COMPACT&BALE
TOTAL WASTE & RECYCLING SOLUTIONS

Strautmann Baling Presses

IMPORTANT! Control system

Pressure control

The press cycle runs up to 130 bar. When the press chamber is full of material the press plate moves down **BUT** moved up **immediately** when the pressure of 130 bar is reached. So the material is touched for a second and is not compacted for longer time.

Time control

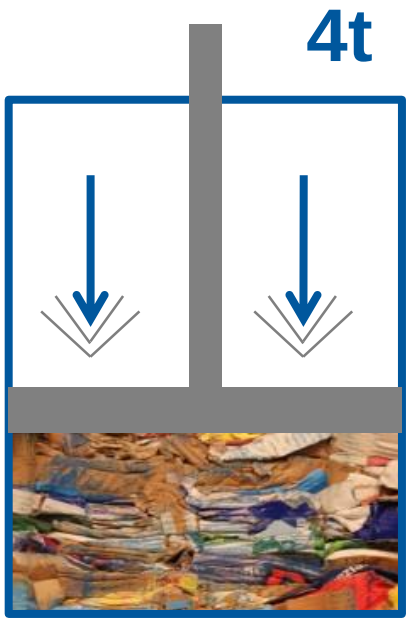
The press cycle always takes e.g. 25 seconds. So if the press chamber is full of material the press plate moves down and stays on the material. It does **NOT** move up immediately!!! The press plate stays on the material with full pressure for the rest of the time, (e.g. 15 seconds).

Thanks to this system the bale has a higher density and higher weight. The pressing time and thereby the density and weight can be installated variably.

We get this result with our 4t version.
Our competitors need 6t and do not even reach our bale density!!!

Control system

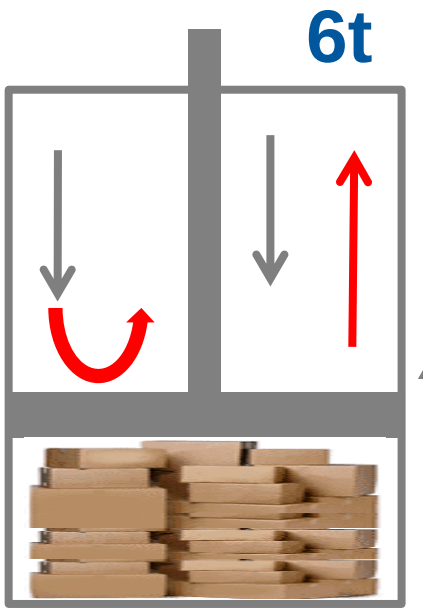
Time control = Strautmann



10 seconds
full pressure

- **higher density**
- **more efficient in energy consumption**
- **less transportation costs**

Pressure control = Bramidan, HSM, Orwak….

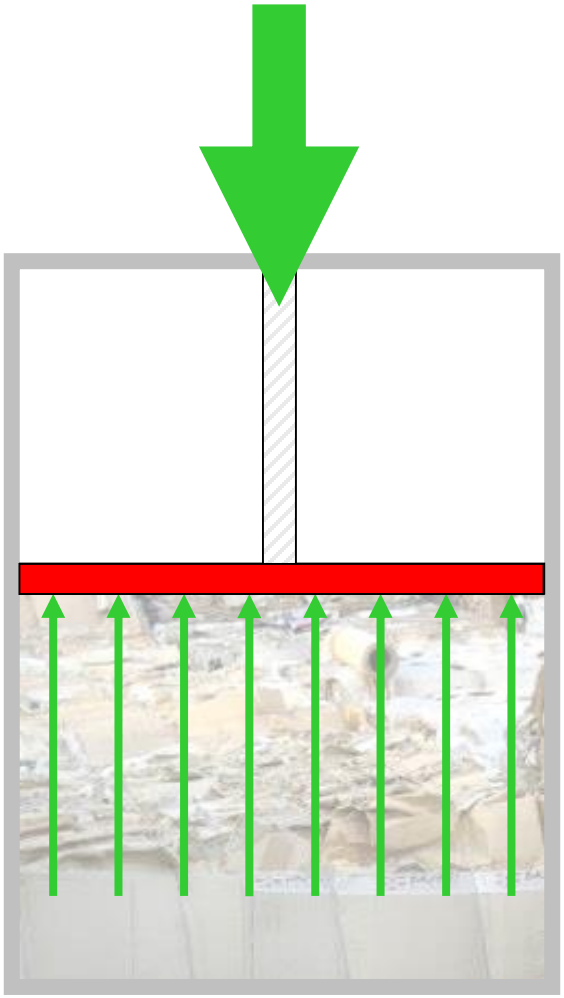


= 1 second
full pressure

- **higher energy consumption**
- **higher transportation costs**

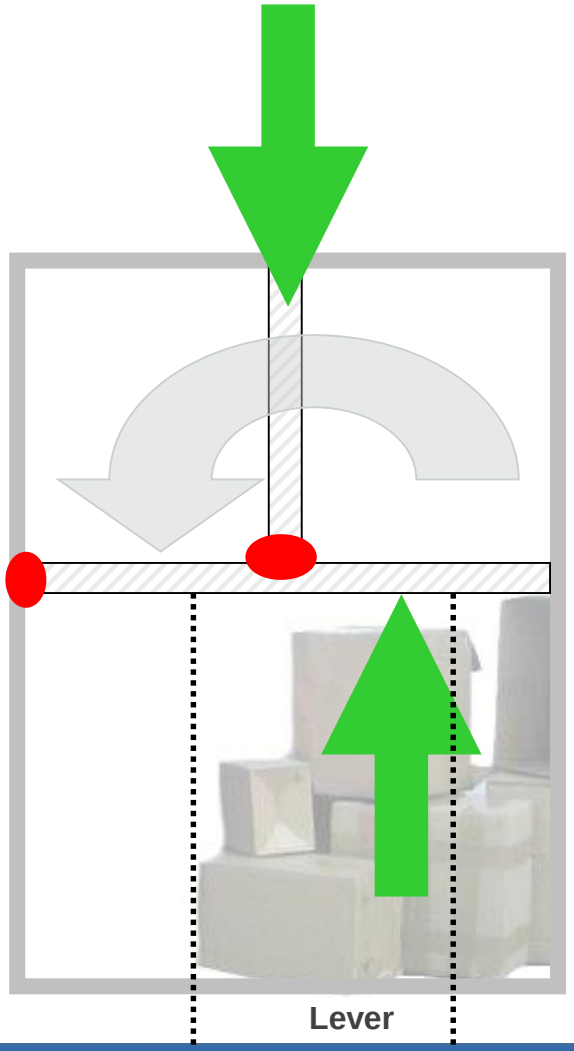
Law of the lever

Ideal, but in reality not possible



Equal filling is difficult
to achieve in practice!

