State of the LindnerART.

RDF

Processing systems for alternative fuels.

The ART of innovative SHREDDING!

we reduce it.

LINDNER Recyclingtech

Our intelligence belongs to us … and our clients.

For over six decades, our family run business has been supplying clients from all over the world. As a traditional company, we have never lost sight of values such as sustainability, environmental protection, and family. On the one side, we produce shredders, on the other, optimal systems for processing alternative fuels (RDF). Lindner systems are used for applications such as industrial and commercial waste, domestic waste, as well as in large-scale industries (cement and steel industry) and in power stations. LindnerPOWER for sustainable environmental protection. I put my name behind this entirely, and this is why we were awarded the "Global Fuels Award" in Toronto, Canada in 2009.

Instead of resting on our laurels, we are constantly developing further. Today, our company rests on four solid pillars: The Lindner-Recyclingtech GmbH as parent company, Lindner E-Tech (industrial automation technology in the field of shredder technology and installation engineering), Lindner reSource (distribution and service company of Lindner-Recyclingtech GmbH, planning and implementing shredder plants for plastics and in the field of recycling), and Lindner America LLC (distribution and service company of Lindner-Recyclingtech Gmbh in America).

Our creative heads keep turning in search for new technologies and solutions of our clients. We keep our promise: Our intelligence belongs to us…and our clients.

Yours,

DI Manuel Lindner

Requirements:

Large scale energy users like the cement and steel industry as well as power plants often have very strict specifications for refuse derived fuel (RDF), manufactured from the commercial and industrial waste streams. For instance, particle sizes of 20 mm are often required in those cases. For this purpose a multi-level shredding process is required.

The main criterion for the systems is the effective pre-shredding of the input material to a defined granulate-size which is a precondition for a problem free separation of large foreign parts. The separation of this heavy fraction using the heavy fraction separator minimizes wear costs, optimizes product quality, increases availability and makes for economic processing.

System Components:

- Primary Shredding of the non-treated waste
- FE-separator
- Heavy fraction separator
- Secondary Shredding
- Conveyors

Application Areas:

- Commercial and industrial waste, municipal solid waste
- Plastics and textiles from the automotive industry (loose or in bales)
- Packaging material made of wood, paper and plastic film (loose, in bales or rolls)
- Waste products and lumps from the plastic industry (PP, PE, ABS, etc.)

Throughput Capacity:

Approximately 8 to 30 tons per hour,
depending on the chosen shredder-size.

Workflow:

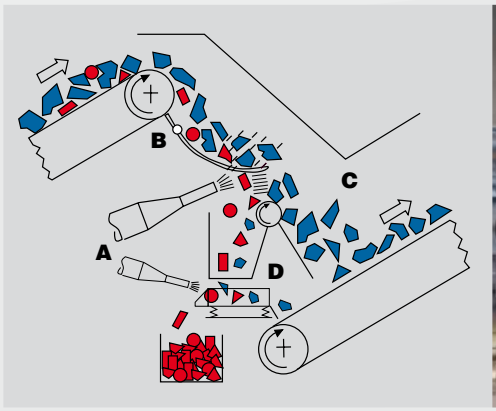
The supply of material to the Alternative Fuel Processing System can be done by drag chain conveyors assuring continuous feeding of the JUPITER single-shaft pre-shredder, by wheel loader, forklift truck or crane. The robust drive system of the pre-shredder (a countershaft drive with safety clutch directly mounted on the rotor shaft) in combination with the massive monofix-knife-system optimally protects the shredder from damage caused by large foreign parts.

The JUPITER shreds the input material to a defined granulate-size. Homogeneous output-sizes allow optimum separation of large foreign parts by means of FE-separation and the heavy fraction separator. The separated material, free of large foreign parts, is transported to the downstream granulator POWER KOMET by belt conveyor. The level of fine granulation ranges approximately from 15 to 50 mm, depending on the chosen screen size The finished RDF material is then discharged by means of conveyors or by the modular LINDNER chain-conveyor-system LIMATIC.

