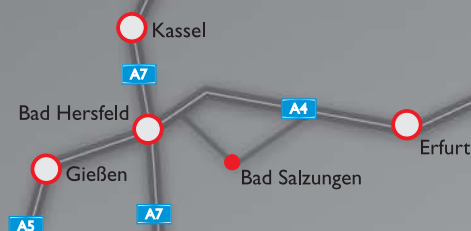


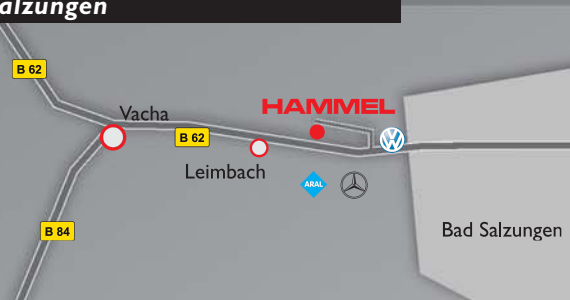


HAMMEL
RECYCLINGTECHNIK

HAMMEL - in Germany



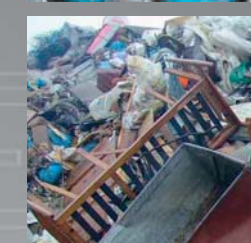
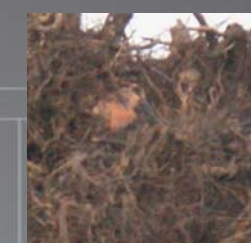
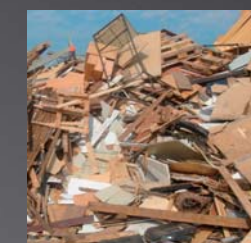
Bad Salzungen



HAMMEL-Primary shredder

Typ 450/650/750/850/950

Diesel / Electric



HAMMEL Recyclingtechnik GmbH
Leimbacher Straße 103
D-36433 Bad Salzungen

phone: +49 (0) 36 95/69 91-0
fax: +49 (0) 36 95/69 91-23
Internet: www.hammel.de
e-mail: info@hammel.de

084_089/Deutsch/Hammel/H054



“We proof Power” - Technical Specifications

The HAMMEL- primary shredder processes extremely difficult materials like waste wood, railway sleepers, root stems, green waste, industrial- and bulky waste, paper rolls, tyres and car bodies, etc. Due to its robust and clear construction the HAMMEL- shredder is reliable for volume reduction. It is equipped with a slow-speed 2-shaft-system. These shafts turn with a speed of approx. max. 46 rpm. Therefore the HAMMEL-shredder belongs to the extremely slow running shredders and has a huge number of advantages.

Weights			
450 D/E	8 t	450 DK	11 t
650 D/E	16 t	650 DK	19 t
750 D/E	17 t	750 DK	20 t
850 D/E	25 t	850 DK	30 t
950 E	30 t	950 DK	42 t

Engine performances			
450 D/DK	140 hp	450 E	110 kW
650 D/DK	200 hp	650 E	160 kW
750 D/DK	350 hp	750 E	260 kW
850 D/DK	480 hp	850 E	320 kW
950 DK	710 hp	950 E	500 kW



