

The Hesston 4800: an "exceptional" machine!

Hesston 4800



FIATAGRI

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The world's first giant high-density baler. The modern way of baling straw and hay efficiently and productively cuts down baling time and handling and transport costs. The 4800 heads Hesston's baler range. It is designed to meet the needs of farmers with big acreages cultivated extensively.

The thought that has gone into the 4800 enables it to provide positive answers to all the problems that arise in the materials handling area:

- large, square, high-density bales
- fewer bales to handle
- easier stacking
- more profitable truck payloads
- very high productivity with any baled crop. For greater driving comfort, too, the 4800 comes with a monitor that is placed in the tractor cab to allow the operator to keep an eye on the main mechanisms, such as the gathering units and the knotters.

A single operator can bale up to 200 tonnes a day with the 4800. Its exclusive features are covered by a host of patents, which make the Hesston 4800 the only one of its kind.



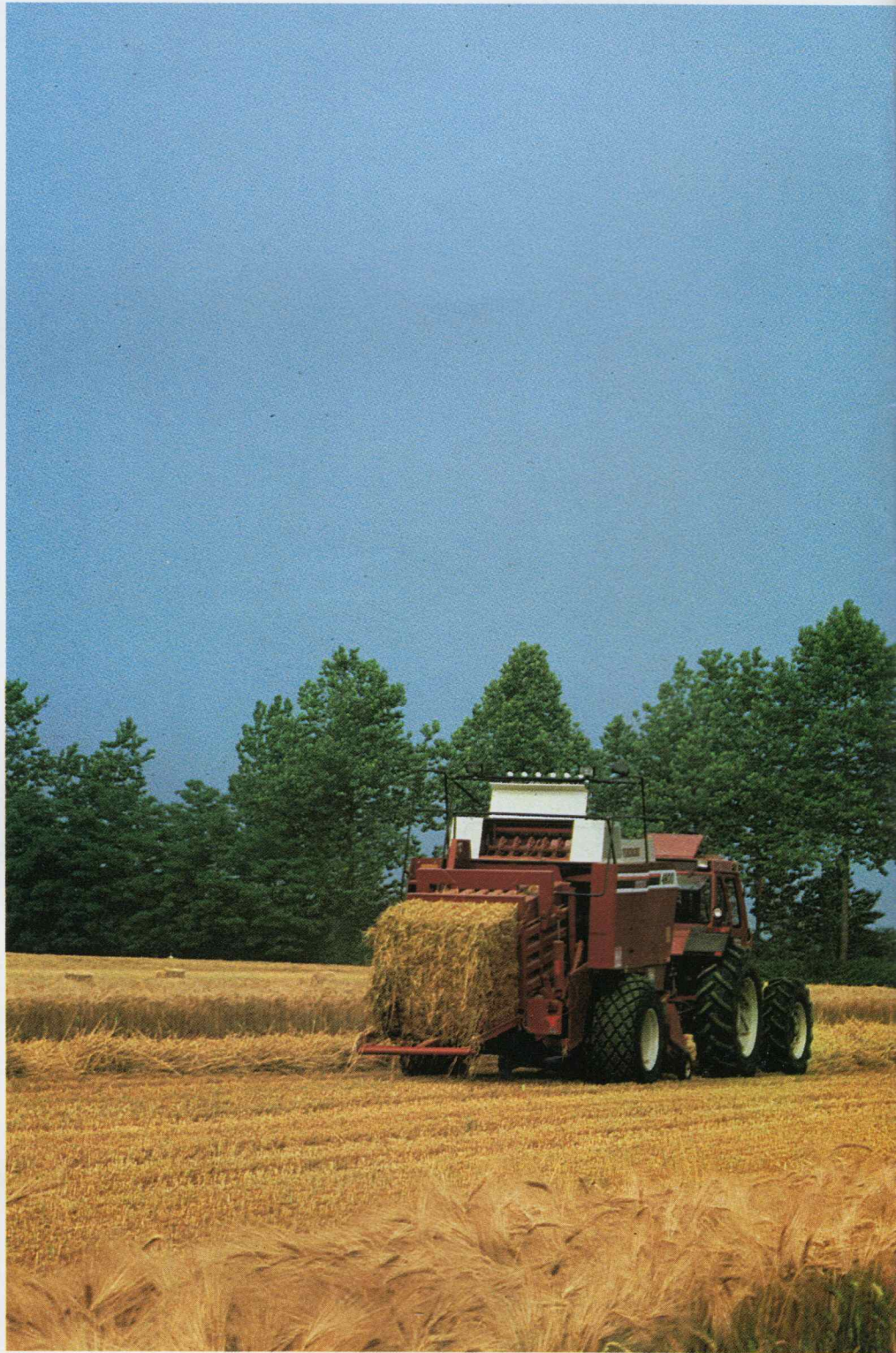


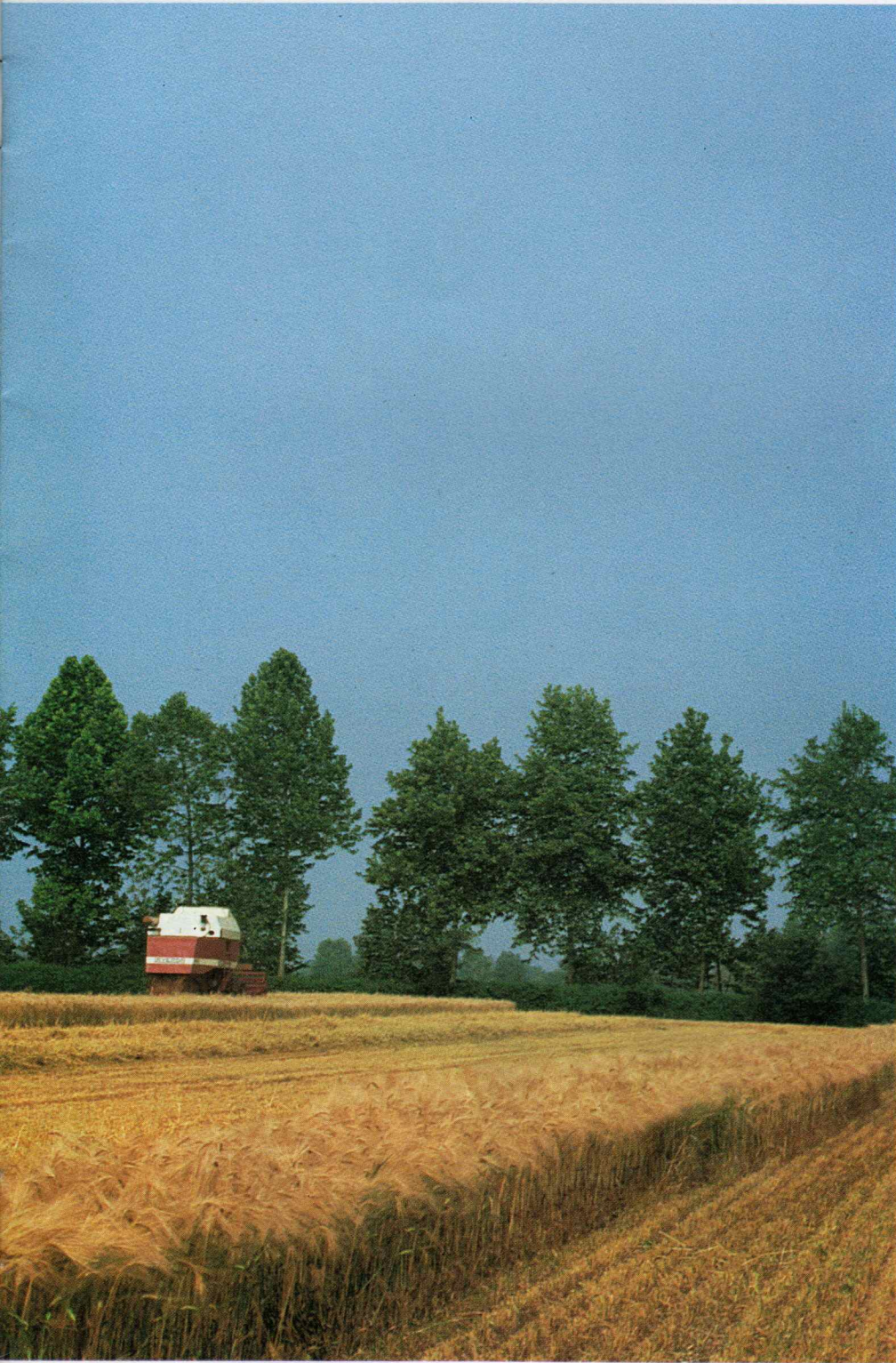
The 4800 - Hesston's "industrial" baler

The 4800 gathers material at an "industrial" rate and converts it into large, square bales that are both a better economic proposition to produce and are easier to handle and store. Its revolutionary design allows the 4800 to produce really enormous bales: 1.22 x 1.29 m square and up to 2.44 metres long.

Bales like these may weigh as much as 600 kg each in the case of straw or 1 tonne in the case of hay. In practical terms, they contain from 30 to 50 times as much as conventional, medium density bales.

Compared with round bales, too, the space taken up by the same amount of crop is much less. And this means both less transport and less storage space. Since their maximum width is 1.20 metres, two of these bales can be stacked side by side on a truck or trailer without exceeding the maximum overall width allowed by the traffic regulations (2.50 m). Long-distance transport, too, becomes much less expensive with these compact, constantly sized bales. Like conventional balers, Hesston's giant 4800 works non-stop, tying and knotting as it goes. With this truly industrial baler, one man alone can gather and bale up to 200 tonnes a day.