Pre-shredder JUPITER

FE-separation

Granulator POWER KOMET



Heavy fraction separator

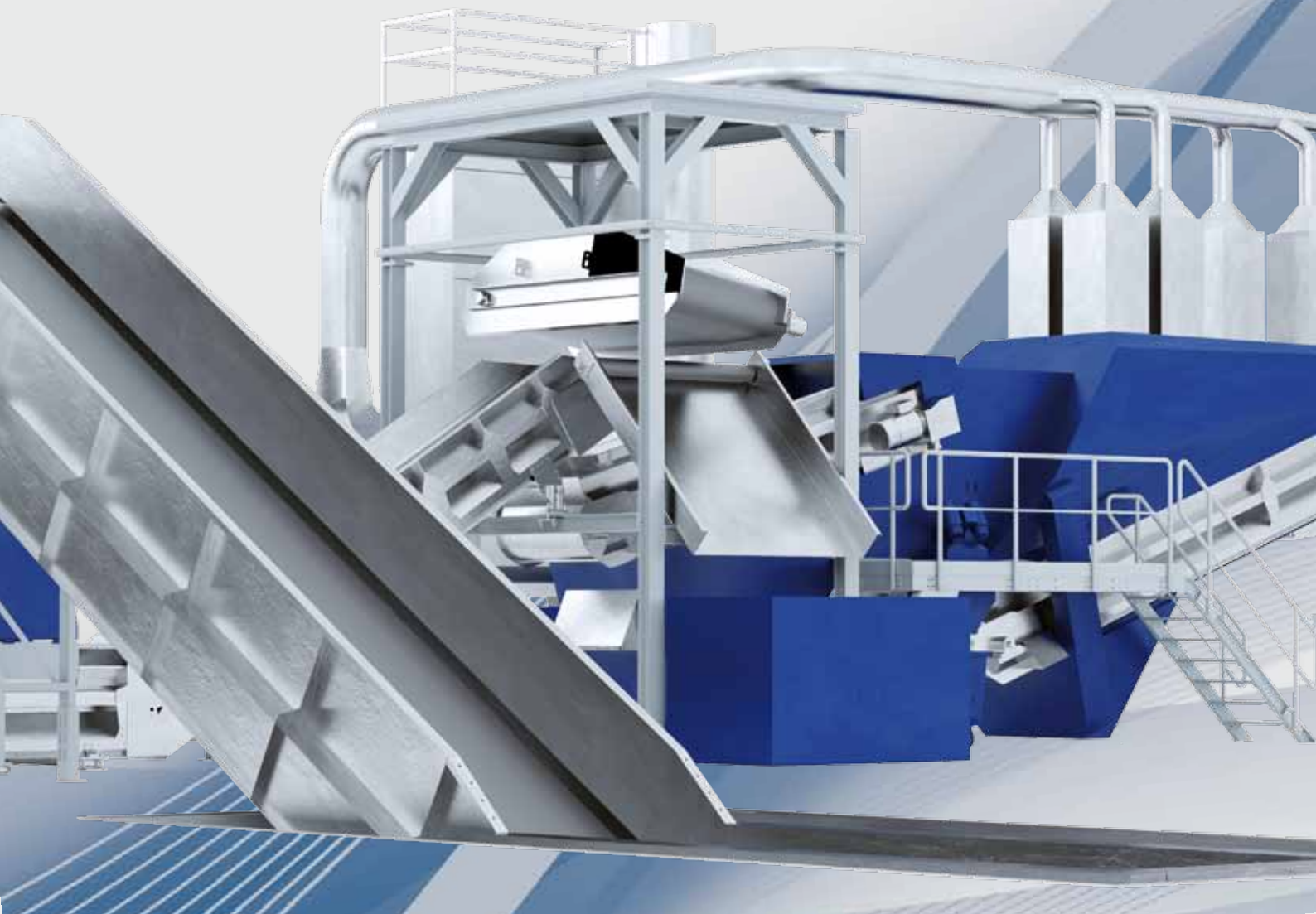
Separation of heavy and light parts by means of air injection and flexible element
A Air injection
B Flexible element
C Expansion chamber
D Vibrating chute

Conveyor technology

Straight and bent conveyors
- Individually adapted
- Know-how by long-term experience

RDF

LindnerPOWER for alternative fuel processing systems



LindnerPOWER for your alternative fuel processing needs!

JUPITER

- Slow running, efficient single shaft shredder
- Cutting system delivers defined output sizes
- Application: domestic-, commercial-, and industrial waste, bulky waste, hard-to-reduce problem-materials with large foreign parts
- Capacity: Throughput rate up to 50 t/h (household waste with sickle screen) or up to 15 t/h (industrial and commercial waste with hexagonal screen 130 mm)
- Granulate size: approx. 100 – 300 mm (household waste with sickle screen) or approx. 50 – 120 mm (industrial- and commercial waste with hexagonal screen)
- Technical data:
  Rotor length: 1800 mm / 2200 mm / 3200 mm
  Drive Power: 1 x 200 kW / 2 x 110 kW /
  2 x 132 kW / 2 x 160 kW
  Knife size: 87 x 87 mm (point-knives) / 116 x 116 mm (point-knives or step-knives) / 145 x 145 mm (point-knives) / 116 x 116 mm (point-knives)
  Total weight: approx. 27000 kg – approx. 39000 kg

