

LEXON®

01 Pet Perforator

Air and liquids that are present inside the PET bottles pose an obstacle during the baling process. In order to remove this obstacle and boost the baling efficiency, our PET perforator machine perforates and scratches the PET plastics so the air and liquids are flowed out thus a higher yield is achieved during baling process.



02 Flap Mechanism

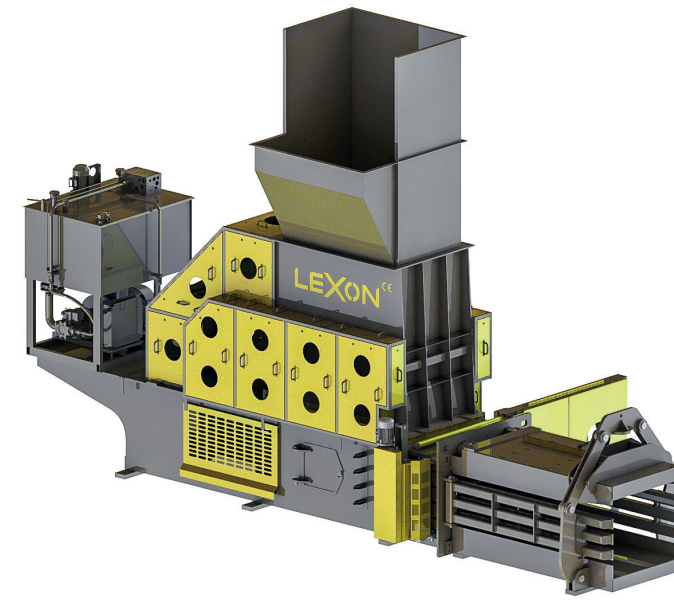
Flap mechanism generates additional pressing force during baling process and thus directly boosts the baling efficiency. Baler knives are exposed to less force and thus their durability is increased. Moreover, it decreases the baling time and increases weight of the bales by approximately 11 per cent.

03 Touch Screen PLC Automation

Siemens products, supported with Profinet communication, are used in automation system infrastructure. 12" Siemens industrial touch screen provides a user friendly interface with visual elements that eases the handling of the operator. Thanks to pressure regulation function offered by the screen, pressure of the "Jaw" and "Ram" can be traced. Furthermore maintenance and servicing time can be decreased by using error diagnostics and maintenance tabs. Pizzato / Siemens safety products are used within the system to both trace potential risks and to take required precautions.

04 Wire Feeder/ Twister Cutter Mechanisms

Standard and reliable bale wiring is achieved with the help of these systems that play a key role in rigid forming of bales. Even amount of wiring for each bale guarantees equal intervals, even load-bearing, and less wire consumption.



90 TON HORIZONTAL BALE PRES WITH FLAP MECHANISM

| | | |
|---------------------|------------|-------|
| Ram Force | : 90 | ton |
| Drive Motor | : 55 | kw |
| Bale Dimensions | : 1100x850 | mm |
| Capacity (OCC) | : 11,5 | tph |
| Capacity (*PET) | : 3 | tph |
| Capacity (Capacity) | : 15 | tph |
| Number of Wires | : 4 | wired |
| Oil Tank Capacity | : 1200 | litre |
| Feed Hopper Width | : 1600 | mm |
| Wire Thickness | : Ø=3,5 | mm |
| No Load Cycle Time | : 16 | sec |
| Baler Weight | : 21800 | kg |

*Capacity when pet bottle crusher unit is active.

90 TON HORIZONTAL BALE PRES

| | | |
|---------------------|------------|-------|
| Ram Force | : 90 | ton |
| Drive Motor | : 55 | kw |
| Bale Dimensions | : 1100x850 | mm |
| Capacity (OCC) | : 10 | tph |
| Capacity (*PET) | : 2 | tph |
| Capacity (Capacity) | : 13,5 | tph |
| Number of Wires | : 4 | wired |
| Oil Tank Capacity | : 1200 | litre |
| Feed Hopper Width | : 1600 | mm |
| Wire Thickness | : Ø=3,5 | mm |
| No Load Cycle Time | : 16 | sec |
| Baler Weight | : 20300 | kg |

*Capacity when pet bottle crusher unit is active.

LX120FLP 120 TON HORIZONTAL BALE PRES WITH FLAP MECHANISM

| | | |
|---------------------|-------------|-------|
| Ram Force | : 120 | ton |
| Drive Motor | : 55 | kw |
| Bale Dimensions | : 1100x1030 | mm |
| Capacity (OCC) | : 15,5 | tph |
| Capacity (*PET) | : 3,5 | tph |
| Capacity (Capacity) | : 21 | tph |
| Number of Wires | : 5 | wired |
| Oil Tank Capacity | : 1200 | litre |
| Feed Hopper Width | : 1600 | mm |
| Wire Thickness | : Ø=3,5 | mm |
| No Load Cycle Time | : 16 | sec |
| Baler Weight | : 22500 | kg |

*Capacity when pet bottle crusher unit is active.

