

FINE SHREDDER



1200A SERIES



WASTE
REFINING
SOLUTIONS



FOR SORTED AND PRE-TREATED WASTE

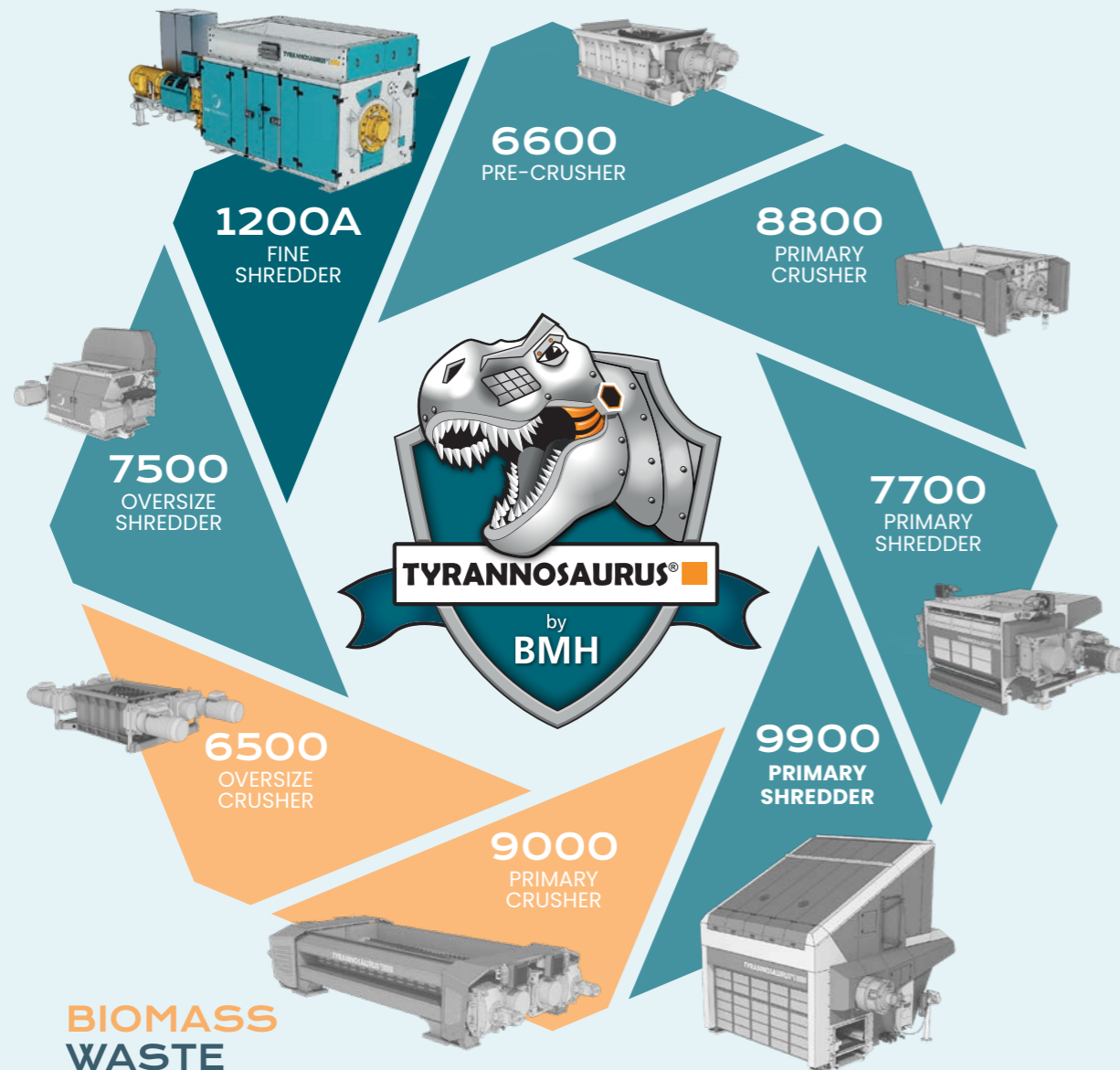


Outstanding performance with smart technology

TYRANNOSAURUS® shredders & crushers

BMH'S SHREDDER AND CRUSHER EXPERTISE originates from our deep understanding of material handling processes and different customer needs. Since 1960's, we've delivered hundreds of shredders and material handling systems worldwide.

