/120	170/127	200/150	200/150
	Recommended PTO power – cutter unit	180/135	190/142	200/149	250/186	250/186
	PTO type	Type II: PTO ø 35 mm, 21-spline		Type III: PTO ø 44 mm, 20-spline		
	Requirements hydraulic control valve (min.)	2 or 3 double-acting control valves, depends on specification				
Special equipment	Special equipment available from dealers	Integral bale scale, electric bale length adjustment, hydraulic support leg, rear view camera, AgCommand telemetry system				

¹⁾ = Depends on the legislation of the market

Your Fendt dealer will be pleased to inform you about further tyre options.

The optimal bale size

The required bale size depends on the subsequent use for the bale. Fendt offers four different bales sizes to meet all needs. The top model 12130 N is especially well-suited for dry crops. With a bale size from 120 cm to 130 cm, it meets the requirements of modern straw burning systems. The models 990 S, 1270 S and 1290 S are equipped with an additional cutter unit and therefore ideal for silage.



FENDT

Leaders drive Fendt.



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 **AGCO**
Your Agriculture Company

Fendt is a worldwide brand of AGCO.
All data regarding delivery, appearance, performance, dimensions and weight, fuel consumption and running costs of the vehicles correspond with the latest information available at the time of going to press. Changes may be made before the time of purchase. Your Fendt dealer will be pleased to supply you with up-to-date information. The vehicles are not shown with country-specific equipment.

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