Usual in reality

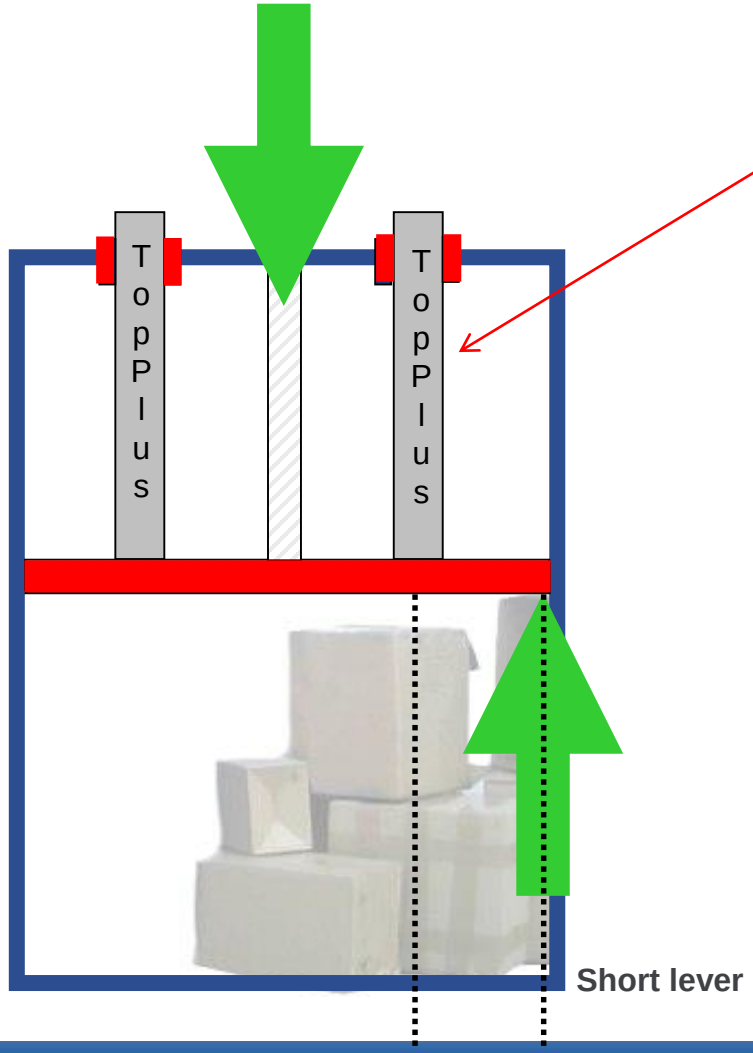


Strautmann TopPlus®

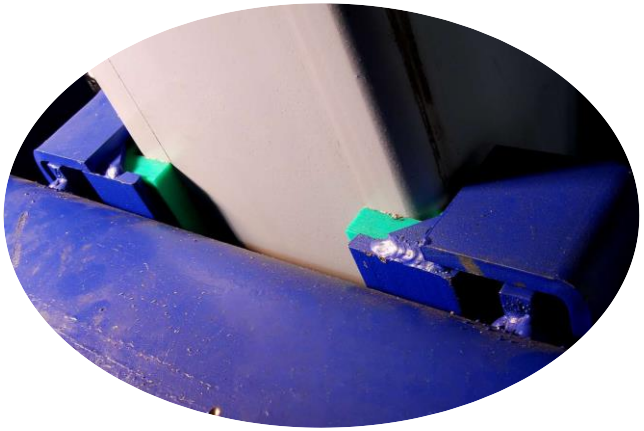
Two very stable guiding tubes absorb the forces affected to the press shield by compacting material that is unevenly filled into the press chamber. So, other important components of the machine are not stressed.

Long life duration of the machine and high bale density!

Strautmann TopPlus®



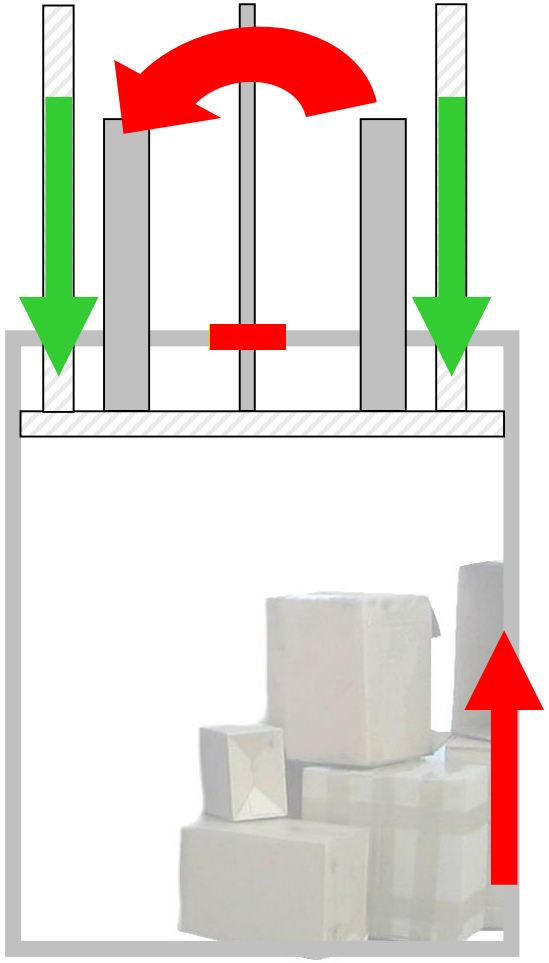
The forces are absorbed by the guides and relieve the components of the machine.



In addition the sliding rails relieve the machinery components.

Stable steel guide profiles (200 x 200 mm) prevent wear of the press plate and the machine.

Other systems – TCS - System



The so-called Torsion-Control-System measures the disposition of the press plate.

When the maximum disposition is reached, the machine stops compacting and the press plate is liftet up.

The operator gets no information about that!

The material is not compacted!

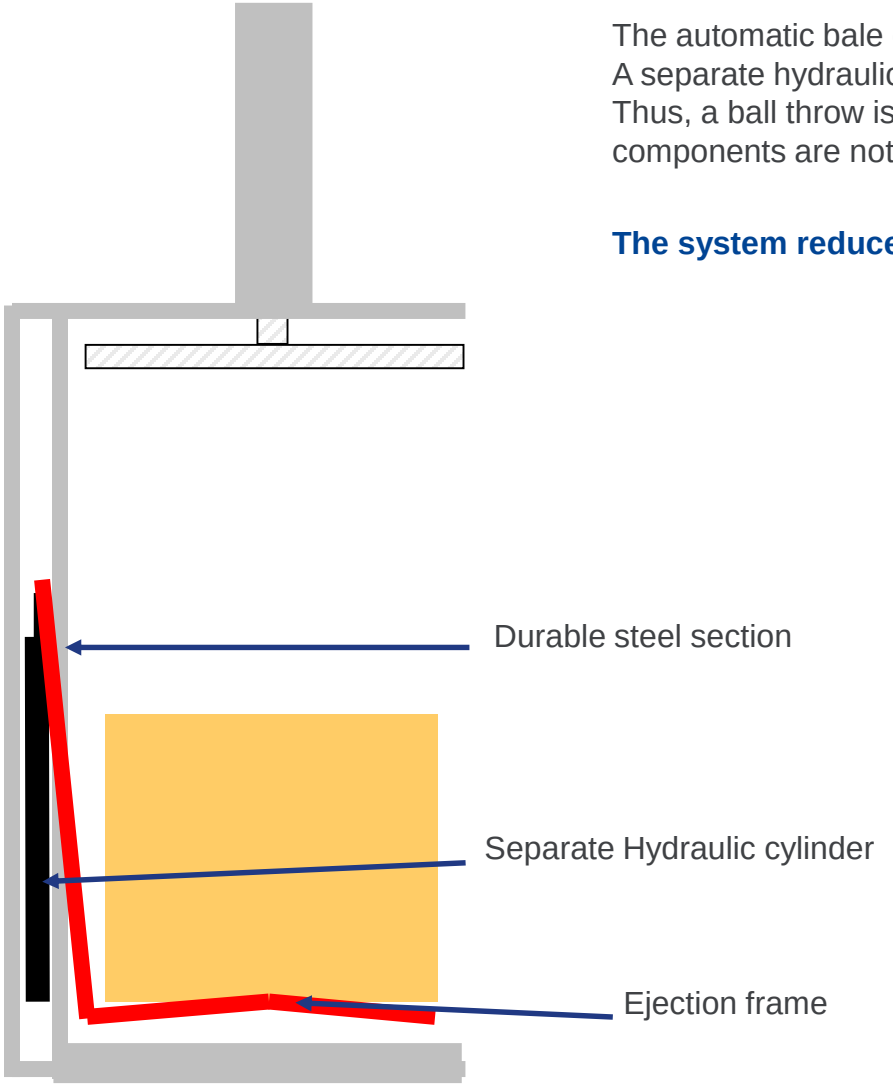
Instead of a stable management system (TopPlus) a slight inner guide is used here, which saves the use of expensive steel.

