

# **ABOUT BOA**

As a manufacturer of waste treatment systems, BOA Recycling Systems is familiar with every aspect of the complex field of waste treatment with the result of more than 60 years of experience. All equipment is developed and produced in our own production factory in Hengelo (NL).

Over the years our company achieved a leading position both in the Netherlands and internationally. The larger part of our production is intended for export all around the world, although Europe is our main focus. An international sales and service network, including BOA branch offices in Great Britain and Germany, is at the service of our customers permanently.



### We supply to companies active in various waste markets:

- · Paper and cardboard
- Municipal waste
- · Commercial industrial waste





# **REEL SPLITTER**

This cutting machine is suitable for cutting paper, cardboard, plastics, foils and tetra reels.

After cutting the roll, the material is cut into small pieces so that it can be further processed. An important feature of this machine is their simple, proven construction, working method and operation.

### Safe control

The control of the machine is done by means of a PLC control. On the front panel of the electric switch box there is a safe two-hand push button control to lead the knife downwards. The emergency switch leads the knife upwards immediately and stops the machine. The machine can be placed without any special foundation requirements and can be adjusted to the right height by means of adjusting "feet".

### **Functional description HRSM**

The knife movement is controlled by a differential control in the hydraulic system, which results in a considerably shorter cutting time. The machine has a knife guiding with guiding shafts in order to prevent shearing forces from transferring on the hydraulic cylinders. The two cylinders run synchronously, which is being controlled automatically. An adjustable stop for the knife determines the maximum cutting height.

The double stage pump of the hydraulic unit is protected against overloading. The knife is protected on both sides by means of pipes equipped with rubber rings. There are protection fences on the sides of the machine next to the knife.



Reel Splitter







### **BAG OPENER**

This robust machine is extremely suitable to open bags efficiently. Characteristic for the bag opener are the simplicity and efficiency. This limits the consumer- and maintenance costs to a minimum.

The slow rotating drum takes the material along an adjustable cam on which the robust wear-resistant hammers are mounted. This side of the machine can be opened easily hydraulically for maintenance and cleaning purposes. The hydraulic system is a part of the construction.

The hammers on the drum and the cam are executed with an extreme wear-resistant layer. It's easy to refit the resistant layer without replacing the hammers. The hammers are placed in such a way that the highest rate of bags (close to 100%) will be opened. After opening the bags, the material from the bags will fall out at the bottom of the machine onto a conveyor or in a chute.

The bag opener is equipped with an electric control to prevent overload. As soon as an overload occurs the feeding conveyor will stop. The drum will turn in opposite direction for a short while to clean the drum. When the blockage keeps occurring the machine will give a signal and the side of the machine can be opened manually to remove blocking material.

The machine has an adjustable cleaning mechanism, which prevents material from wrapping around the drum.

#### **Benefits**

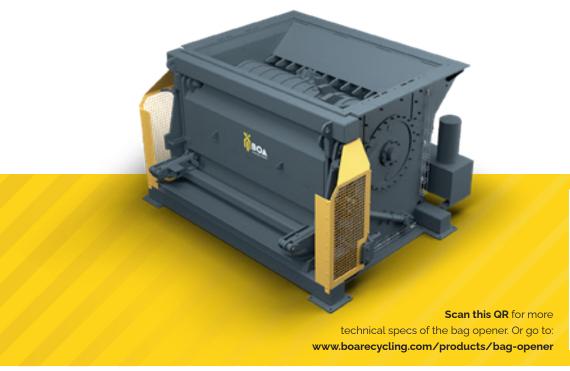
- For maintenance purposes the front side of the machine can be opened hydraulically.
- When the bag is being opened it will not affect the material quality.
- The drum together with the drive can be easily disassembled.
- The wear-resistant layer on the hammers is easily renewable, so replacement of the hammers is not necessary.



Shock-free drive



Wear-resistant hammers







# **SHREDDER (SLOW TURNING)**

BOA shredders suitable for shredding large pieces of cardboard and thick tubes and cores.

### KKS 1800 HD

The KKS shredder is a heavy-duty version which is suitable for shredding large pieces of cardboard, paper sheets and cores. This machine is provided with three rotors, independently controlled by frequency controllers, running in opposite directions. Due to the relatively low operating speed (max. 75 rpm) the machine operates more quietly and risk of fires is reduced. The machine will tear cardboard and paper sheets into pieces that are suitable for processing. The heavy duty rotors are manufactured in cast iron. These parts can be easily changed. These rotors are equipped with small needles which are made of hardened steel, to optimize the shear effect

Besides the feed opening for paper/ cardboard sheets, there is also a separate feed opening for cores. The cores will be led to the rotor by means two guiding rolls which are adjustable in heights. The cores will be drawn into the shredder by the two slowly rotating rolls. The upper/rear quickrotating roll which is provided with blades will shred the cores. These blades are made of special hardened steel and can be rotated so that all the cutting edges can be used. After all the cutting edges have been used, new blades can be mounted. For shredding cores, a special program needs to be selected on the display because the speed of the rotors will be different than the rotors for processing sheets.

