Recycling

www.metsominerals.com

Lindemann KHA Hammer Mills

metso
minerals

Special expertise and comprehensive experience

Years of experience in the comminution of the widest possible variety of materials, comprehensive expertise in mechanics, hydraulics and electrical engineering/ electronics as well as state-of-the-art production methods form the solid basis for products of extreme reliability and lasting efficiency.

A good example of this is the Lindemann KHA series of hammer mills. They are best suited for the fragmentation of a wide range of residual materials such as household and commercial waste, bark, tree parts and wood from demolition sites. They have proved their efficiency in material processing for thermal, biological and mechanical waste recycling plants.

Our hammer mills in the Lindemann KHA series are available in stationary, semimobile and mobile versions.


KHA 12/12
KHA 12/18
KHA 16/20
KHA 16/24

Multiple advantages

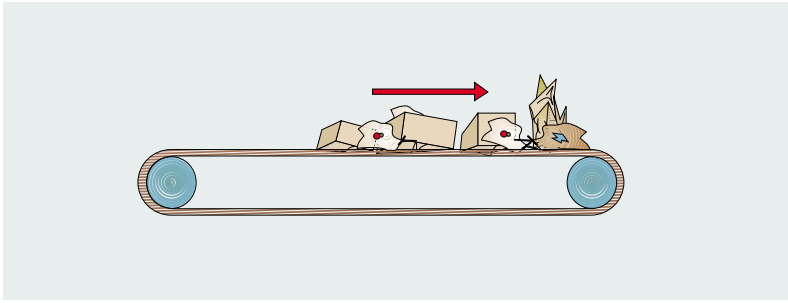
The three-step fragmentation of Lindemann KHA hammer mills means intensive size reduction and short material holding times in the hammer mill. Therefore, larger grate openings can be used, which results in increased throughput and lower wear and energy costs.

A special air guide inside the hammer mill leads to a fast material discharge and reduces dust.

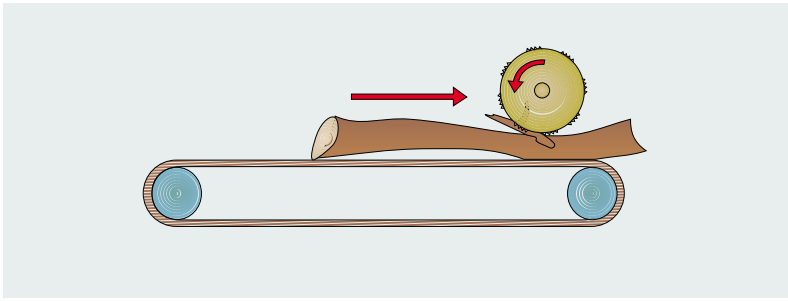
Our apron conveyors, forced feeders and feed rollers with controlled feeding speeds (patent pending) all help to ensure an optimum material infeed. This makes for high fragmentation capacity and prevents peak loads.

Because Lindemann KHA hammer mills are typically fed horizontally it is easy to process long items. It also means that buildings can be lower and less space is required. This type of feed is also a real advantage for mobile Lindemann KHA mills.

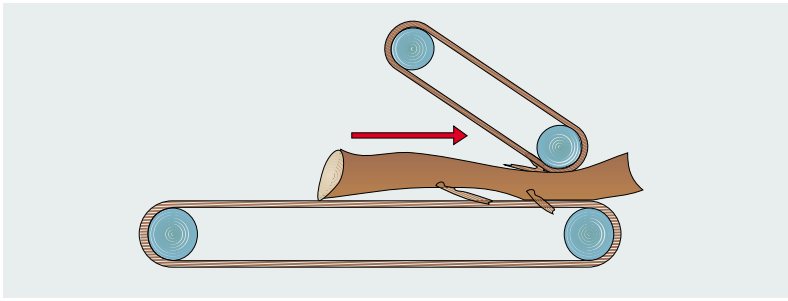
KHA means:
- *three-step fragmentation*
- *insensitive to unavoidable unshreddable coarse pieces*
- *particularly suitable for long bulky material*
- *reduced space requirement*