Who can put the giant 4800 baler to the best use?

First and foremost, all those who employ straw for industrial purposes: grass drying plants where straw is used for fuel; paper mills in the production of pulp; mushroom growers; forage merchants that collect hay and straw for dispatch to distant markets; big farms and cooperatives that gather straw and condition hay for their own use.

In addition to hay and straw, the 4800 can also be used to gather green semi wilted grass for ensilage. This is best collected in bales 1.20 m long, making perfect cubes that are very easy to handle and stack. About 3 hectares (equivalent to some 36 tonnes of green fodder) can be worked per hour with the 4800. Some 15 bales of about 800 kg each are made per hectare, which means much less loading and handling.

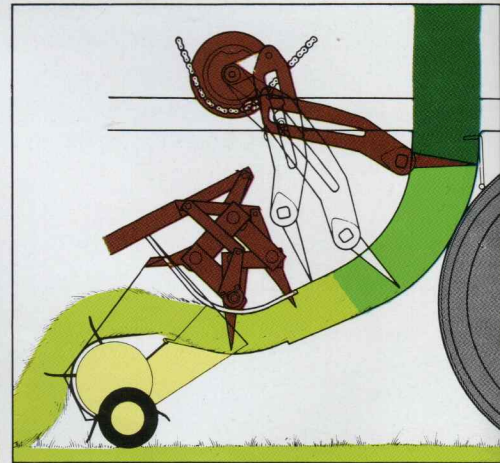
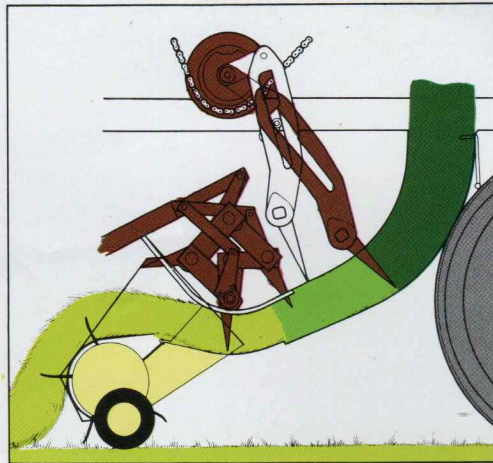
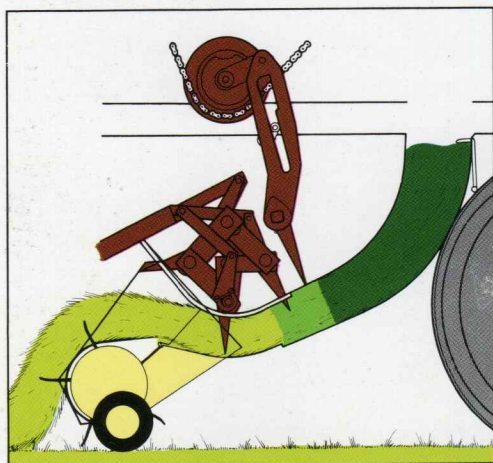
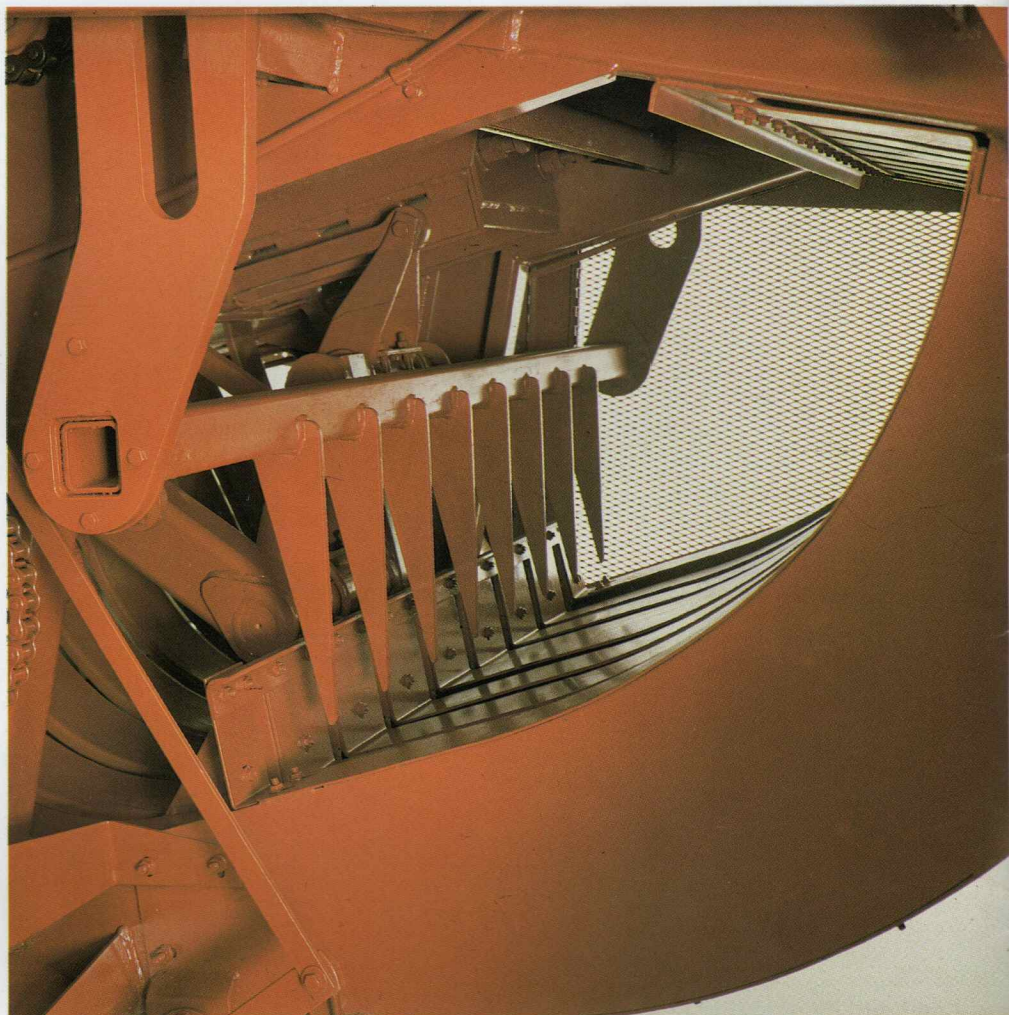
Thanks to this extra capability, the 4800 very quickly pays for itself. In effect, it can be used for a full four months in a row: from May onwards for ensilage of semi wilted grass through till August for hay and straw.