The rest of the shafts are fitted with standard cutting blades for cutting cardboard sheets. The KKS shredder further distinguishes itself from the standard LSH shredder because the KKS shredder is equipped with heavier shafts, transmission and drive

### LSH 1800

This shredder is suitable to reduce big cardboard and paper sheets as well as cores (only cores with a thin wall thickness). The shredder is provided with 3 braking shafts, which run in opposite direction and which take care for the reduction of the material. The breaking shafts are made of hardened steel. The rotating speed is very low, so that wearing is limited and the noise level low. The material is fed into the LSH by means of a transport conveyor, which is an integrated part of the machine. The LSH is provided with a control, which stops the supply conveyor in case of overfilling and restarts the conveyor as soon as the end switch is set free. By overloading the breaking shafts turn back during a short period of time.

### Advantages of both machines:

- · Easily accessible for service purposes.
- Independently driven, frequency controlled axles.
- · Low noise level.
- · Low wear.







# **SHREDDER (FAST TURNING)**

### **RINO**

The high-speed shredder type RINO has been developed for the destruction of difficult-to-process materials up to approximately A4/A5 size, such as bundled newspapers and magazines, archives, tubes, voluminous cardboard packaging and even small pressed bales.

The heavy rotor is mounted in spherical roller bearings with a diameter of 100 mm. Replaceable, wear-resistant manganese steel hammer blocks are mounted on the rotor, which break the material. The spherical roller bearings are designed in such a way that they can easily absorb the occurring forces. The respective hammer blocks do not and cannot be sharpened, which is a time-saving and cost-saving advantage over competing machines.

### **ALLIGATOR**

The fast-turning paper shredder type Alligator is ideal for shredding paper, cardboard and other archive material to an output of  $35 \times 35$  mm or larger.

The destroyer is robust. The heavy, balanced rotor is mounted in generously dimensioned spherical roller bearings with a diameter of 100 mm. The feed belt carries the material to be shredded to the shredder, which is fitted with an overload circuit which stops the feed belt as soon as the rotational speed of the rotor decreases due to overload. When the motor is running at full speed again, the feed belt is switched on again. A blockage of the shredder is almost impossible.

#### SE

The fast-running shredder type SH is ideal for shredding large pieces of cardboard and paper to approximately A4/A5 size.

The shredder has two converging conveyor belts: one bottom belt, which feeds the material to the crusher drum, and one top belt. This upper belt has a dosing function, whereby material (such as boxes) is pressed between the belts. The small gap between the belts forces a correct dosage, and the process described below also prevents incorrect filling and overloading of the shredder. Incidentally, the strap height is adjustable especially for tubes.











# TRANSPORT SOLUTIONS

BOA has many years of experience in supplying transport solutions. With the different types of conveyor belts that BOA supplies, the transport solutions can be adapted to the wishes of the customer.

As a manufacturer of balers and supplier of waste separation and processing installations, BOA has specialized in developing turnkey solutions for a wide range of waste processing problems. BOA produces not only waste processing equipment, but also rubber, chain and steel plate conveyors and belt conveyors. We offer large and small installations that are built according to the latest technologies. Closed construction, dust removal or an integrated slope selection function are options for all our conveyors.

### Rubber belt - RB

This type of conveyor consists of an endless rubber mat. Depending on the application, the mat runs on support rollers or slide plates. The mat can be supplied with rubber carriers, as a flat mat or as a profiled mat. The rubber belt is available as a sorting belt, conveyor belt, but also as a bunker belt. Robust, hydraulically driven bunker doors are available for bunker belts. The belts have a strong construction and are therefore suitable for a large number of materials

### Chain Conveyor - KTH

The chain conveyor consists of a stable open-frame construction of profile steel and sheet metal, a drive and tensioning device. The sides of the above-ground part are covered with removable plates, making the chain easy to clean. The six mm thick rubber mat is attached to profiles placed between two conveyor chains. A special guide rail on each cylinder protects the chain from lateral forces. The raised edge of reinforced sheet steel consists of removable parts of 1500 mm long. The KTH can be mounted at floor level or above the ground.

### Steel plate conveyor - PBM

The steel plate conveyor consists of specially designed steel slats that are attached to a chain. The rollers of the chain run on wear-resistant strips. The frame is provided with easily removable side and bottom plating. The PPE is designed for conveying sharp materials and the labyrinth seal ensures that fine materials do not reach the chain

### Circulation belt - OLB

The circulation or circulation belt consists of a drive unit, a conveyor hopper, a vertical tensioning device and a return track that is mounted on the roof. The transport mat consists of an anti-static, synthetic cover with a flexible strip on the sides over the entire funnel length. The vertical tensioning device is secured with perforated sheet metal. The basement is not contaminated with material, which reduces the risk of fire.

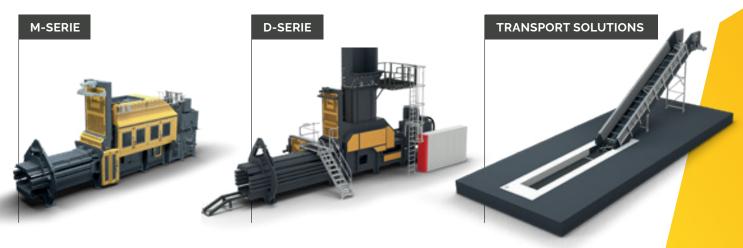


Scan this QR code for more technical specs of the transport solutions. Or go to: www.boarecycling.com/products/transport-solutions



# **OUR PRODUCTS**











**BAG OPENER** 



BOA Recycling Systems designs and supplies high quality machines and solutions for recycling and waste processing. Our machines and solutions are tailored to each specific business process, resulting in reliable and effective handling and processing. Boa Recycling Systems Hassinkweg 8 7556 BV Hengelo The Netherlands

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