- **many mechanical problems because the forces that occur are too high for the weak construction → wear**
- **no press cycle done!**
- **low bale density!**
- **short lifetime!**

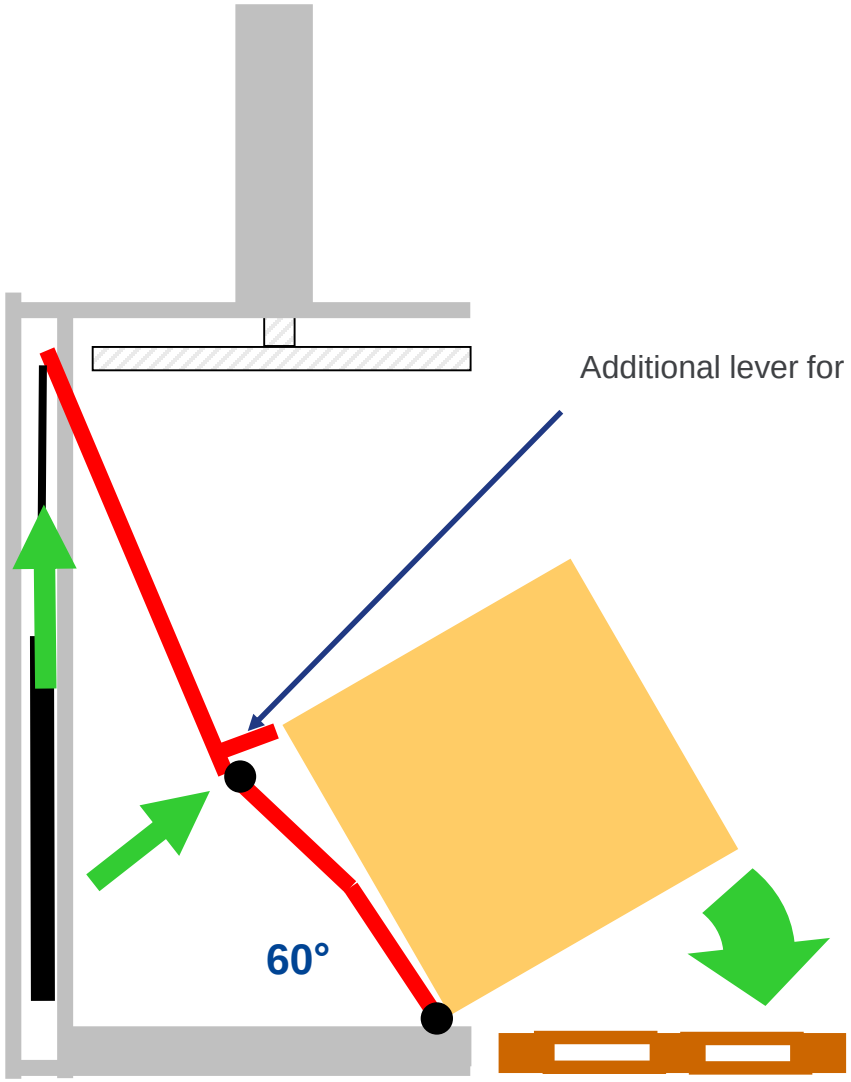
Strautmann BaleMatic

The automatic bale ejection ensures easy delivery of the bales. A separate hydraulic cylinder moves a special ejector device. Thus, a ball throw is guaranteed without physical exertion. Other components are not claimed.

The system reduces wear and increases the life time.



Strautmann BaleMatic

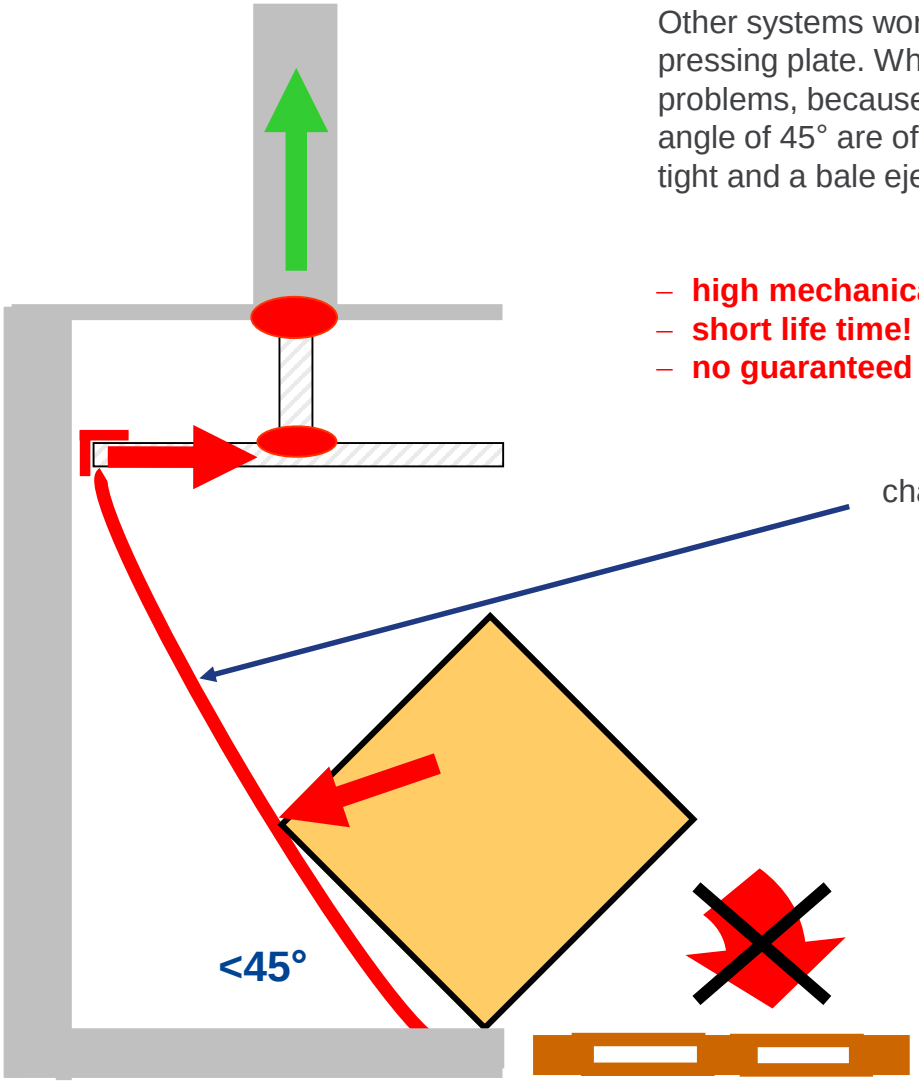


Additional lever for improving the ejection angle.

Bale ejection is guarenteed by the geometry of the mechanic.

