### Waste FineShredders from Metso Waste Recycling















# Metso Waste Recycling – your shredder expert

Reap the benefits from our wealth of experience in the design and manufacture of shredding equipment to effectively and reliably reduce the size of all materials – and choose us as both your Pre- and FineShredder supplier. Through more than 700 installations worldwide and continued focus on our customers' needs, Metso is one of the world's leading suppliers of shredders for the recycling and waste industry.

We work with companies in different segments of the recycling business such as incineration, hazardous waste, waste-to-energy, recycling, landfills, cement production and RDF.

Our range of FineShredders has been developed to serve the needs in the recycling industry and work with either a pusher or two shaft self-feeding systems. The 3 different solutions share certain key benefits like:

- Homogeneous output from 10-100 mm
- · Minimal fine particles
- Minimal dust emissions
- · No heat generation
- Easy maintenance









# M&J FineShred 1550 and 3550

Single shaft high-tech Fine-shredders with pusher



The M&J FineShred 1550 and 3550 single shaft with pusher are very suitable for RDF production and can deliver a through put up to 17 tons per hour depending on the output size.

The M&J FineShred series consists of one-shaft shredders ideal for all recycling purposes. The shredder handles a wide range of different materials in bales, rolls, bricks or loose – and is highly suitable for RDF production.

The multi-edged shaft is fitted with a patented knife system and is fed by a pusher. The sensitivity of the pusher ensures that material is not forced onto the shaft and a minimum of heat is generated. The hydraulic drive of the shaft guarantees impact resistant and resonance-free power transmission.

The system ensures minimum wear and energy consumption— and produces RDF material of the highest standard









# M&J FineShred 4500 and 6500

double shaft for a wide range of applications and high volumes



The M&J FineShred 4500 and 6500 double shaft are suitable for RDF production and can deliver a through put up of to 20 tons per hour depending on the output size.

The M&J FineShred range also consists of two-shaft shredders for continuous material input.

M&J FineShred units can be used in a wide range of different applications including difficult materials such as sticky bitumen, fabrics and foams.

Particle sizes of 10-100 mm are obtainable depending on screen size. Two counter rotating shafts fitted with knives specially selected for individual applications make the units highly flexible. The unique design of the cutting area ensures minimal friction on the shaft. The combination of continuously adjustable rotor speed, variable cutting frequency and optimal selection of screen sizes delivers a very homogeneous output with a minimum content of fine fractions.

The two shafted machine is very suitable for high volumes of material and continuous material input.

The hydraulic drive of the shafts guarantees impact resistant and resonance-free power transmission with minimum wear and energy consumption.







# M&J FineShred 1500 and 3500

Single shaft high-tech Fine-shredders with hydraulic pusher for baled material



The M&J FineShred 1500 and 3500 single shaft with horizontal pusher are suitable for mono fractions such as plastic foils, PET and aluminum. It can deliver a through put up to 13 tons per hour depending on the output size.

The third member of the M&J FineShred series is the one-shaft shredder with hydraulic pusher ideal for many recycling purposes. The shredder handles a wide range of materials in bales, rolls, bricks or loose. Output is always of uniform quality in sizes from 10 to 100 mm.

The multi-edged shaft is fitted with a patented knife system and is fed by a hydraulic pusher. The speed and sensitivity of the pusher are interlinked with the function of the shaft. This ensures that material is not forced onto the shaft and a minimum of heat is generated.

The hydraulic drive of the shaft guarantees impact resistant and resonance-free power transmission.

# Patented cutting technology

### featuring multi-edge shaft and hydraulic drive



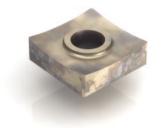
#### Shaft

The patented shaft can be fitted with a number of different cutting tools. Knife blocks are positioned firmly in the shaft utilizing a unique self-centering, distortion- and tilt-safe assembly. The shaft is positioned to ensure correct feeding via the horizontal or gravity pusher. In the two shafts version the shafts are positioned to ensure self-feeding and thus eliminate the need for additional pushing devices. The geometry of the 12-edged shaft minimizes the risk of materials getting entangled, and prevents the machine from heating up.

on each shaft. This "state of the art" double hydrostatic system provides maximum output and the most reliable performance available

#### Screen

The precise cutting of material minimizes the strain on the screens which can be made from very thin materials typically, 6 mm plates. The absence of pressure on the screen means the open area can be optimized to ensure a high output rate. Granules can be discharged using screw or belt conveyors.



#### **Knives**

Knives are available in different designs to suit the demands from different applications. The positioning of counter knives in relation to rotating knives delivers a "clean cut" minimizing dust emissions. Cutting clearance is easily adjusted using the notches provided.

#### Drive

The hydraulic system consists of a variable pump with power control, an integrated feed pump and a hydraulic motor mounted

#### Service

Knives and knife holders are easy to fasten and change. The new design feature which allows the two shafts to be moved away from each other has greatly improved access to the shafts and the cutting tables. The service hatch on the outside of the two one-shafted machines provides easy access to service the shaft or change the knives.

Ease of maintenance ensures minimal down time.







# Our history and quality standard





#### We are a proud long-established company

Set up in 1857 in Horsens, Denmark, as a foundry under the name "Møller & Jochumsen", Metso Waste Recycling of today has a long tradition of designing and manufacturing industrial components and equipment.

#### We listen

The basis of any good co-operation lies in an in-depth understanding of our customers' requirements and respect for individual preferences. We believe that close co-operation with customers and suppliers, based on mutual respect and trust gives the best results – to the benefit of all concerned.

#### We encourage quality performance

A high level of quality is a key element in all our activities, both internal and external – we want our customers to return, not our products. Our objective is to ensure our customers always have complete confidence in us. Your satisfaction is fundamental to our long-term development. Our employees, together with supportive participation from all levels of management, work hard to ensure you have a good experience when working with us.

#### Our level of quality is achieved by

- Fulfilling the requirements of ISO 9001 and thereby continuously improving the effectiveness of the quality management system.
- Having a zero-defect strategy and focusing on error prevention. If errors do occur, we will correct them and find a way to ensure that they never occur again
- Working as "One" in all our processes and teams to create value not only for our customers, but also for our employees.
- Relevant training for all levels of personnel. Our organization, both management and staff, are committed to the above philosophy and directives.

### To meet our customers' needs

# The Metso Way

#### **MAKING THE BIG DIFFERENCE**

The message that covers everything we do



#### knowledge

We have deep knowledge about our customers' business environment, processes and challenges



#### people

Our committed and highly competent people make the difference to our customers



#### solutions

We create the technology and services required to meet our customer needs



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