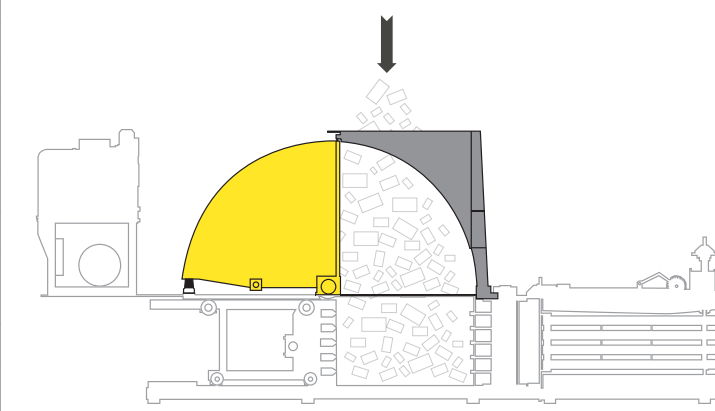
LX120 120 TON HORIZONTAL BALE PRES

| | | |
|---------------------|-------------|-------|
| Ram Force | : 120 | ton |
| Drive Motor | : 55 | kw |
| Bale Dimensions | : 1100x1030 | mm |
| Capacity (OCC) | : 14 | tph |
| Capacity (*PET) | : 3 | tph |
| Capacity (Capacity) | : 19 | tph |
| Number of Wires | : 5 | wired |
| Oil Tank Capacity | : 1200 | litre |
| Feed Hopper Width | : 1600 | mm |
| Wire Thickness | : Ø=3,5 | mm |
| No Load Cycle Time | : 16 | sec |
| Baler Weight | : 21000 | kg |

*Capacity when pet bottle crusher unit is active.



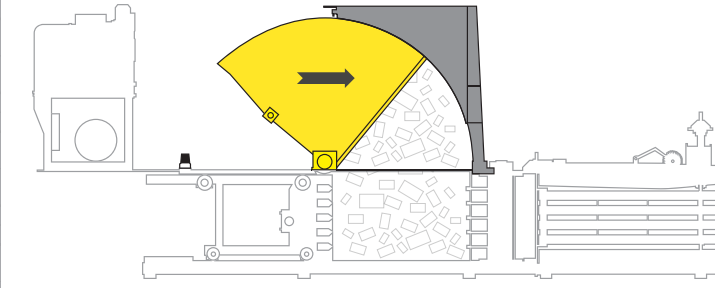
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FLAP MECHANISM WORKING PRINCIPLE

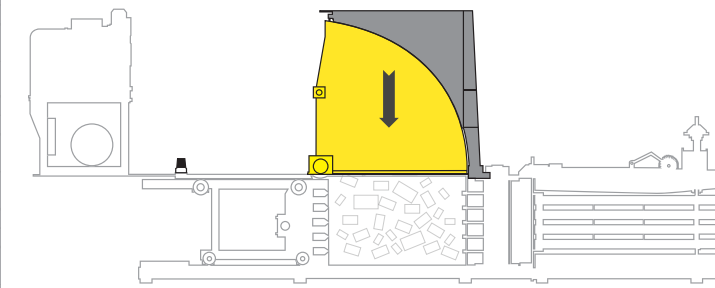
STEP 01

Materials are fed to chamber when the flap system is inactive. Integrated sensors trace the level of the material inside the chamber.



STEP 02

Hydraulic Flap mechanism becomes active when oil pumps force pressure oil to the system.



STEP 03

Thanks to the oil pressure pumped into the system, speed and pressure of the pistons are controlled and materials are baled.

- 1 Hydraulic Unit
- 2 Flap Mechanism (Hydraulic)
- 3 Pet Perforator Unit (Hydraulic & Mechanic)
- 4 Bale Cutter Blade
- 5 Wire Feeder Mechanism (Hydraulic)
- 6 Compacting Chamber (Hydraulic)
- 7 Wire Twisting Mechanism (Hydraulic & Mechanic)
- 8 Service Hatches
- 9 Ram Force Mechanism (Hydraulic)
- 10 Covers



PLANT BUILDER

TURN-KEY SOLID WASTE SORTING PLANTS

Thanks to half a century of experience, Benli offers its services of designing, planning, manufacturing, guaranteeing and commissioning integrated systems for such rising investment areas as; Solid Waste Sorting, Packaging Waste Sorting, RDF Preparation, Waste to energy, Waste disposal and Recycling to both domestic and international market.