Overall width*

Type 450: 1,70 m

Type 650: 2,50 m

Type 750: 2,50 m

Type 850: 2,50 m

Type 950: 3,00 m

Overall height*

Type 450: 2,10 m

Type 650: 2,70 m

Type 750: 2,70 m

Type 850: 3,00 m

Type 950: 3,20 m

Overall length*

Type 450: 7,50 m

Type 650: 9,70 m

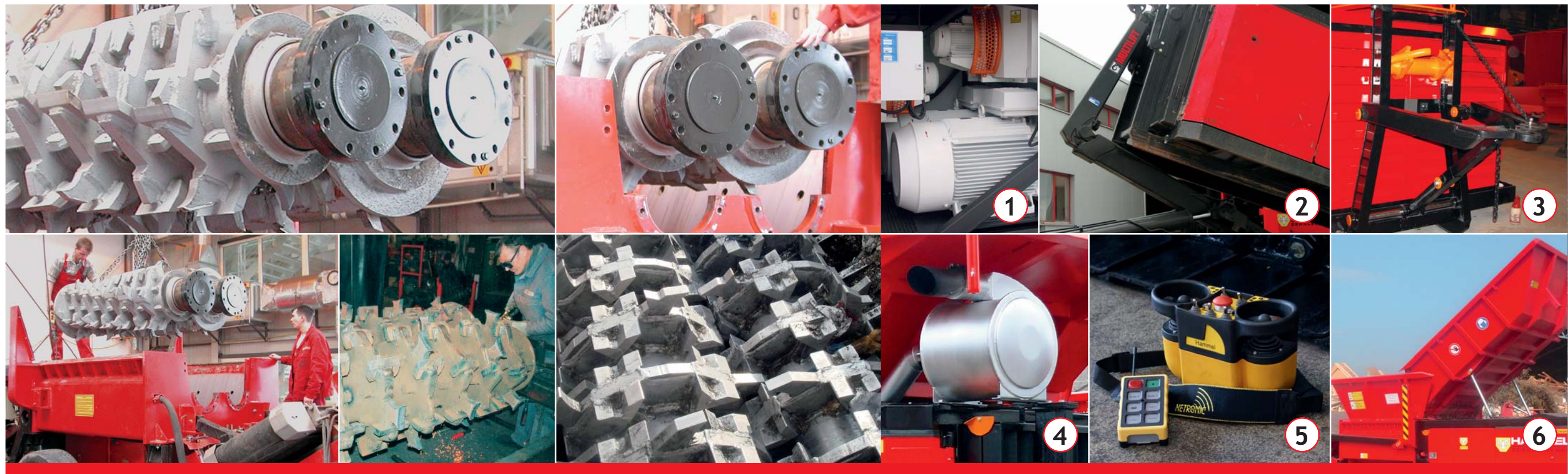
Type 750: 9,70 m

Type 850: 11,40 m

Type 950: 15,00 m

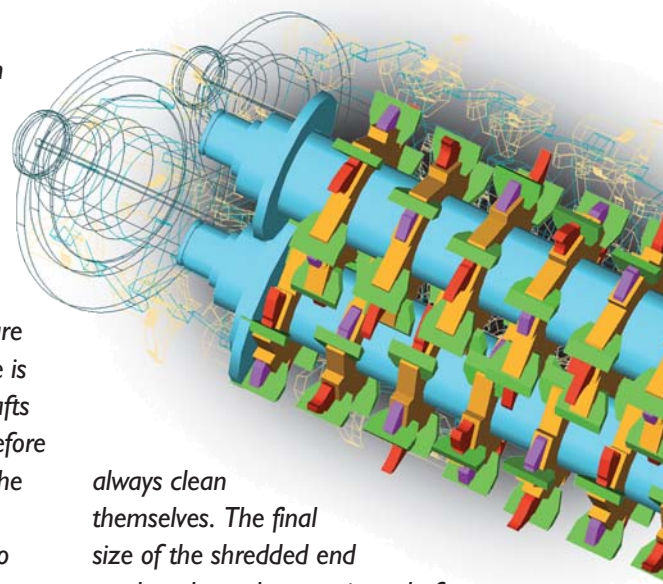
Advantages

- high performance with low wear and tear costs
- very low noise
- minimum of dust generation
- long life time of the shredding tools
- no projectiles
- no fire hazard
- customized
- knives are welded on, not screwed on



The patented „2-shaft system“

The special, counter-rotating shafts with aggressive hooks and knives pull in the material directly loaded onto the shafts. The input material is ripped, torn and cut and discharges directly from the shafts onto the conveyor belt. When extremely difficult material like carpets and mattresses or root stems are processed and a hydraulic end pressure is reached, the hydraulically controlled shafts switch automatically into reverse. Therefore the shafts turn backwards, and break the material again, clean the shaft from material, switch automatically again into the forward mode and the normal shredding stage can be continued without even being noticed by the operator. This function guarantees that all material was shredded before it enters the discharge conveyor belt, and rolling up of any stringy material is avoided through this special and fully automatic roll up protection. The shafts



always clean themselves. The final size of the shredded end product depends on various shaft configurations, HAMMEL can provide you with. Generally, an end product size between approx. 150 – 400 mm is achieved. Thanks to our long-term experience in the wood and waste sector the shafts have a long life span of more than thousand operating hours before refurbishing is needed.

The shaft configuration is defined according to the input material and the end product specifications of the customer.

All inclusive

Every HAMMEL – Primary shredder disposes of an attractive high quality basic configuration, to embrace also with your expectations.

