

Waste Pre-Shredders from Metso Recycling
M&J Eta[®]PreShred Mobile



Metso Recycling – the waste shredder expert

The M&J Eta[®]PreShred mobile pre-shredders

Metso Recycling specializes in the design and manufacture of shredding equipment to effectively and reliably reduce the size of all material. Through more than 600 installations worldwide and continued focus on R&D, Metso Recycling is one of the world's leading suppliers of shredders for the recycling industry. Our position also stems from our customer focus. To supply you and your business with the best shredder solution, we always do our best to understand your current situation, and your future needs. Our customers include companies that work with incineration, hazardous waste, waste-to-energy, recycling, landfills, cement production and composting.

All Metso shredders share certain basic features and exceptionally robust construction. We use components from internationally recognized suppliers, to ensure maximum performance and durability.

M&J Eta[®]PreShred 1000 Mobile Hooklift



Key advantages of the M&J Eta[®]PreShred

- Open cutting table reduces wear to the bare minimum
- Bi-directional shredding results in a consistent flow of shredded material onto down-stream conveyors
- Asynchronous shredding keeps waste constantly moving, thus improving shredding efficiency
- With our aggressive knife design, no pushing device is required
- Central lubricating system is standard on all machines
- Automatic reversal if knives encounter large or tough steel cement parts
- Intelligent shredding routines automatically adapt to processed material characteristics. The PLC control system is equipped with six standard programs, including two that can be individually programmed
- Hardox steel used in all parts of the cutting table exposed to wear
- Bi-directional shredding with equal speed and torque reduces wear and improves capability and pre-shredder capacity

M&J Eta[®]PreShred 4000 Mobile crawler



Powerful concept, excellent performance

All bolts and bearings are mounted away from the cutting area for easy and safe access

The M&J double hydrostatic drive is very reliable under heavy loads and shocks

All knives are made of Hardox 500 wear resistant steel for less wear and less down time

Well-proven belt conveyer

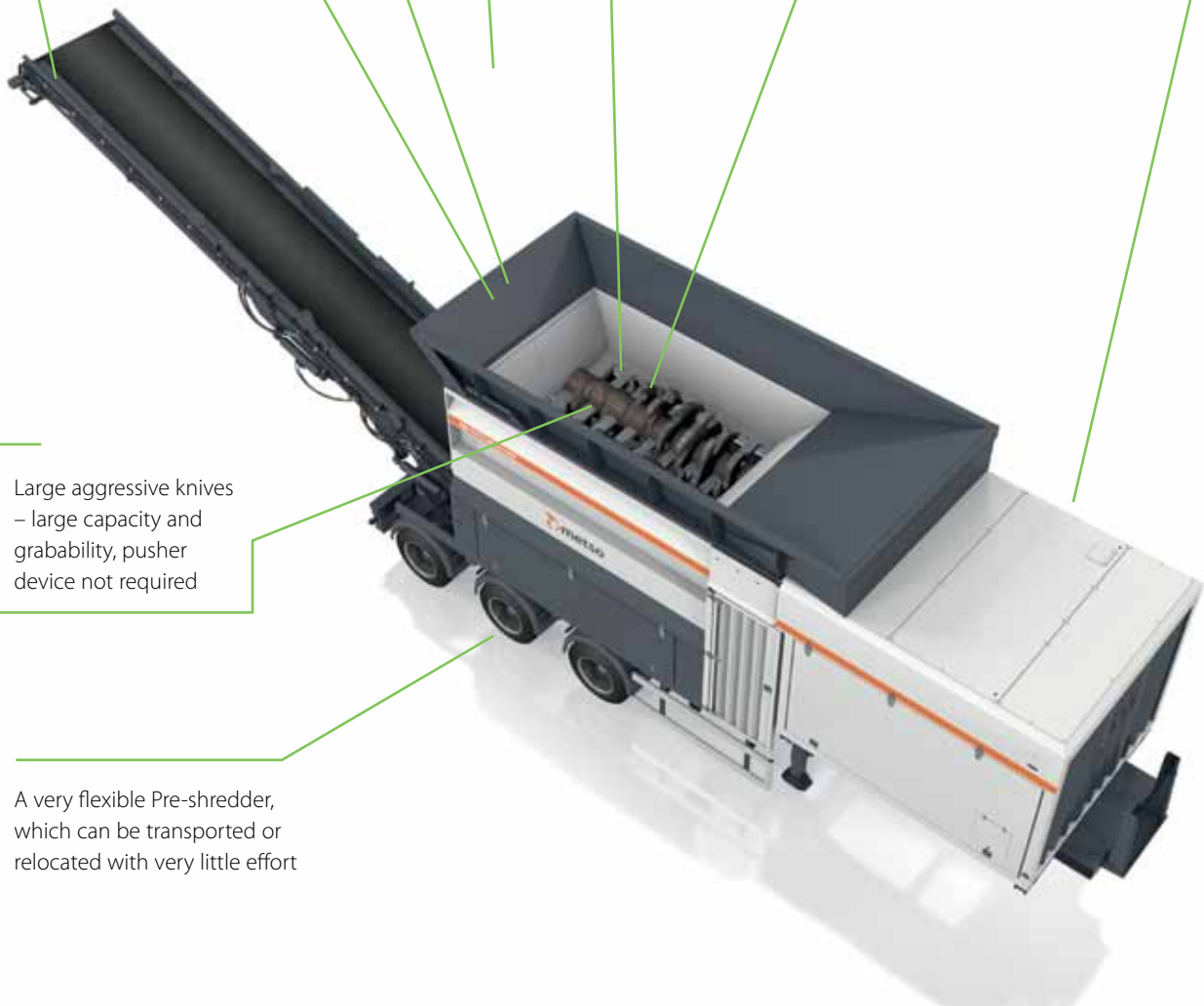
Open cutting table allows stone and metal parts to fall through, resulting in less wear

