

ALLRECO



BST



Komplett. Durchdacht.

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KOMPLETT. **POWERFUL.** DURCHDACHT.

BEST PERFORMANCE - THE **BST**

The New Exclusive Shredder

The market demands a simple, robust, and performant machine. We would like to introduce you to the best shredder – the BST from ALLRECO.

In developing the BST, we have focused only on the best components and omitted anything that has no benefit. The new drive concept is designed to achieve the highest throughput at the lowest energy consumption.

Due to the modern drive concept, no pulley or gearbox is required to efficiently transmit the power to the shredding shaft. The shaft speed is infinitely variable up to 350 rpm. Full torque is available at any set speed.

The machine is optionally equipped with one or two water-cooled high-torque motors with 176 kW each.

With two drives, the BST is even more powerful than a 500 kW machine thanks to its boost function.

The granulator cutting system of the BST is extremely robust as well as insensitive to impurities and efficient due to the high blade spacing. The solid material rotor allows to store kinetic energy, which makes the machine much more efficient.

The machine shreds most fractions in a single stage directly to customer-specific particle size. The easily exchangeable baskets facilitate the handling. The BST is available with baskets for grain sizes from 10-120 mm and is thus well prepared for a wide range of applications.

Two independently operating pushers ensure maximum throughput. The pusher assembly

operates completely electrically and load-dependent. No hydraulics are required to operate the machine. For maintenance and service, the pusher assembly can be swung out completely of the shredding chamber.

The new BST shredder is true to the ALLRECO slogan: KOMPLETT. DURCHDACHT.

ALLRECO. KOMPLETT. DURCHDACHT.

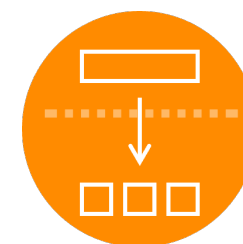
It all started in Niederberg in the "Bergisches Land" region. Hedwig, Werner, and Josef Doppstadt established the "Doppstadt" agricultural contractor company. Today the passion for technical innovations, inventiveness, and the perception of market requirements are still the fundamental motive forces for the successful creativity of the Langenberger Innovation

Group (LIG) with the 2nd generation of shareholders. ALLRECO, with a long Doppstadt history, is directly owned by the LIG since 2021.

Our core business includes machines and plants for the processing and separation of waste wood, MSW, commercial and industrial waste, biomass processing, and refuse-derived fuel production.

We are a team of highly qualified and experienced employees, and we can offer our customers tailor-made, high-quality machines and completely thought-out plant solutions to meet their requirements.

With a lot of flexibility and inventiveness, we are ready to move great things with you!