Safe operation by 2-Hand-Mode

Other ejection systems

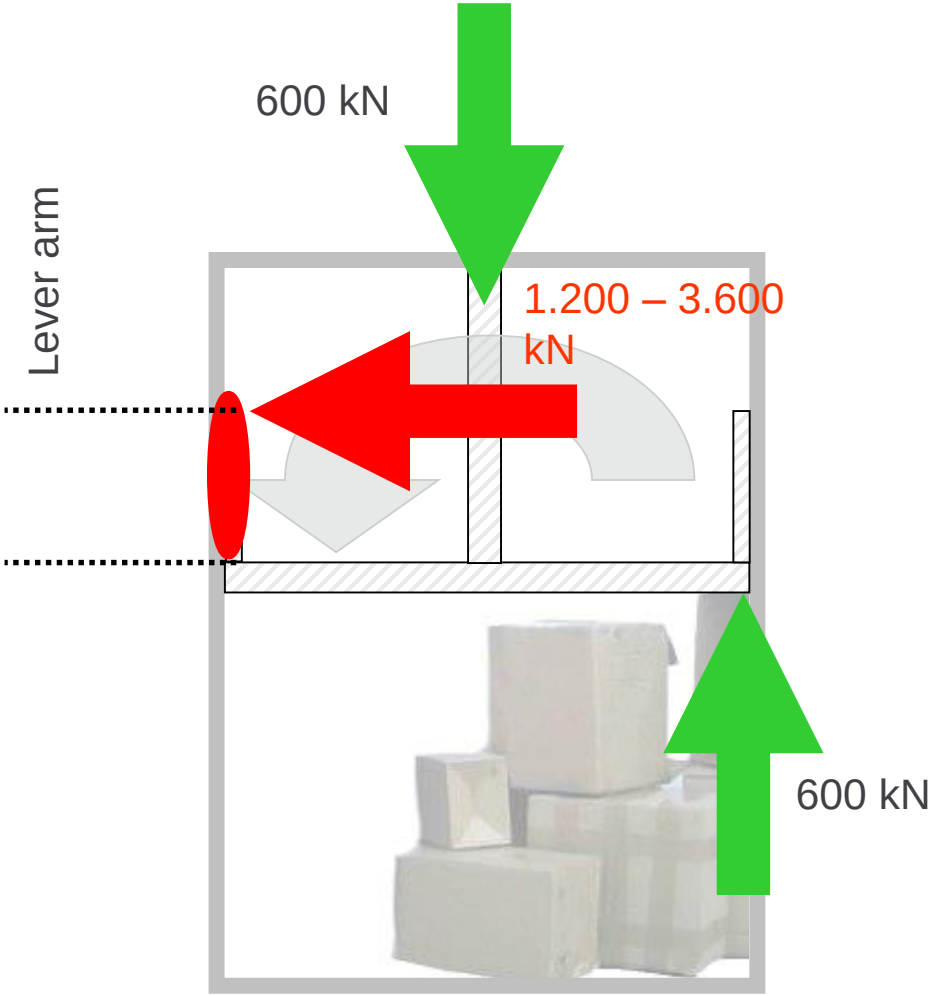


Other systems work with belts or chains that are connected with the pressing plate. When the press plate moves up it causes mechanical problems, because the press plate is "unnatural" loaded. In addition, angle of 45° are often not achieved because the belt can not be pulled tight and a bale ejection is not given.

- **high mechanical stress and wear!**
- **short life time!**
- **no guaranteed ejection of the bale!**

chain or belt

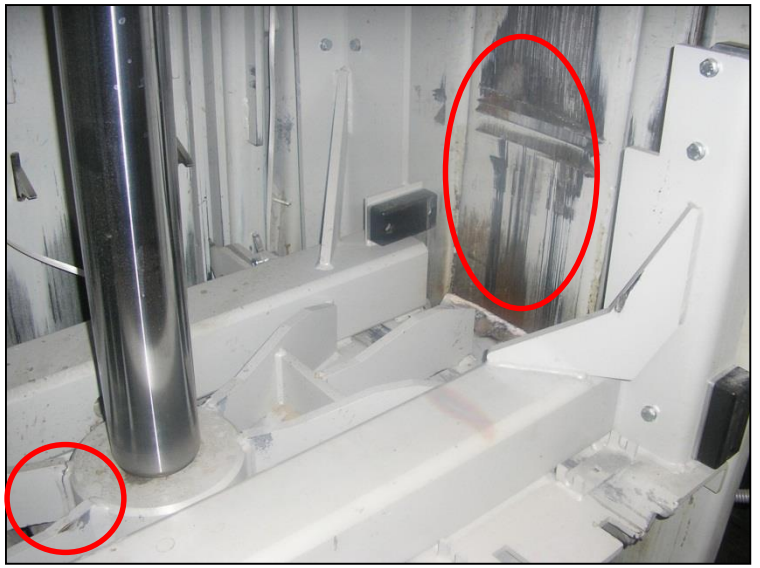
Other systems - Inner guiding of the press plate



Some competitors guide the press plate with a guiding unit against the inner side walls. This causes high mechanical stress.

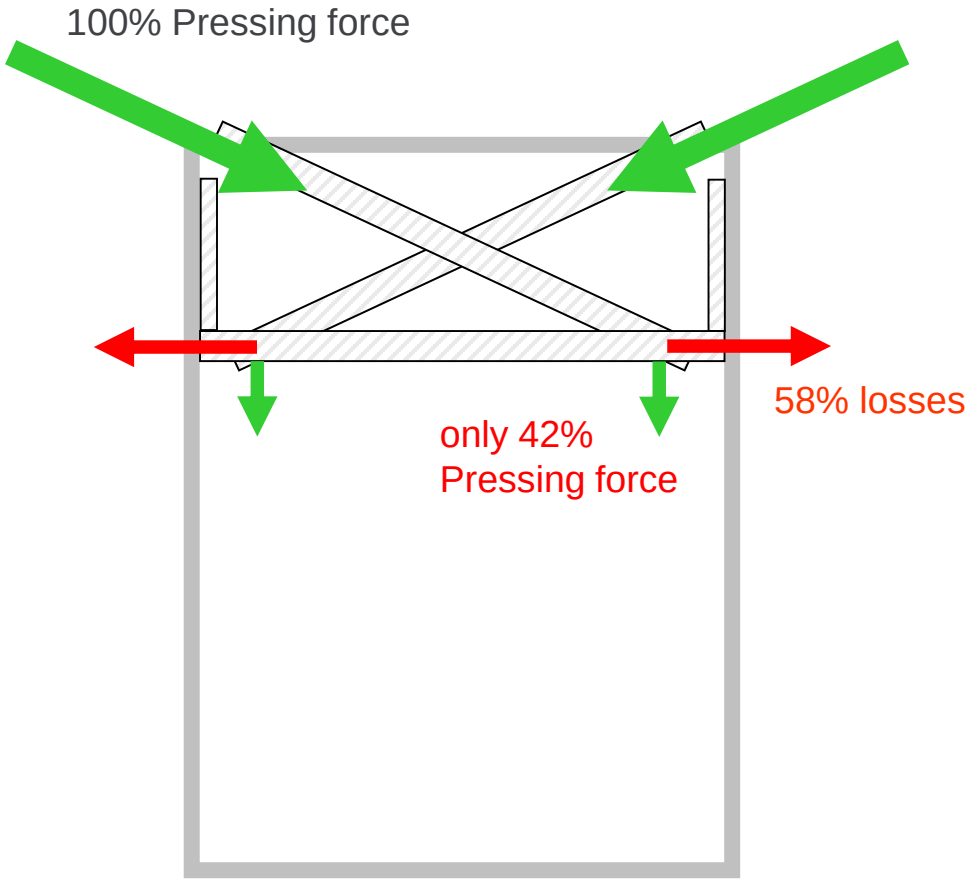
This guiding unit effect levers which multiplicate the forces by 2 up to 6, dependig on their length.