Operates at variable speeds, and shred asynchronously in both directions, monitored and controlled by a Siemens S7 PLC

Can be controlled by a remote control unit

Large aggressive knives – large capacity and grabability, pusher device not required

A very flexible Pre-shredder, which can be transported or relocated with very little effort



By far the best

Technical data	M&J Eta®PreShred 1000 Mobile	M&J Eta®PreShred 4000 Mobile	M&J Eta®PreShred 6000 Mobile
Number of shaft	2	2	2
Rotation speed	10-37 / 13-52	16-40 / 26-55	11-32
Cutting area	1584x1600	2420x2000	3461x2400
Number of knives	2 x 5, 6, 7	2 x 6, 8, 9, 10, 12	2 x 9, 12, 14, 16
Drive Diesel	159/212 kW/ph	390/530 kW/ph	390/530 kW/ph
Capacity per hour household waste *	Up to 40 t	Up to 100 t	Up to 200 t
Capacity per hour demolition wood *	Up to 30 t	Up to 70 t	Up to 100 t
Capacity per hour industrial waste *	Up to 15 t	Up to 35 t	Up to 50 t
Capacity per hour bulky waste *	Up to 20 t	Up to 50 t	Up to 70 t

* Depending on grain size and density of the input material



The grain size of shredded material is determined by the number of rotating knives. So, for example, a 6-knife configuration offers wider openings between counter knives in the cutting table, resulting in a larger grain size. Similarly, a 12-knife configuration creates narrower openings between the knives, and therefore produces a smaller grain size.

Cutting table 4000-6 knives



Cutting table 4000-12 knives



Advanced waste and applications technology



Transfer station

Metso Recycling shredding technology is based on an extremely aggressive knife design and open cutting table. These distinct technical advantages ensure our shredders provide outstanding performance when dealing with mixed and challenging materials.

These key features also make M&J Eta®PreShred units extremely resistant to wear caused by materials and waste normally considered as nonshreddable; including solid steel, reinforced concrete and rocks.

M&J Eta®PreShred units tackle most forms of waste – even the nonshreddable kind.

We have developed special models to perform efficiently on specific types of material. These differences in capability are determined by - for example - the size of the cutting area, the number of shafts, the design of the rotating knives and the available motor power.

Versatility

All M&J Eta®PreShred mobile and stationary units feature a modular design approach combining a range of well-proven components to meet your specific application, shredding performance and mobility needs.

Mobility

Metso Recycling's range of mobile shredders includes three machine sizes covering a wide range of capacities. Each model is available in a variety of mobility and shredding performance levels. We also offer stationary installations with diesel-driven power packs.

Capability

Thanks to the shredding capabilities of the M&J Eta®PreShred range, our mobile shredders are available in a wide spectrum of applications such as:

- Transfer stations
- Landfills
- Composting plants
- Wood recycling plants
- Waste recycling plants
- Waste service providers
- Shredder rental companies

Landfills

However enormous a landfill site first appears, it is surprising how quickly – and how ineffectively – it can become full. Regardless of how bulky, resilient or abrasive your waste may be, effective shredding makes best use of the space available by considerably reducing the volume, which also helps accelerate the transformation processes of the shredded waste.

Metso Recycling waste pre-shredder equipment includes a choice of three mobile shredder sizes plus a variety of mounts, to provide a range of grain sizes defined by the chosen type of cutting table. This makes it easy for you to select the most efficient and cost effective shredding solution for a wide variety of landfills.

Transfer stations

The cost of waste transportation is an important factor. To save money it is important to shred waste to a manageable size at or near the point of collection.

Due to their versatility, M&J Eta®PreShred mobile units are perfect for reducing the particle size and therefore volume of material prior to transportation, thereby considerably increasing the pay-load on each truck or train wagon.



Roots



Demolition



Cable drums



Carpets



Bulky



Household



White goods

M&J Eta[®]PreShred mobile shredders

M&J Eta[®]PreShred mobile shredders are available as semi-trailers and drawbar trailers for road transport and as crawlers, simple hook-lift frames (depending on weight etc.), simple on-site trailers, and on hydraulic or static legs or on flat-racks for side loader for semi-static use and can be used where no electricity supply is available.