TYRANNOSAURUS® Shredders and Crushers for waste and biomass represent excellent availability and high capacity. All our rotors have spiral knife arrangement, which means maximized power for each cutting event.



TYRANNOSAURUS® Fine Shredders produce RDF/SRF with homogeneous and consistent particle size at high capacity & high availability.

1200A series

The finest particle size with consistency

THE TYRANNOSAURUS® 1200A FINESHREDDER SERIES consist of electrically driven, high-speed, single-rotor shredders. They are specifically designed for industrial scale refining of pre-shredded and

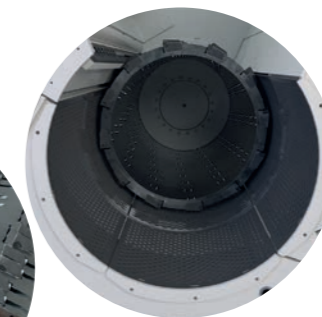
sorted solid waste that typically needs to be reduced to 20–70 mm particle size for the purpose of increasing fuel combustibility or optimizing the particle size for further processing.



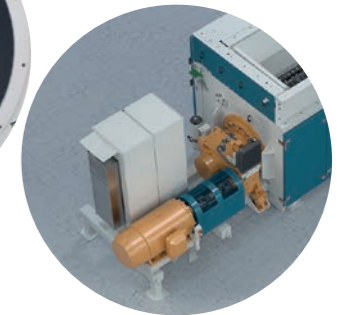
THE PATENTED ZERO GAP® cutting technology ensures that the capacity, particle size and quality are preserved even when the knives start to wear. Each 800 mm section of the counter knives can be adjusted independently to maintain the cutting gap in minimum, ensuring optimal cutting even for the thinnest of waste materials.



THE IMPACT PROTECTION™ system is based on the counter-knives that are hydraulically held in position. This allows for an easy and fast removal of unshreddable materials and effectively prevents damages to the shredder. The Impact Protection™ system both reduces the need for process stops and shortens the actual stops.



EFFECTIVE SCREENING is the key to achieving high processing efficiency. The screening area is 50% bigger than in the previous model. This enables easier access for the shredded material to pass through the screen and reduces the heat generated in the process.



THE 1200A SERIES shredders are typically delivered with the electric motor and the control cabinet mounted on an integrated support platform. This arrangement simplifies the shredder's commissioning and operation. The control cabinet also makes it easy to connect the shredder to the rest of the plant.



312
KNIVES

TYPICAL APPLICATIONS:

- 1 Alternative fuel for cement kilns and RDF based fluidized bed boiler (FBB) power plants
- 2 Feedstock for RDF pellets production
- 3 Feedstock for chemical production

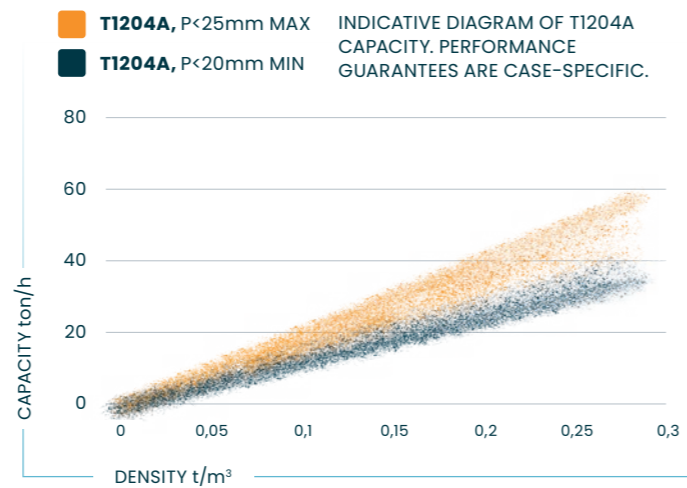
Designed to perform

These fine shredders are ideal for producing the finest particle size when there is a need to increase fuel combustibility or optimize the particle size for further processing. The long-term capacity is a result of maximizing hourly capacity and uptime hours.

TYRANNOSAURUS® Fine Shredders are designed for refining pre-shredded and sorted solid waste, which usually consists of plastics, cardboard, wood and textiles.