The Hesston charge chamber, the key to uniform-density bales

This is how the charge chamber works on the Hesston 4800. As soon as it is gathered, the crop is carried to the throat of the charge chamber and pushed inside by the packing fingers (1). Once the chamber is full, a trip releases the stuffing forks (2), which then carry the flake thus formed into the bale chamber (3) for compression by the plunger.

Each bale has the same density right through because each flake is pre-sized before it is taken into the bale chamber, whatever the volume of the windrow.

Thanks to the charge chamber the 4800 is equipped with a slow plunger. This works at only 26 compression strokes per minute, compared with the 80 or more strokes usual on conventional balers. It's easy to see that there's less wear, longer working life and lower leaf losses with the 4800.



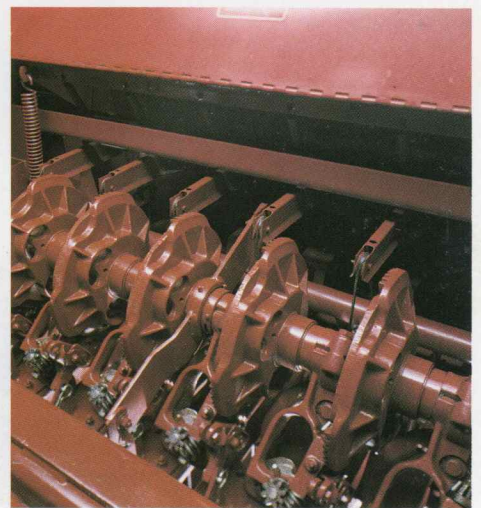
The hydraulic density control

is mounted on the plunger drive. It senses the pressure needed to compress each flake and through 2 hydraulic rams adjust the bale chamber sides and top accordingly. The volume of the bale chamber is automatically adjusted to suit the chosen bale density, irrespective of the density of the crop. The 4800 does just what the driver requires to meet the needs of hauliers.