The Power Pack used in these mobile shredders is a particularly compact unit that we design and build in-house.

M&J Eta[®]PreShred 6000 Mobile



Demonstrations and tests

Exceeding your expectations

At Metso Recycling, we'll help you achieve the ultimate return on your investment.

On-site test

The very best way to provide you with information and insight about what an M&J Eta®PreShred high-quality shredder can do for your operation, is to arrange an on-site demonstration and test using our mobile unit operated by our skilled operators.

Performance confirmed

The aim is to provide you with a clear idea of the performance and efficiency of our pre-shredder, and offer you a unique opportunity to validate these performance figures using your particular type of waste.

This ensures everyone concerned has the relative information required to discuss the most effective shredder solution for each project.

We go anywhere in Europe

We can offer you a demonstration and undertake test runs throughout Europe. At these tests we can demonstrate the performance of M&J Eta®PreShred units using different types of material and in different applications.

Arrange an on-site demonstration

To contact us directly, please find our details on the back page of this brochure or contact your local Metso Recycling dealer. We will need basic information about the kind of material you need to process, your site, the means of loading and your requirements regarding capacity and grain size.

Apart from that, all you need to provide is some appropriate waste, a loader and a place where we can clean the shredder after the test.

Our personnel evaluate every test and we provide a complete report, to give you the best possible basis for your future project.

Why not ask other users?

If neither approach suits you, we can recommend one or more users of M&J Eta®PreShred units whose operations resemble yours, so that you can either visit or contact them by phone.



Reliability also means service

Sydskraft currently operate four M&J Eta®PreShred 6000 pre-shredder units:

“We were looking for the most robust shredder on the market. A good working environment for our employees was also a high priority. Our processing operations mean we can’t avoid dust completely, but we do aim to keep it to a minimum. We’ve found that the best way for us to achieve this is by using low-speed shredding machinery like the M&J Eta®PreShred 6000 units we currently operate. We also experience that these units wear less than most – as well as keeping fire risks down.”

**Benny Broman E.ON,
Sweden**

M&J Eta®PreShred units are normally the first step in treating mixed and difficult waste. They are often directly exposed to all the impurities and unwelcome surprises in the incoming waste stream.

As a result, M&J Eta®PreShred units often have to deal with extremely tough operating conditions. Even the sturdiest machines have to be maintained and serviced properly to make sure they perform at maximum efficiency and to keep expensive downtime to a minimum.

To achieve this, we provide an exceptionally strong service concept that focuses on meeting our customers’ needs for rapid response service programs that meet the changing needs of the future.

Our service team will make sure you and your staff are completely satisfied with the M&J Eta®PreShred unit we have delivered. We do this through excellent customer communication and by updating and optimizing the shredder’s performance.

The Metso service team commitment:

We will:

- Provide accurate, easy-to-use information and instructions at start-up, service visits and customer enquiries. Our aim is to make it easier for you to operate and run your pre-shredder as efficiently as possible
- Handle all aspects of after sales service. In addition to technical support, this includes delivery of spare parts from stock, undertaking both preventive and curative service visits, rebuilding shredders when needed, training of operators and local maintenance
- Ensure that our service know-how is focused, correct, and delivered promptly. Parts are delivered within 24 hours and you can contact us 24/7/365 via a special service phone line



Our proud heritage

Established in 1857 in Horsens, Denmark, as a foundry under the name “Møller & Jochumsen”, the Metso in Denmark of today has a long tradition of designing and manufacturing industrial components and equipment.

Throughout our long history, we have played an active part in many technical “revolutions”. Up until the Second World War, the company was one of Denmark’s leading manufacturers of steam engines: we also produced industrial diesel engines. We have also manufactured turbines, petroleum engines, generators and complete water towers, plus a wide variety of machinery and equipment for railways and other industries.

The anvil has long since been replaced by fully automatic, efficient manufacturing equipment. And the craftsmanship of the blacksmiths has been supplanted by manufacturing by other trained specialists and skilled machinery operators. The result is advanced-technology products and outstanding quality of service.

Let’s work together

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.

The advanced production engineering equipment now available makes it possible to manufacture items that are nearly perfect. But it is our committed employees and their know-how and craftsmanship that ensure we can consistently achieve a unique level of quality.



Metso Recycling Equipment

Our range:

Pre-Shredders
Shredders
Shredder Plants
Metal Crushers

Scrap Shears
Turnings Crushers
Briquetting Presses
Double Screw Presses
Anode Crushers

Screen Drums
Scrap Baling Presses
Waste Fine Shredders
Waste Pre Shredders

Metso Recycling Services

Uptime Services

Inspection Services
Parts Services
Repair and Refurbishment
Troubleshooting Services

Performance Services

Process Monitoring Services
Optimization Services
Upgrade Services
Training Services

Project and Engineering Services

Start-up Services
Health, Safety and Environmental Services
Engineering Services
Plant Relocation Services

For more information, contact your local Metso Recycling representative, or contact your dealer directly.

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We reserve the right to make changes and improvements without notice, "M&J Eta"PreShed Mobile", Metso Recycling, January 2013