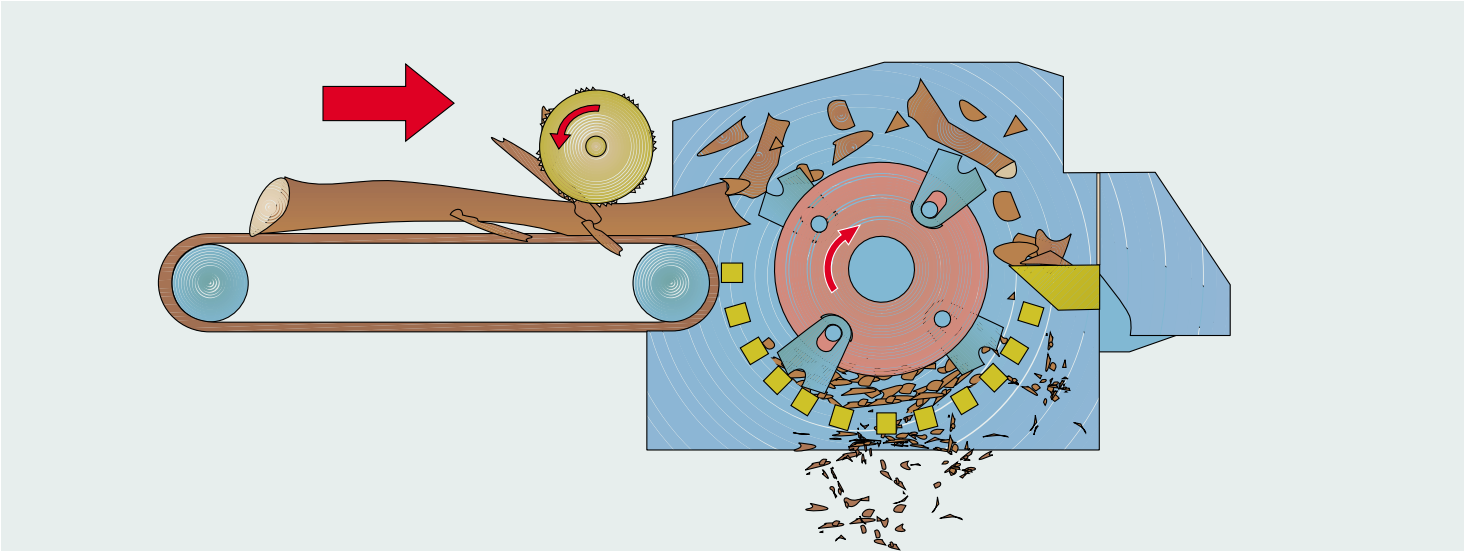
Apron feeder



Feed roller



Forced feeder



Easy maintenance

Lindemann KHA 16/24 – 630 kW: plant for recovering fuel from waste, the Netherlands

Lindemann KHA 16/24 – 800 kW: biomass power plant, Australia

Outstanding availability

Unique design features of the Lindemann KHA hammer mills help save time and money by increasing availability and facilitating inspection and maintenance work.

Flexibly suspended hammers reduce the risk of damage to tools and shafts by non-shreddable material. Furthermore, non-shreddables are detected and automatically removed during operation via the ejection outlet.

The mill housing can be opened hydraulically, which offers easy access to the inner wear parts of the hammer mill. A hydraulic shaft remover is available to speed up hammer replacement. As a further aid to maintaining bigger machines, tools are available to lift all of the hammers arranged on one shaft at the same time to speed up hammer exchange.

Additional control units ensure maximum operational reliability and safety. The vibration control of bearings and rotor shaft as well as an electric/hydraulic coarse parts recognition system sensitive to vibration, for which a patent has been applied, considerably reduce the risk of damage. Temperature control for rotor and motor bearings is available as an optional extra.