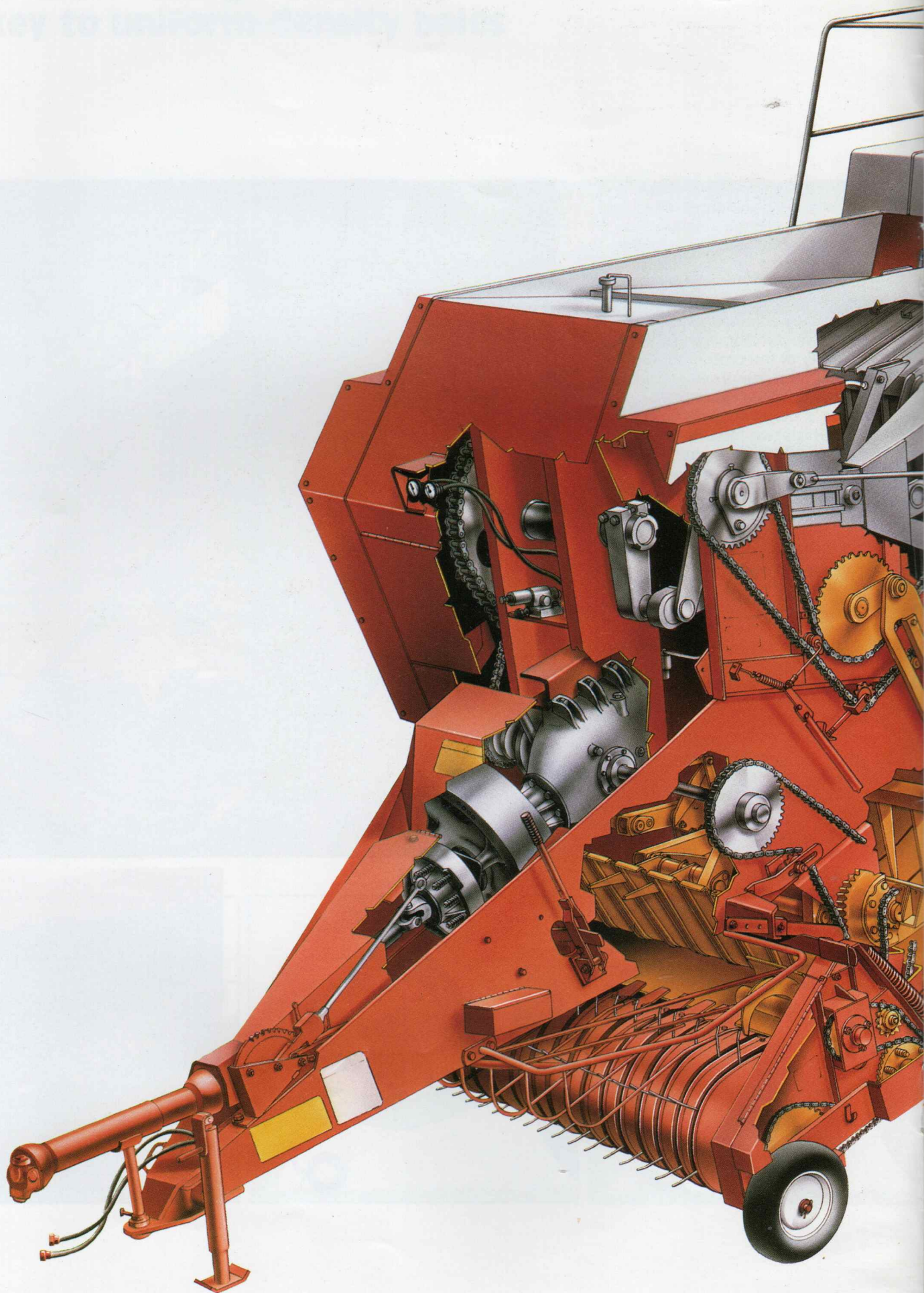
Hesston's original tying system is another exclusive feature, together with its double-knot knotter. When a bale reaches the chosen length, six large needles carry heavy-duty plastic twine to the six knotters. The twine is only held during the knotting operation, resulting in knotter and needle longer life and less wear. When the formed bale is tied, the first knots of the next bale are made before the needles leave the knotters. Each knotter makes two knots for each bale, where as conventional baler knotters would need to make from 30 to 50 to tie the same amount of material. Twine tension is controlled mechanically. The knotters work just as efficiently whatever the density of the bale.

Bales can be any length from 1.20 to 2.40 metres. A large starwheel working on the same principle as a conventional baler accurately measures the length of each bale being formed. When the right length is reached, it brings the tying mechanism into action.

The 4800 carries enough twine to tie more than 400 bales 2.40 metre long. Twine cost savings can be as much as 50% compared with conventional balers.



The Hesston charge chamber,
the key to uniform capacity bins.





Reliability: safety devices and signals

Safety devices and signals -two forms of protection for your peace of mind.

"Key safety devices" help to protect all the moving parts:

- Pick-up: slip clutch and overrunning clutch
- Feeding system: slip clutch
- Stuffer: shear bolt
- Power drive: heavy-duty slip clutch and overrunning clutch
- Main drive: shear bolt
- Knotters and needles: shear bolt

"Permanent signals" cover the main gathering stages:

- Knotter flags indicate faults to the driver
- Two gauges indicate compression and static pressure in the hydraulic system.