KEY FACTORS FOR HIGH CAPACITY

- The Zero Gap® cutting technology maintains high capacity even when the knives start to wear.
- The rotor has a large diameter of 1200 mm and houses 312 knives.
- The knife size and rotation speed are optimized for high production.
- The spiral knife arrangement allocates power effectively to each cutting event.
- The automated pusher presses the material against the rotor.
- High power with reserve for varying load demands.



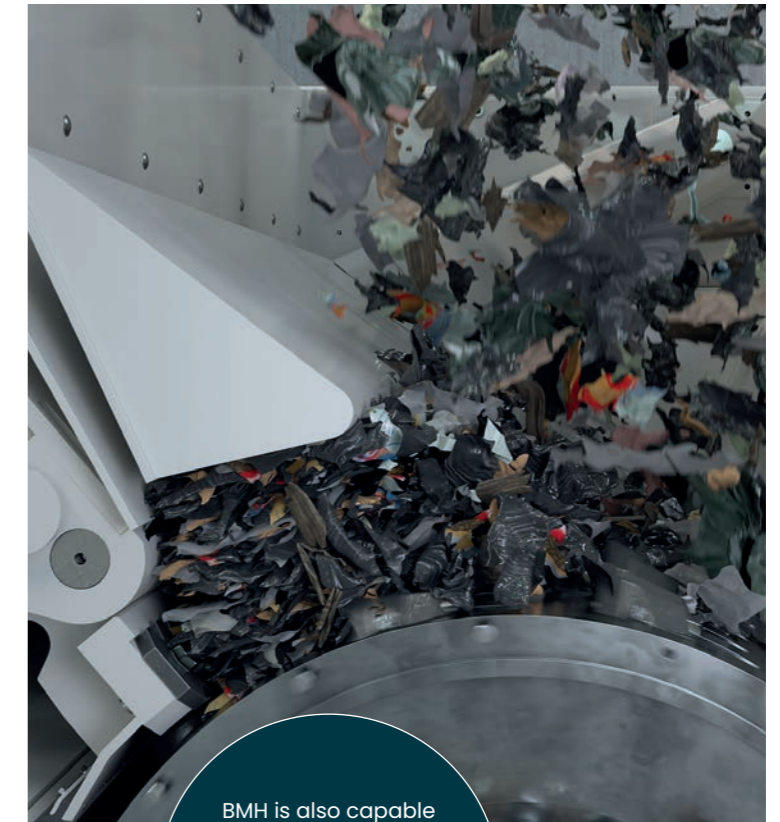
More capacity & wider application range with optional equipment

Pusher & pusher extension

The hydraulically operated pusher efficiently presses the waste against the rotor knives. This keeps up continuous high shredding performance and enables processing lighter input materials. For very light and fluffy feed materials, the pusher can be extended.

Screens

A wide range of available screens secures the shredder's adaptability to various applications. The carefully selected aperture size and shape also improve the shredder's capacity in each application.



BMH is also capable of supplying service platforms and ladders, which are designed to fit to customer's plant layout.



Support frame

The support frame enables installing the shredder easily on top of a discharge conveyor.



Superior knives guarantee high capacity & quality

HIGH NUMBER OF CUTTING EVENTS

A total of 312 knives results in a high number of cutting events. This tremendous amount of knives reduces the load per knife, which increases knife lifetime and optimises the energy consumption.

OPTIMISED PARTICLE SIZE & QUALITY

The knife material, size and shape have been carefully selected to produce high SRF/RDF quality and to resist wear and fracturing. The small knife size also has a positive impact on particle size and quality.

EXTENDED KNIFE LIFETIME

Opposite edges of the knife can be utilised by turning them 180°, which creates a big saving in operating costs. In addition to the extended knife change interval, the quality of produced SRF/RDF stays even and capacity remains on a high level.