- **high mechanical stress!**
- **low density of the bales!**
- **short life time**



These forces leave marks!

Other systems - X- Arrangement of two cylinders



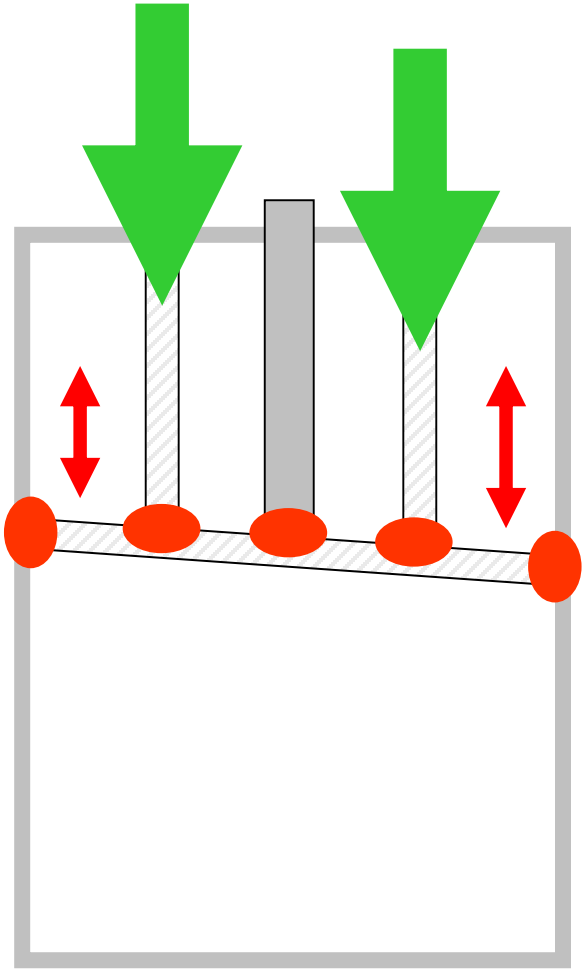
The variation of an X-arrangement of two press cylinders has high by the angular position forces losses. Only a small portion of the cylinder force is used for the pressing force. To achieve the same compression forces as Strautmann, the hydraulic power must be increased.

25° angle
sin25° = a / c
0,42 = a / 100
a = 42%

45° angle
sin45° = a / c
0,71 = a / 100
a = 70%

- **high energy demand!**
- **high mechanical stress!**
- **low bale density!**
- **short life time!**

Other systems - double cylinders and one guiding



At a construction with two hydraulic cylinders and one central guiding tube the press shield runs not horizontal because the cylinders do not run exactly synchronous. This means wear and stress for the machine.

- high mechanical stress!

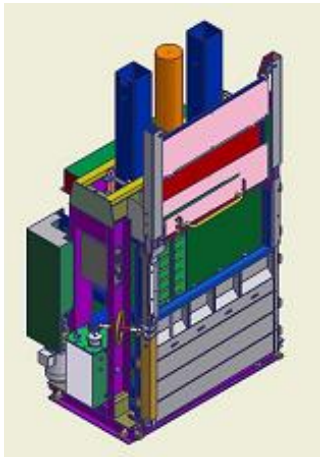
- short life time!

Strautmann QuickDoor®

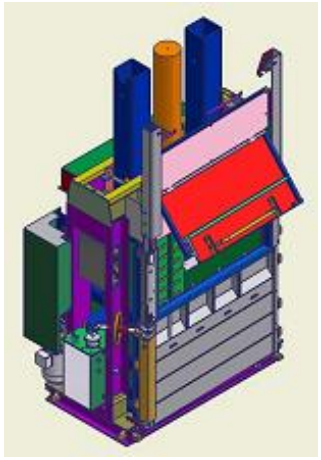
Swing- / sliding door for an easy and safe filling
The door is closed manually and after the pressing process the door moves up automatically. The bale chamber can be filled immediately. Due to the swing function material that sticks out of the press chamber, is easily and securely pressed into the machine. In optimum working height.

Easy and safe workflow which needs no extra space!

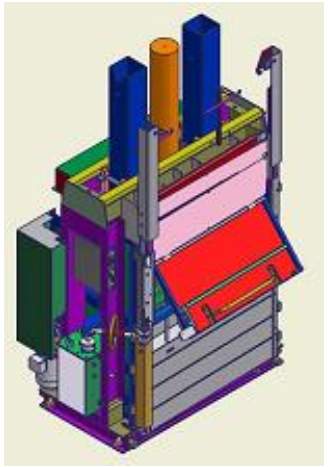
Strautmann QuickDoor®



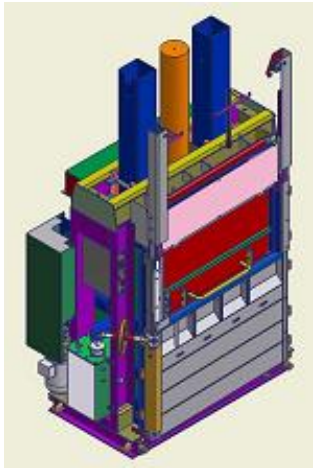
open flap



open **QuickDoor** up



open **QuickDoor** down



closed flap

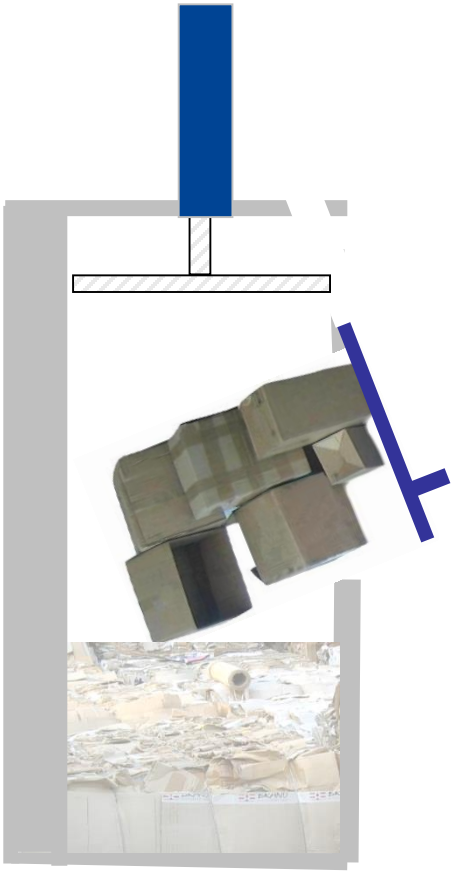
Comfortable and easy handling.

By tilting out the door you can push the overlaying material easy and safe into the press chamber.

automatic opening
no waiting time before filling

easy to close without effort
by counterweight

safe closing
cardboard that sticks out of the chamber is pushed back easily and safely



Other systems

Material must be inserted into the press chamber by hand!

Large space required due to revolving door!

The open flap keeps the operator on distance during filling.

- risk of accident
- uncomfortable operation
- waste of space

Strautmann HydroClose

The hydraulic door lock controls the strong re-expansion forces of large bales out of film.