Single stage shredding

Reduction from input size directly down to target grain size



Maximum throughput



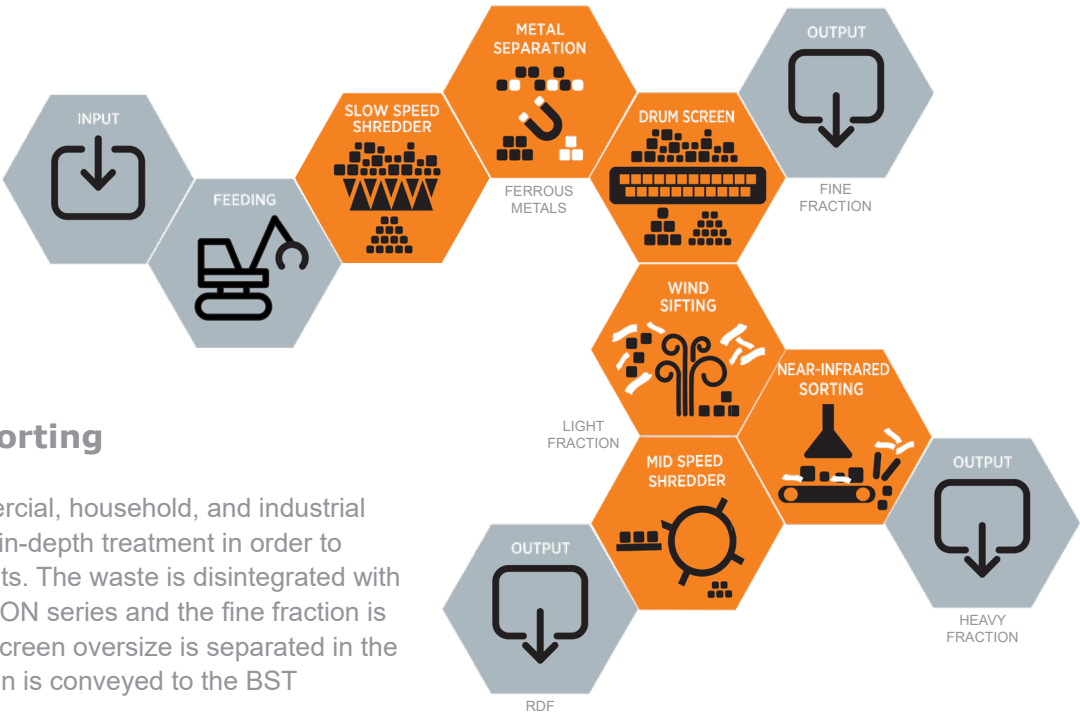
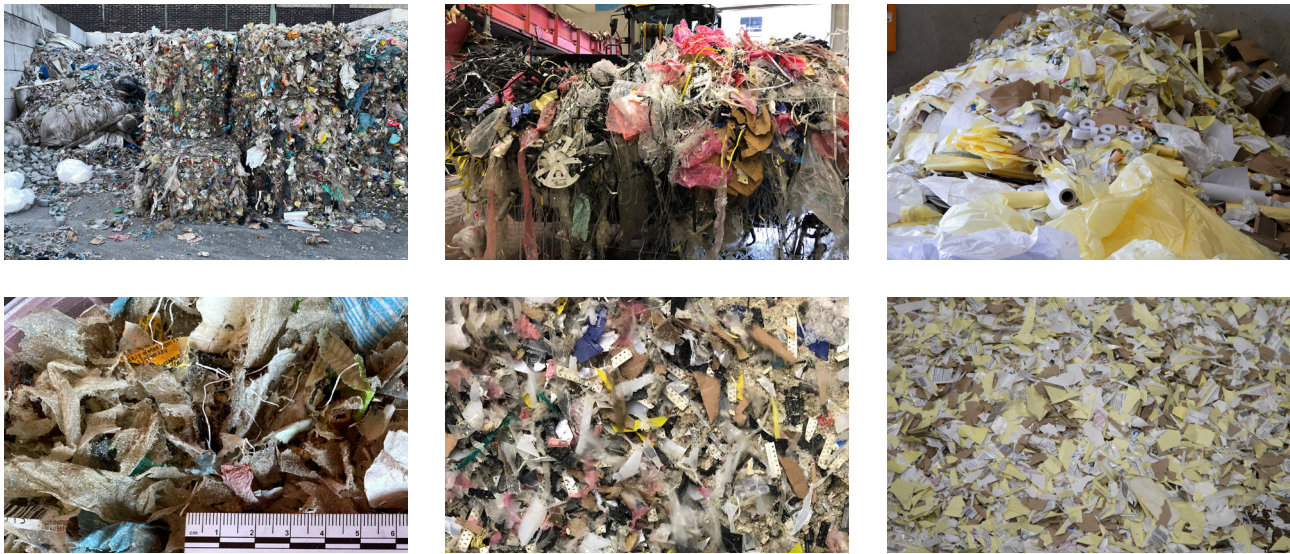
Low operating costs

POWERFUL SHREDDING

Substitute Fuel Production – Exemplary Processes

The BST shreds everything – from commercial waste to mixed plastics and foils from sorting plants, mixed plastic briquettes, plastic production waste, lightweight packaging, and rejects.