Easy access to service points

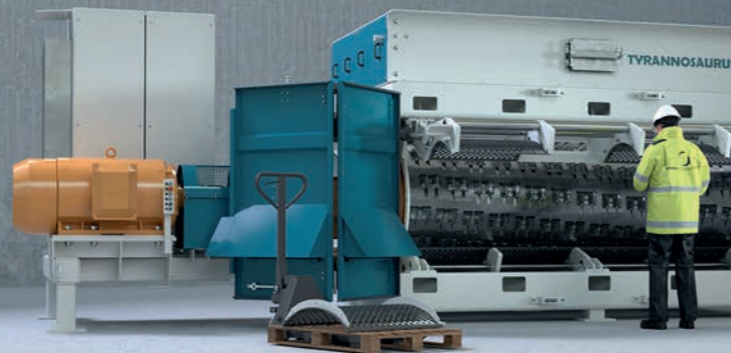
BIG DOORS & HATCHES

We have put plenty of effort in making the regular maintenance safe and easy. Cleaning, servicing and replacing parts takes only a minimal amount of time. Big doors and hatches ensure easy access to the rotor, screens, and counter-knives.

SAFE AND EASY MAINTENANCE

We have made sure that there is no need for the operator to go inside the hopper. The screen opening is controlled by a hydraulic cylinder, which improves safety during service. The screen meshes can be pulled aside for easy and fast maintenance.

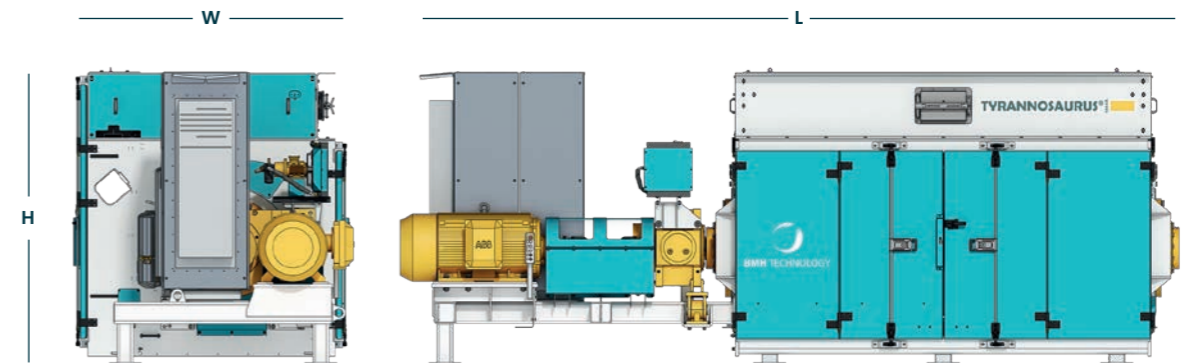
↑ The shredder's critical parts are carefully protected. Structural design and material choices ensure high availability and a long lifetime in all shredding conditions.



TYRANNOSAURUS® 1200A series/ Technical details

MODEL	1203A	1204A
MAIN DIMENSIONS (L x W x H) [mm]	6400 X 2600 X 2700	7200 X 2600 X 2700
WEIGHT [t]	28	30,5
DRIVE POWER [kW]	250	350
DRIVE SYSTEM	ELECTRIC	ELECTRIC
INFEED OPENING [mm]	2540 X 1440	3340 X 1440
NUMBER OF ROTORS	1	1
ROTOR LENGTH [mm]	2400	3200
ROTOR DIAMETER [mm]	1200	1200
ROTATION SPEED (rpm, max)	180	180
COUNTER KNIVES [pcs]	6	8
COUNTER KNIFE CASSETTES [pcs]	3	4
SCREENS (pcs)	9	12
CAPACITY [t/h, max]*	UP TO 17	UP TO 25
TYPICAL OUTPUT PARTICLE SIZE [mm]	30	30
AUXILIARY HYDRAULIC POWER UNIT(kW)	20	20

* THESE INDICATIVE VALUES HAVE BEEN CALCULATED USING TYPICAL WASTE PROPERTIES. PLEASE SEE GRAPH ON P. 4.





BMH TECHNOLOGY

Cleantech company from Finland rooted back to 1929.



Scan
to visit 1200A
product page!

We create solutions for waste to be reborn as raw materials and renewable energy.

We offer material handling solutions for our customers who work towards carbon neutrality and a greener future. With our plant solutions, equipment and life cycle services they can reuse material previously seen merely as waste. We help our customers turn municipal, industrial, commercial and wood-based waste into raw materials and renewable energy. This answers to the needs of industrial, chemical and energy production as well as construction and infrastructure.



COMPLETE
SOLUTIONS



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REFERENCES



EXECUTION
CAPABILITY



LOCAL
SERVICE

Renewable
future
together.

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