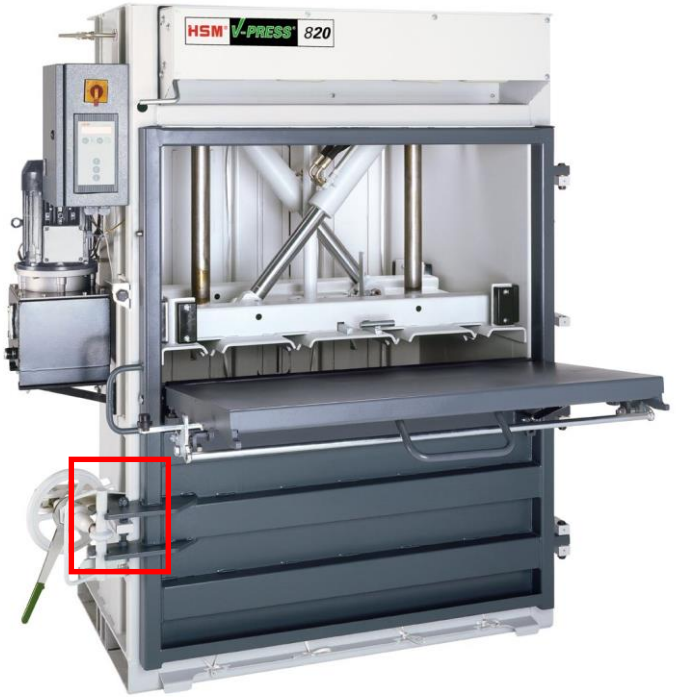
A separate hydraulic cylinder opens the door controlled and slowly so that an unexpected serving is prevented.

Controlled and safe door opening.

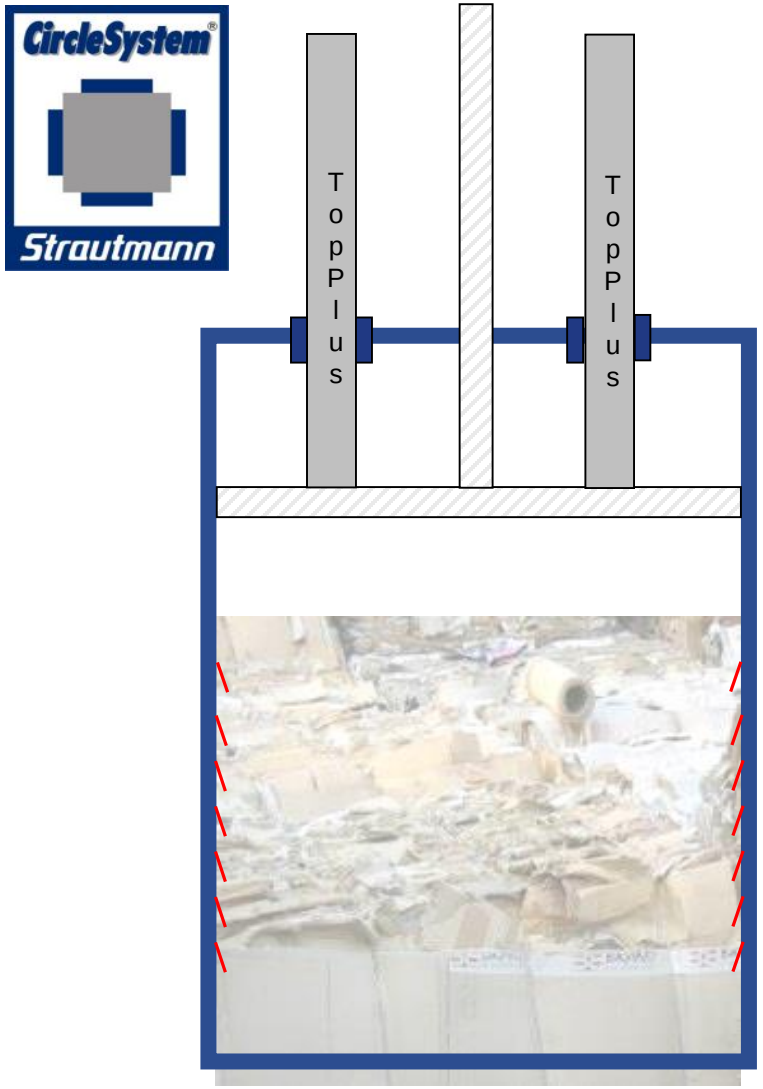
Stable door lock

Strautmann: door lock length, no crack or other signs of wear thanks to stable door locking.

Competitors: the door is locked only selectively, so with high forces cracks occur.



Strautmann CircleSystem®



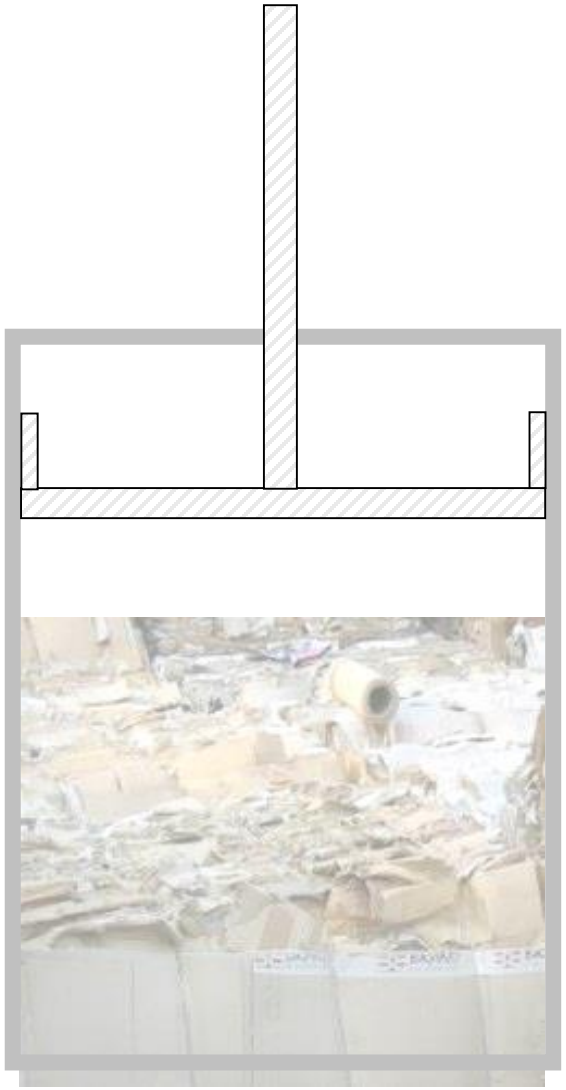
Pierced „scales“ inhibit the re-expansion of the material when the press shield returns to home position.

The material is compacted

The „scales“ hold the material down – low expansion !

- **high bale density!**
- **low energy demand!**
- **bigger re-filling volume!**

Smooth side walls



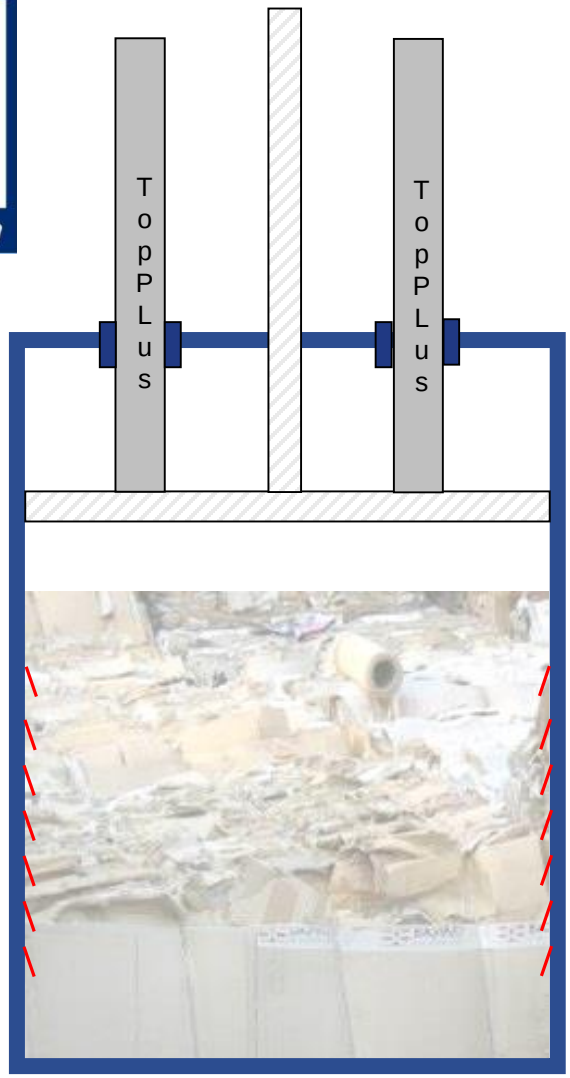
Systems with smooth side wall have no chance to hold the material down after pressing.