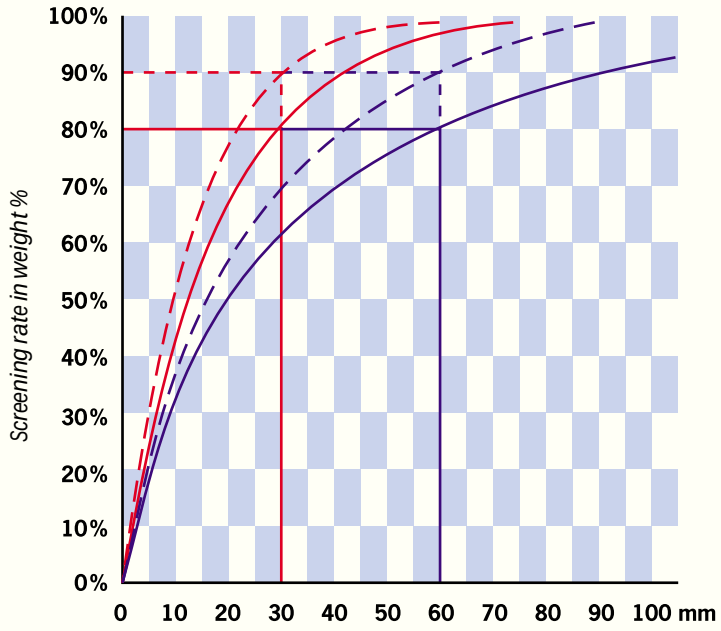
No compromises with the mobile KHA

Everything is under control

The work process is monitored comprehensively on our multi-information terminal with graphic display for process data visualization and online help in most languages; it also ensures easy operation and quick troubleshooting.

PLC Telediagnosis, and software updates via Teleservice for prompt aid and economical support, are available as optional extras. So prompt aid and economical support are provided. Problems involving electronics and software can be solved immediately by our service engineer from his office. Moreover, the right expert and the necessary spare part can also be determined for the mechanical side.

Degree of size reduction



Wood, e.g. from demolitions, 80% less than half grid opening.
Household waste, 90% less than half grid opening.

- Demolition wood at 60 mm grid opening
- Demolition wood at 120 mm grid opening
- Household waste at 60 mm grid opening
- Household waste at 120 mm grid opening

Metso Minerals Recycling Equipment

Our range:

Scrap shears
Shredders
Metal crushers
Turnings crushers

Scrap baling presses
Briquetting presses
Double screw presses
Anode crushers

NF-metal separators
Trommel screens
Sorting plants

Hammer mills
CR crushers
Rotor shears
Bulky refuse shears

Metso Lindemann GmbH
Erkrather Straße 401
D-40231 Düsseldorf
Germany
Phone: +49 211 21 05 0
Fax: +49 211 21 05 376
E-Mail: minerals.lindemann@metso.com
www.metsominerals.com/metalwasterecycling

Metso Minerals North and Central America
3073 South Chase Avenue
Milwaukee, WI 53207
USA
Phone: +1 414 769 4300
Fax: +1 414 769 4730

Metso Minerals South America
Caixa Postal 272
18035-240 Sorocaba
Brazil
Phone: +55 152 191 300
Fax: +55 152 191 695

Metso Minerals Asia-Pacific
P.O. Box 399
West Perth, WA 6872
Australia
Phone: +61 8 9420 5555
Fax: +61 8 9320 2500

Metso Minerals North and Central Europe
P.O. Box 4004
20311 Malmö
Sweden
Phone: +46 40 24 58 00
Fax: +46 40 24 58 78

Metso Minerals South Europe and Mediterranean
41, rue de la République,
71 000 Màcon
France
Phone: +33 3 8539 6300
Fax: +33 3 8539 6349

Metso Minerals Southern Africa
Wordsworth Office Park
41 Wordsworth Avenue, Senderwood
Johannesburg 2007
South Africa
Phone: +27 11 723 2000
Fax: +27 11 723 2080

www.metsominerals.com

metso
linking innovations™

Brochure No. 1240-01-02-REC/Düsseldorf-English

Printed in Germany-2