"Monitor system"

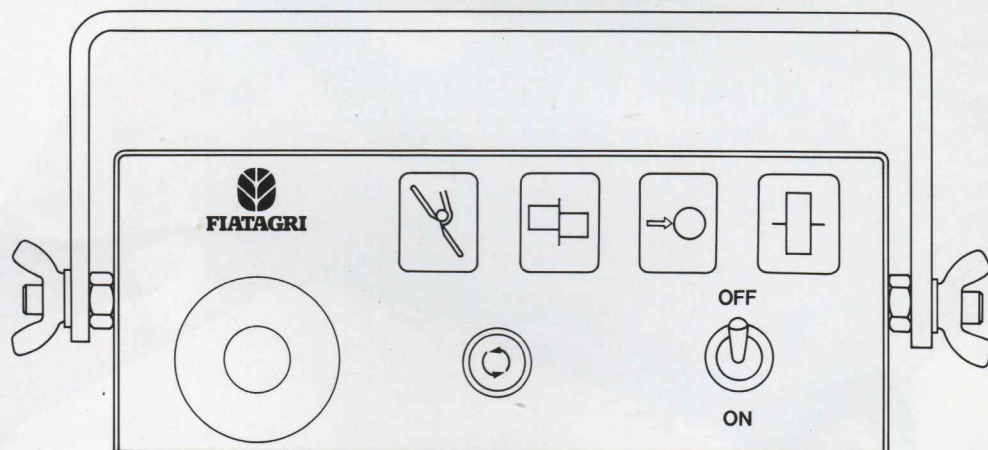
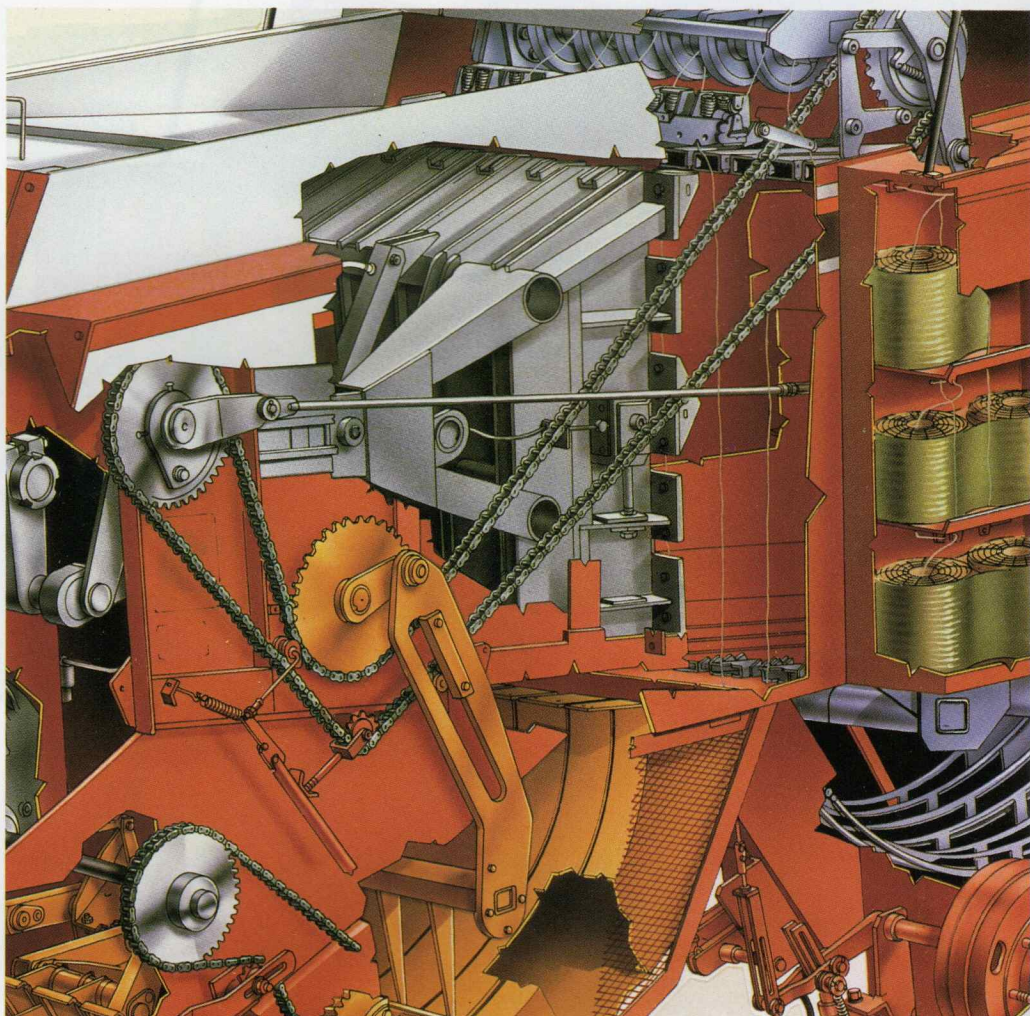
For greater driving comfort, the 4800 comes with a monitor system. This is mounted on the tractor dashboard and shows the driver that the main mechanisms, such as the feeding unit and the knotters, are working properly. It is no longer necessary to keep turning round to keep an eye on the baler. Night driving, too, is very much easier.

Quality construction and industrial power at the service of farmers

The power take-off turns a large, 66 cm diameter flywheel to drive the feeding and baling mechanisms through a massive bevel gearbox, chains and shafts.