First, the material is compacted

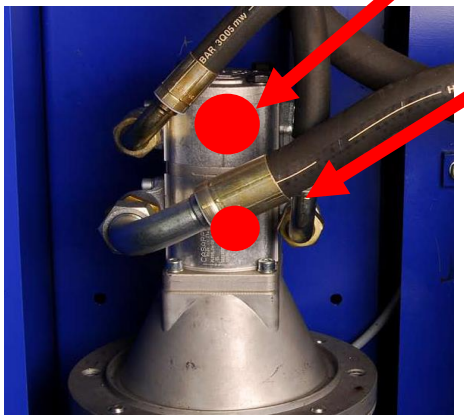
Then, the material is not hold down – high re-expansion !

- low bale density!
- high energy demand!
- low re-filling volume!

Strautmann EnerSave®



Two combined pumps drive the press shield automatically fast when the material is not reached yet and powerful when pressing force is needed. This saves up to 50% energy costs.

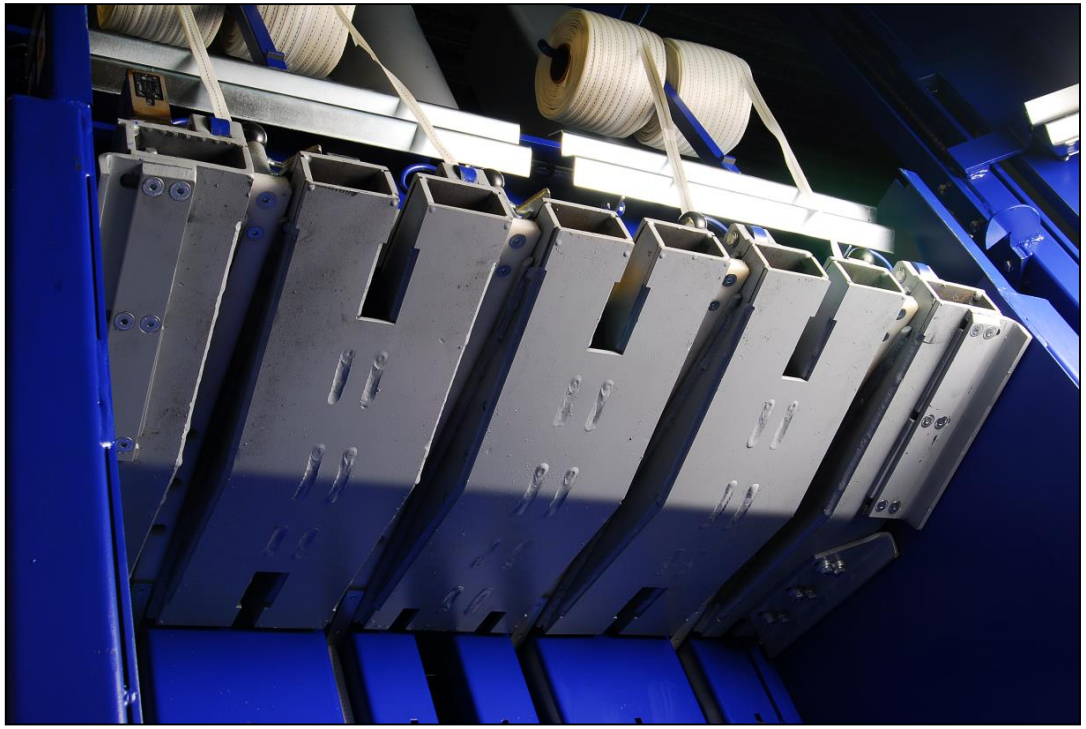


High pressure pump

Quick feed pump

- **low energy demand**
- **short press cycle**

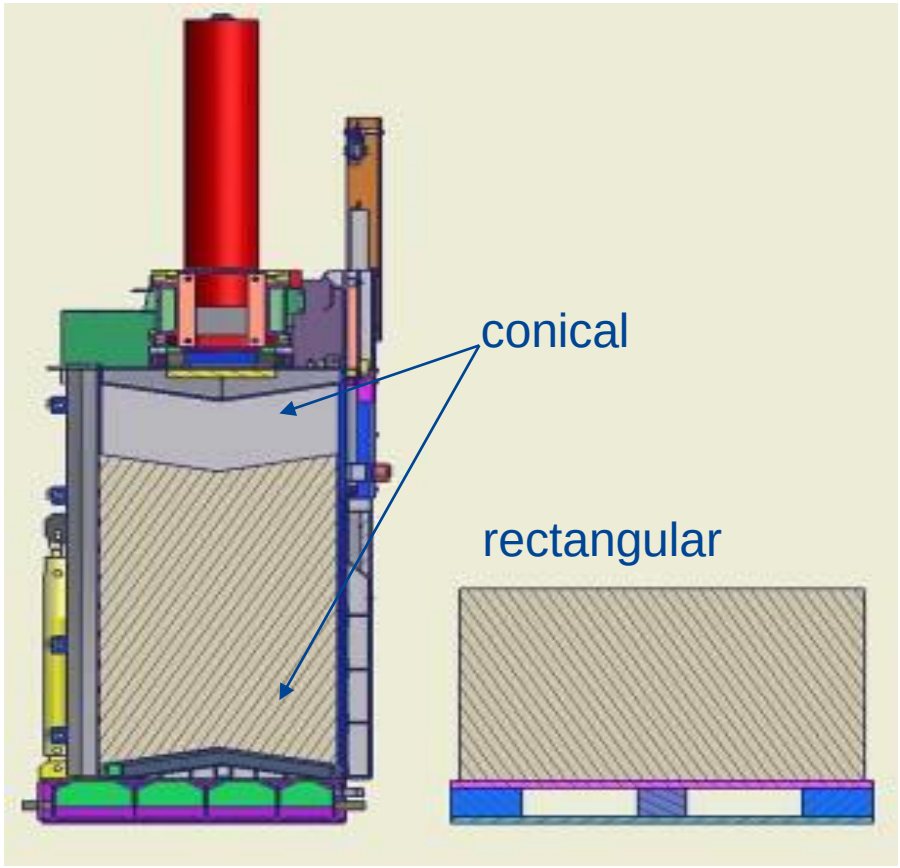
Strautmann ConPlate

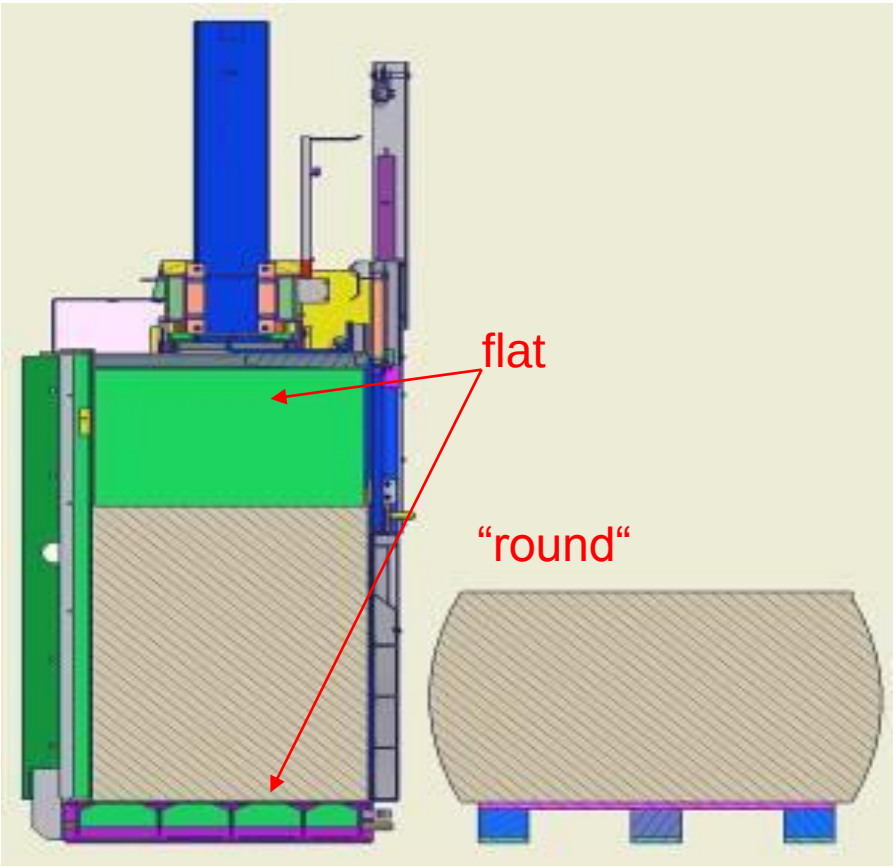


By pressing the conical plate and the bottom of the conical chamber re-expansion of the bale from the front into counteracted.

The result is a rectangular, very good stackable bale without bulges.

Comparison of flat and conical bottom or pressing shield



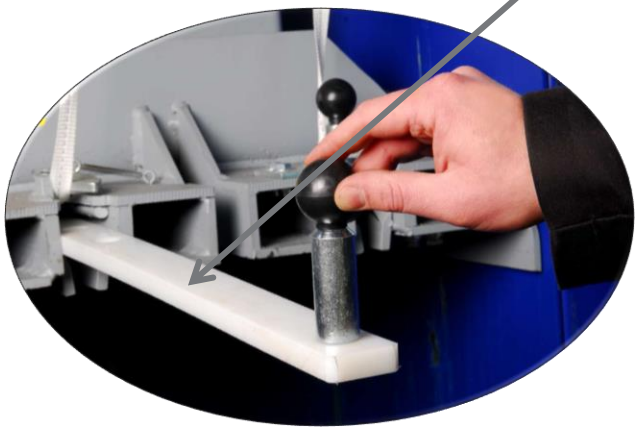


Strautmann EasyStrap

The integrated belt tensioner (4 pieces per press plate) allowfast and convenient tying of the bale. By positioning on the pressing plate the belt tensioners are easy to use.

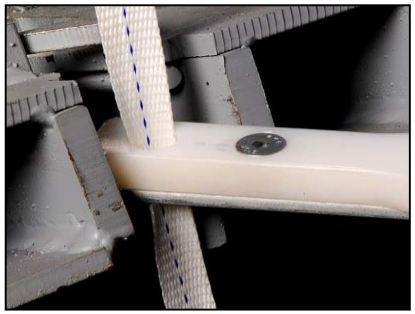