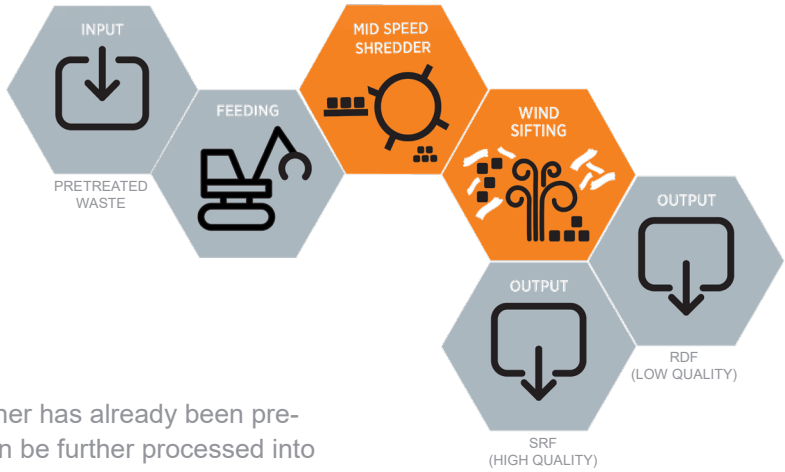
With the BST, you are counting on enormous performance with maximum profitability.



Process with Pre-Sorting

Untreated waste from commercial, household, and industrial applications requires a more in-depth treatment in order to comply with legal requirements. The waste is disintegrated with a pre-shredder from the CERON series and the fine fraction is removed by screening. The screen oversize is separated in the windsifter and the light fraction is conveyed to the BST secondary shredder.

For different RDF qualities and depending on the input material, fractions such as plastics can be obtained as additional combustibles from the heavy fraction of the windsifter with an NIR separator and reduced to final size together with the wind sifter light fraction in the secondary shredder. The process can still be further adapted as desired, for example by adding a non-ferrous separator.



Shredding Prior to Sorting

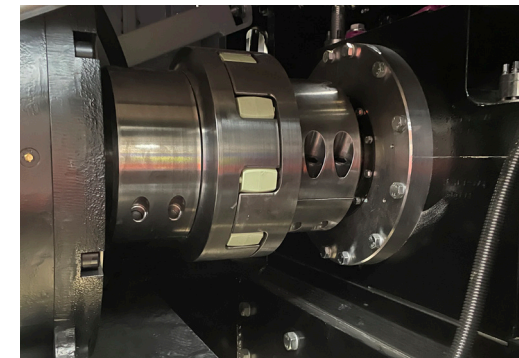
With this processing option, waste that either has already been pre-treated or is collected as mono-fraction can be further processed into a substitute fuel with high quality. After shredding, the material can be further separated with a windsifter. Low density, flat objects are extracted while heavier, more compact particles remain on the belt. The process can be adapted to the specific input as well as target output specifications.

For more information, please see our commercial waste brochure.

ADVANTAGES IN DETAIL

TWO PUSHERS

- Electric
- No hydraulics
- Synchronous or asynchronous operation
- Intelligent, load-dependent control
- Different recipes selectable



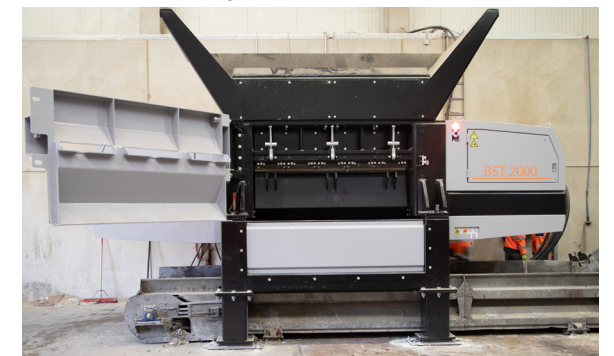
GEARLESS TECHNOLOGY

- High torques at low speeds
- Water-cooled main drives
- Low specific energy consumption due to the high efficiency of the drive package
- High-torque motors made in Germany
- No overload clutch necessary



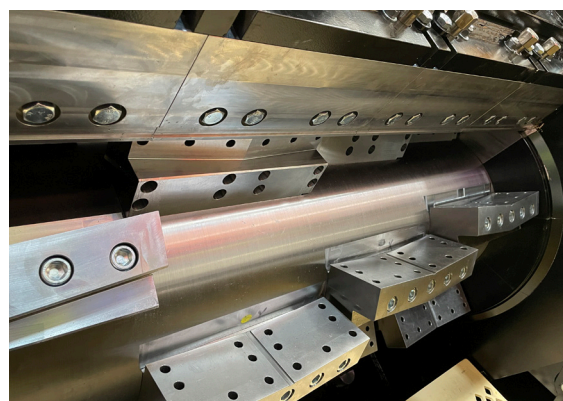
EASY MAINTENANCE

- Two maintenance doors facilitate the access to the shredding chamber
- Stator knives can be adjusted while the machine is running
- Easy-Grid-System facilitates the exchange of baskets without unnecessary effort and risk