ENVIRONMENTAL SERVICES

HOUSEHOLD AND INDUSTRIAL WASTE MANAGEMENT SYSTEMS

Benli Recycling Group started offering its waste management services for the industrial facilities in the early 1990s. As a result of the increase in the consumption of packaged products in direct proportion with the economic development of the country starting from early 2000s, Benli has been continuing to collect and sort the packaging wastes collected separately at the source within the Eskişehir, Odunpazarı municipality, with a population of 380.000, since 2007.



PALLET

WOODEN PALLET RECYCLING

The wooden pallet recycling process developed by the Benli R&D department has made a breakthrough in the sector; a wooden pallet dismantling machine has been developed in the process and the associated intellectual property rights of the machine have been secured. The facility has a production capacity of 50.000 pallets per month, thus allowing recycling 1000 tons of wood and thereby eliminating the need for cutting of 3500 lumber-grade pine trees that have reached 30 years of age, each month.

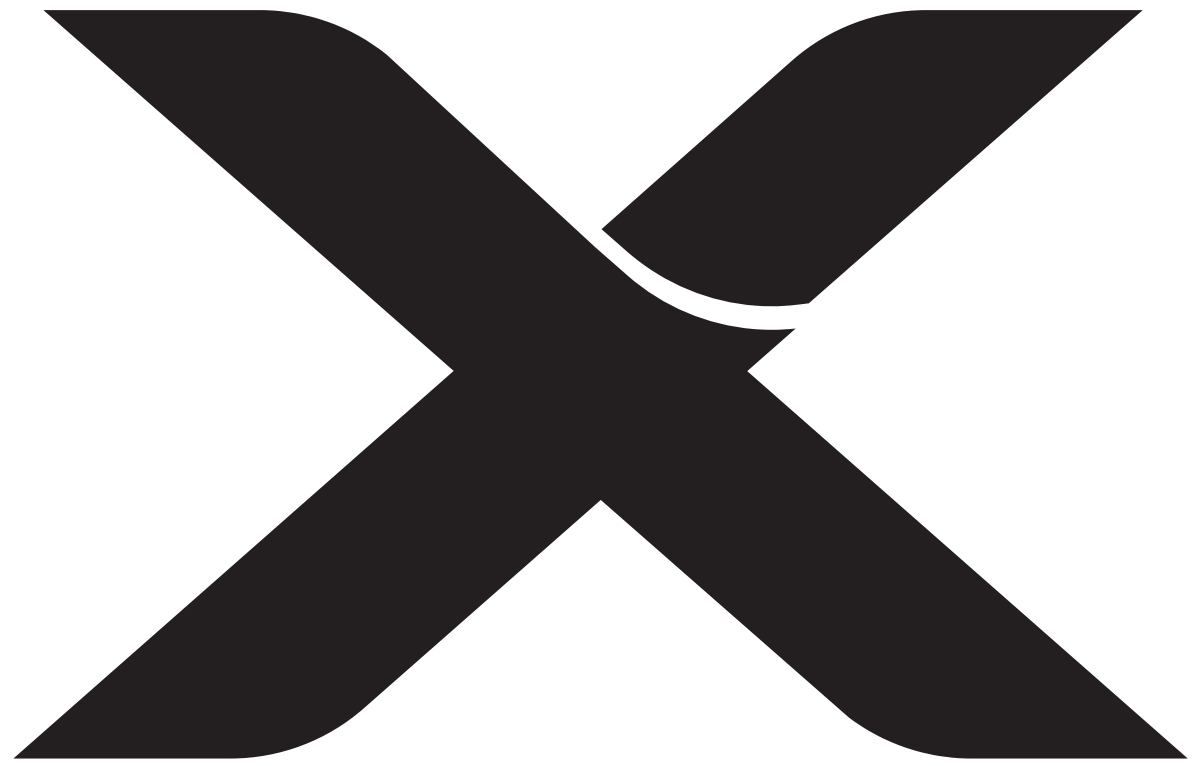


RUBBER

EPDM RUBBER RECYCLING

Clean and unused production scraps of EPDM weatherstrips, intended for the door and windows of vehicles produced by automotive industry, are processed into granules in specific sizes. These granules are offered to domestic and international markets for a variety of uses as infill for artificial turfs, elastic layer for tartan tracks and insulation material for construction industry.

WORLD CLASS BALING TECHNOLOGY



LEXON®