A minimum of 110 pto hp output is required from the tractor. The optimum range to cover all working conditions is 120 to 180 hp. Chain drives and strengthened bearings are used to operate the knotters and all the components of the feeding and bale compression systems.

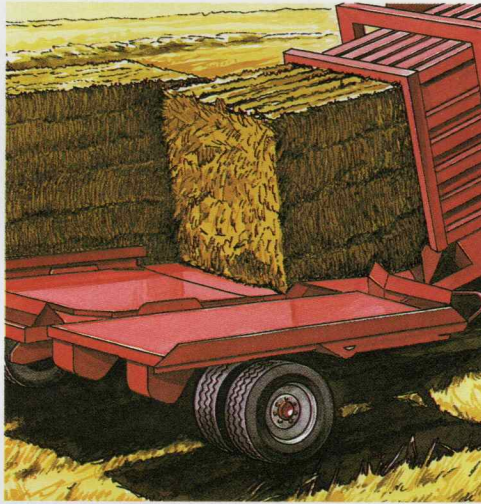
A rod control prevents the plunger from interfering with the needles if the baler goes out of phase.



The 4800: a complete "system"

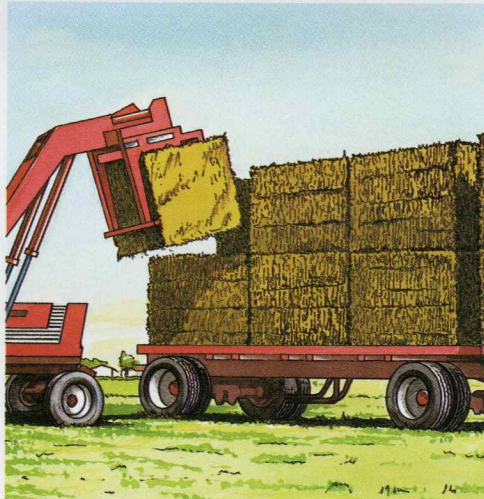
4820 bale accumulator

This is how the bale accumulator works. As soon as the first bale arrives on the end of the platform, it is cross conveyed to the side. The second bale is pushed to the other side of the platform. When the third bale arrives, a visible signal and a buzzer show that the accumulator is full. The operator then pulls a control to operate the unloading mechanism. When the two sides are empty, the middle bale automatically moves to the left side of the platform and is unloaded.



4830 loader

The 4830 loader attachment is the ideal way to load and unload transport vehicles. It stacks giant bales up to three high to form a stable load that is easy to tie down. The overall width does not exceed the permitted limit (2.50 m). The 4830 can also stack three bale layers on the ground. The 4830 can be mounted on industrial-type mechanical loaders for the economical handling of its bales in industrial establishments.



Specifications

Dimensions and weight

Length (without chute): 6.85 m
Length (with chute): 8.45 m
Maximum width: 2.82 m
Height: 3.20 m
Height (with guard rails): 3.60 m
Weight: 7800 kg

Wheel equipment

23.1 × 26 tyres
Hydraulic brakes

Pick-up

Width: 1.90 m
Diameter: 43 cm
5-bar type, with 20 tines
Tine spacing: 8.6 cm
No. of side augers: 2
Protection: slip clutch and overrunning clutch
Tyres: 4.00 × 16
Chain drive
Hydraulic lift

Feeding system

Feeder with 4 cranks and 8 forks
Chain drive
Protection: slip clutch

Charge chamber

Volume: 3 m³

Standard lighting

Side lights
Work lights

Stuffer

Fork-type: 8 tines
Chain drive
Protection: shear bolt

Bale chamber

Width: 1.22 m
Height: 1.29 m
Bale length: adjustable up to 2.44 m

Plunger

Speed: 26 strokes per minute
Length of stroke: 84 cm
Bearings: 4

Tying mechanism

Six Hesston double-knot knotters
Twine box capacity: 24 balls

Main drive

Hypoid gears. Mounted on taper roller bearings in oil bath
Flywheel diameter: 66 cm
Protection: shear bolt

Power drive

PTO: 1000 rpm
Protection: heavy-duty slip clutch and overrunning clutch

Bale density control

Hydraulic circuit, automatically regulated through the pressure exerted by the plunger

Tractor requirements

PTO: 1000 rpm
Hydraulics: double-acting external service
one trailer brake facility
Min. power: 110 hp

Standard equipment

Monitor for:
— knotters
— feeding system



Specifications

Fiat: a great industrial group with a long tradition of engine and vehicle manufacture. A financial power. A specialist in agricultural engines, it started to produce tractors in 1919. When the Company decided to expand into other sectors of

agricultural mechanisation, it chose to join forces with highly specialised companies. A logical decision by any standards, even more so when it proved to be economically and commercially sound. The individual experts: Fiat Trattori,

Laverda, Hesston and Braud, united under the common brand name of FIATAGRI, offer the best guarantee to sales network and customers alike, that their respective product lines represent a blend of top design and production quality, made by



specialists, coordinated and supported
by industrial, commercial and financial
organisation.
FIATAGRI in other words...