ROTOR

- Solid knife holders
- Full material shaft
- Knives with up to four usable cutting edges
- Wear resistant special knives
- Variable speed adjustment

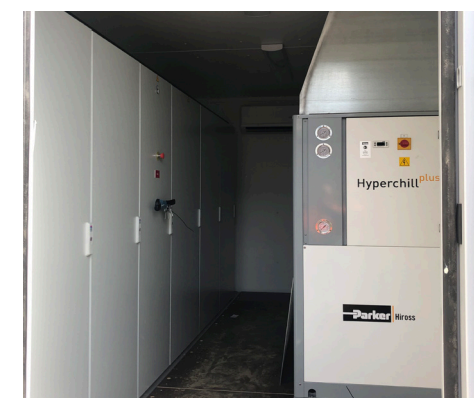


OPTIONAL

- Second counter blade increases productivity
- Remote control facilitates operation
- ALLREConnect for remote service support up to real time monitoring and evaluation of operating data
- Fire alarm system detects hot spots and flames
- Sprinkler system reduces fire risk

CONTROL

- Water-cooled power electronics
- Heat exchanger (also for drives)
- Visualisation of the machine
- Hydraulics only for maintenance functions





KEY FACTS

Efficient.

The machines of the BST series are equipped with two pushers operating independently of each other thus ensuring an efficient and continuous feeding without jamming.

Productive.

Thanks to the two-piece pusher and the second counter blade, the machine achieves approximately twice the performance. Depending on the material properties and the mesh size of the basket, the throughput is between 10 t/h and 40 t/h.

Robust.

The BST easily withstands even large strains due to its very robust and simple design – considering its own weight of over 25 tons.

Economical.

The fact that the two high-torque motors are working without gearbox is the highlight of the BST – in this way the energy is transferred to the shredding unit nearly without any loss. The energy input per ton of shredded material is extremely low.

Persevering.

Even load due to the two independently operating pushers enable the machine to work without interruptions. And this also works with materials that are difficult to shred such as carpets or foils.

Thrifty.

Due to the even load, current peaks and idle times are avoided. The gearless high-torque motors save energy costs. The robust design and the low-wear drive also minimise operating and maintenance costs.

Safe.

Easy and reliable access protection via key transfer system. Large doors and the folding pusher assembly allow quick and safe access to the shredding unit. The optional fire alarm system and the active material temperature monitoring reduce the fire risk.



TECHNICAL DATA

BST	2000
Weight	27000 kg
Length (Basic machine)	6250 mm
Width (Basic machine)	3400 mm
Height (Basic machine)	4200 mm
Drive	2x 176 kW
Loading height	2850 mm
Discharge height	700 mm
Rotor	
Number	1
Length	2040 mm
Diameter	800 mm
Number of knives	50 (Rotor) 20 (Stator)
Speed	0 – 350 rpm

Freely selectable baskets for grain sizes from 10 – 120 mm.

The technical data are approximate and depend on the machine equipment
(Subject to change without notice).