Advantage: due to bale tying under pressure the bale density is as high as possible.

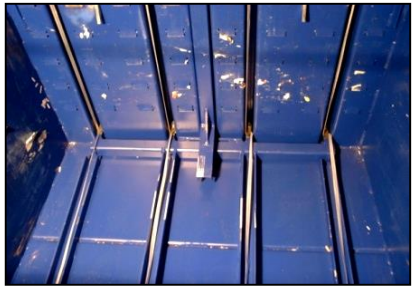
Strautmann EasyBind

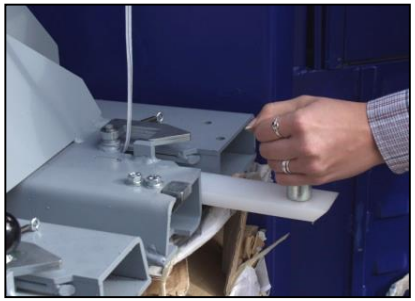


User- friendly handling of the tying bands.The integrated tape drawing hook allow convenient and rapid setting of the bales.

Strautmann EasyStrap

1. 

2. 

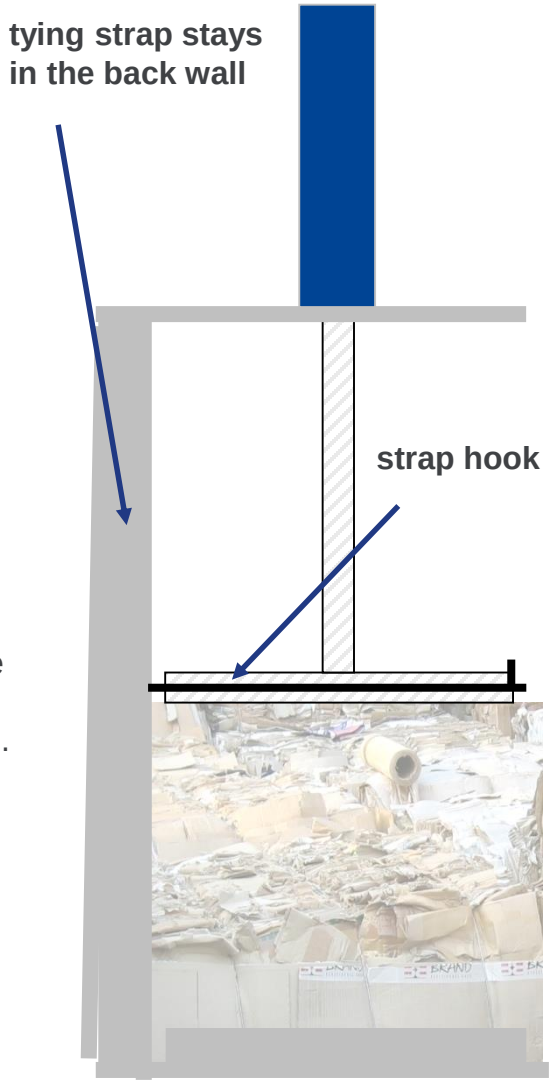
3. 

4. 

When tape loading, the tape is threaded through the eyelet. The tape is taken over with integrated band pull rod from the rear wall to the front to the opening. The pressing plate serves as a guide.

- easy handling!

- quick operation – time saving!



Strautmann band rolls

The band rolls are located at the front side of the press. This saves space and makes easy and fast changing possible.

Less time for bale tying needed!

Strautmann ReinForce

For re-expanding materials like foil, a reinforced machine is needed.
The forces arising during the re-expansion can be absorbed better and the **life time of the press is prolonged**.

With the Strautmann film program, the press-plate remains after the pressing process are on the material.

This ensures maximum bale densities and bale weights.