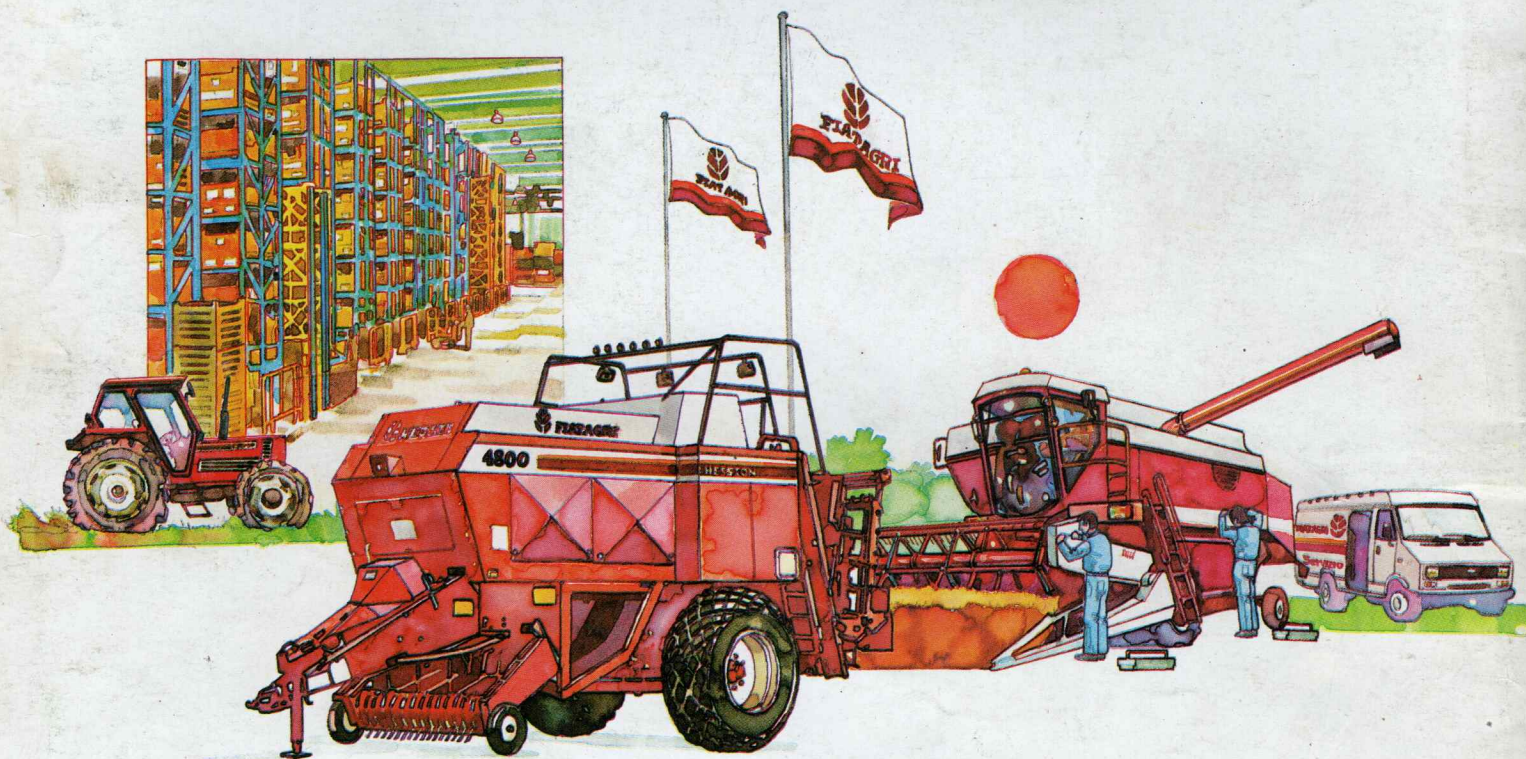


After-sales Service

Spare parts and servicing always close at hand. When you buy a Fiatagri farming machine, you become part of a family. You'll appreciate the advantages of this later in the form of Fiatagri's large, efficient organisation for after-sales servicing and the distribution of spares, the best there is in the agricultural mechanisation sector.

Fiatagri's spares centre is equipped with sophisticated handling and retrieval systems. It carries more than 60.000 items and a total of 21 million individual pieces.

Efficient organisation and fast service are accompanied by the superior quality of original Fiatagri spares. The quality that keeps the value of Fiatagri farm machinery unaltered over the course of time.



HESSTON

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To be sure of getting accurate, detailed and up-to-date information, an intending buyer should consult his nearest dealer.

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