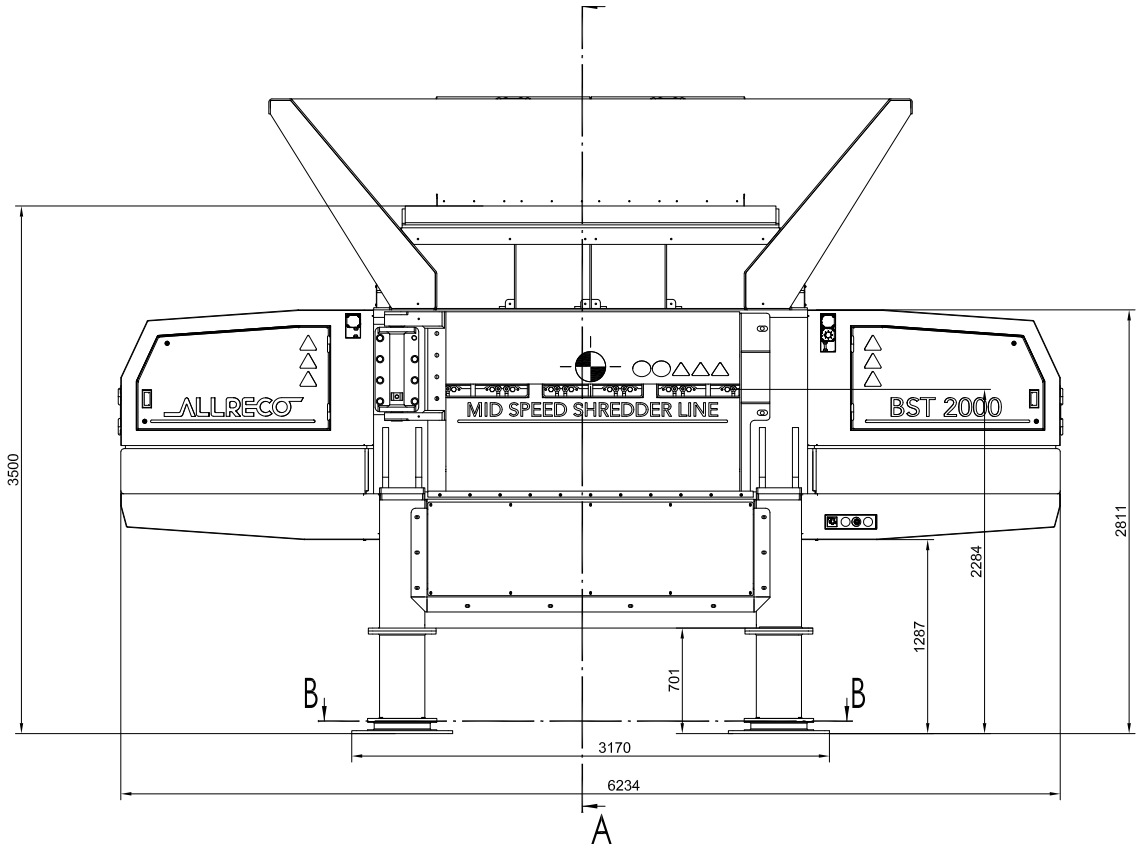
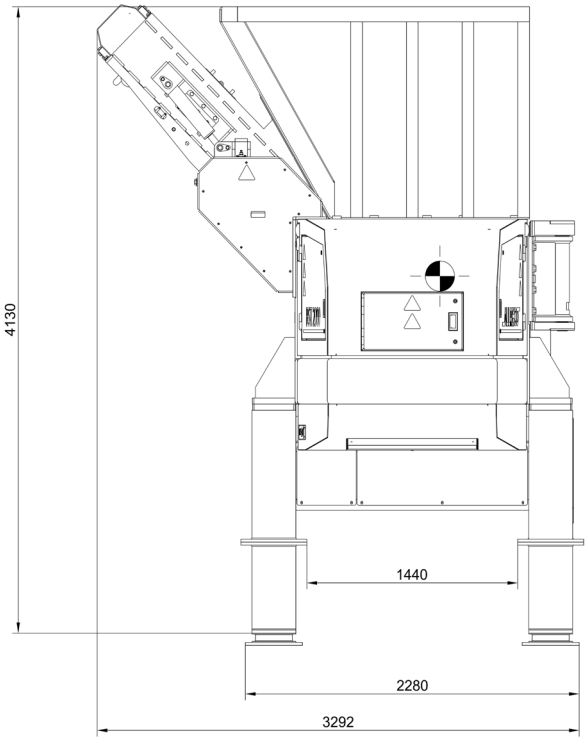


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Your advantages at a glance:

- Innovative pusher assembly
- Highly efficient
- Gearless high-torque motor
- High throughput with low wear
- Direct feeding and shredding in one step are possible
- Compact design
- Maintenance-friendly



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