POWER KOMET

- High speed single shaft shredder
- Cutting system delivers defined output sizes
- Application: Pre-shredded plastics, paper, rubber, pre-shredded domestic-, industrial- and commercial waste, etc.
- Capacity: Throughput rate up to 15 t/h (e.g. mixed plastics with 30 mm screen)
- Granulate size: approx. 10 – 100 mm (mixed plastics with screen)
- Technical data:
  Rotor length: 1800 mm / 2200 mm / 2800 mm
  Drive Power: 2 x 132 kW / 2 x 160 kW / 1 x 200 kW
  Knife system: Rib knife
  Total weight: approx. 25500 kg – approx. 29500 kg

Modular construction system

In order to facilitate flexibility in the length of a conveyor system at planning or later adaption of the system, Lindner constructions are built in modular design. The length of the different modules ranges from 750 mm to 3000 mm. In addition, the tensioning station, the drive station, and the hinged module are designed screwable. This allows modifications of the conveyor system, or converting a straight system into a bent one.

Even if the requirements call for a more complex system, Lindner-Recyclingtech GmbH remains your competent partner, and – working with well-known partners in plant engineering – will find the best solution to suit your needs.

HOTSPOTS

Machine	Type = Rotor length in mm	Application	Dimensions L x B x H in mm	Total weight in kg	Drive Power	Shredding area in mm	Throughput capacity*
JUPITER	1800	Non pre-treated domestic waste, commercial and industrial waste, bulky waste, waste wood, mixed construction waste, mixed plastics, paper, cardboard, files, containers, rubber, leather, textiles, floorings, cables, computer scrap	4800 x 3960 x 4875	27000	200 kW	1790 x 2400	up to 15 t/h
	2200		5500 x 3960 x 4875	33000	2 x 110 kW	2135 x 2400	up to 30 t/h
	3200		6500 x 3960 x 4875	39000	2 x160 kW	3210 x 2400	up to 50 t/h
POWER KOMET	1800	Pre-shredded mixed plastics, paper, cardboard, files, plastics, foam plastics, containers, rubber, leather, textiles, floorings, wood	4780 x 3640 x 4810	21000	200 kW	1770 x 2030	up to 7 t/h
	2200		5375 x 3640 x 4810	25500	2 x 132 kW	2135 x 2030	up to 8 t/h
	2800		6065 x 3640 x 4810	29500	2 x 160 kW	2825 x 2030	up to 15 t/h
KOMET	1100	Pre-shredded mixed plastics, paper, cardboard, files, plastics, foam plastics, containers, rubber, leather, textiles, floorings, wood	4285 x 2900 x 4540	14500	132 kW	1080 x 1265	up to 4 t/h
	1800		4915 x 3640 x 4810	19500	200 kW	1770 x 2030	up to 6 t/h
	2200		5775 x 3640 x 4810	23000	2 x 132 kW	2135 x 2030	up to 8 t/h
	2800		6465 x 3640 x 4810	26500	2 x 160 kW	2825 x 2030	up to 15 t/h
UNIVERSO	2200	Mixed plastics, packaging material, paper, plastic film, leather, rubber, pallets, cable drums, cardboard, files, plastics, foam plastics, cables, containers, textiles, floorings, computer scrap, wood	6000 x 2900 x 3950	18000	132 kW	2135 x 1525	up to 7 t/h
	2800		7000 x 2900 x 3950	27200	2 x 110 kW	2825 x 1525	up to 10 t/h
MICRO-MAT	2000	Mixed plastics, paper, cardboard, files, plastics, foam plastics, containers, rubber, leather, textiles, floorings, cables, computer scrap, wood	4217 x 2790 x 3380	13500	110 kW	2025 x 2280	up to 3 t/h
	2500		4717 x 2790 x 3380	15500	132 kW	2525 x 2280	up to 5 t/h
VEGA	S 600	Mixed plastics, paper, cardboard, files, plastics, foam plastics, containers, rubber, leather, textiles, floorings, cables, computer scrap, wood	2350 x 1430 x 2060	2800	11 kW	540 x 1690	up to 400 kg/h
	S 1100		2350 x 1970 x 2060	4200	22 kW	1685 x 1080	up to 700 kg/h
	L 1100		2720 x 2300 x 2550	5400	45 kW	1800 x 1089	up to 1 t/h
	L 1650		2300 x 3250 x 2250	8100	75 kW	1800 x 1628	up to 1,5 t/h

conception: mp.creations / photo: Johannes Puch, Hannes Kohlmeier / print: Carinthian Druck

we reduce it.

LINDNER Recyclingtech

Lindner-Recyclingtech GmbH
Villacher Straße 48 | A 9800 Spittal/Drau

T +43 4762 2742-0 E office@l-rt.com
F +43 4762 2742-32 W www.l-rt.com