Basic configuration

1. drive

electric or diesel engine

2. transportability

stationary build on hook lift frame

3. pulling drawbar

provides a fast conversion of the shredder on the factory premises

4. low sound emission

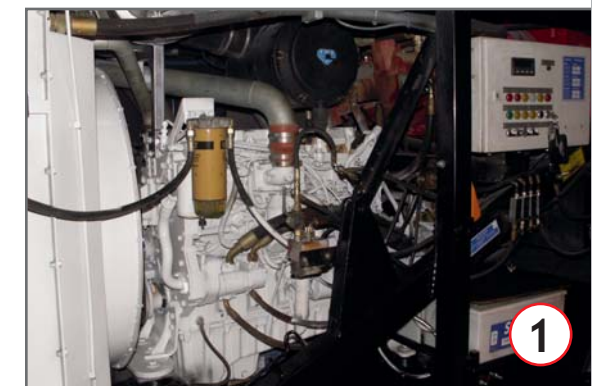
special developed exhaust system, interior trim of doors with special sound proofing

5. remote control

with different customized functions

6. tilting hopper

for ideal feeding





“We are born in wood”

In 1984 the first HAMMEL-machine for shredding root stems was developed. The wood waste recycling market has challenged us until today, so that our shredding technology has been adapted to today's demands and makes the HAMMEL-shredder to a leading primary shredder for all kind of wood in the recycling sector.

We pass on our years of experience by finding the most suitable shaft configuration for every customer and needs. Very low wear and tear and energy consumption as well as high performances are reached by sophisticated engineering and perfectly matching shafts.

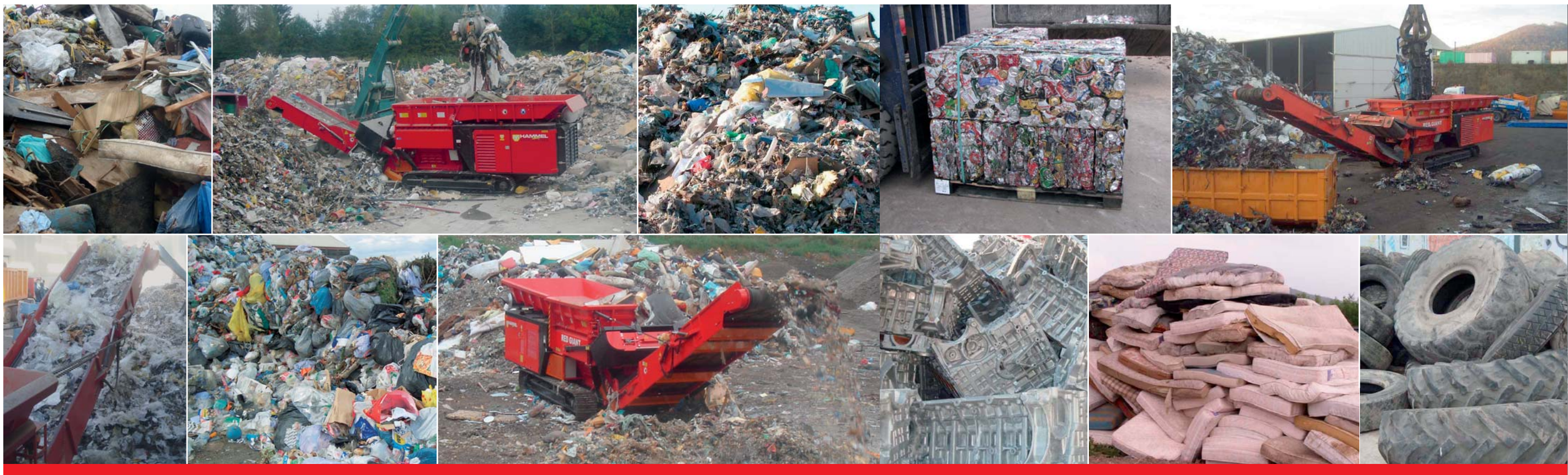
Performance Characteristics

Recyclingmaterial	HAMMEL Shredder Type				
	primary shredder*				
	450 D/E	650 D/E	750 D/E	850 D/E	950 D/E
wood waste/demolition wood	10 t/h	30 t/h	60 t/h	120 t/h	230 t/h
pallets	8 t/h	25 t/h	50 t/h	90 t/h	200 t/h
mixed wood	12 t/h	30 t/h	60 t/h	100 t/h	190 t/h
cable drums	6 t/h ***	25 t/h	40 t/h	60 t/h	130 t/h
railway sleepers		15 t/h	25 t/h	50 t/h	70 t/h
telephone poles		15 t/h	25 t/h	50 t/h	70 t/h
root stems	8 t/h **	25 t/h	40 t/h	50 t/h	90 t/h
green waste	15 t/h	25 t/h	50 t/h	80 t/h	120 t/h

* performances until approx.
** up to Ø 400 mm
*** up to Ø 1.000 mm

With a HAMMEL-primary shredder an end product size between 150 mm – 400 mm can be reached depending on the selected shaft configuration.

Innovation - Experience - Economy - Satisfaction



**“Contact us
before you drown in waste!”**

Performance Characteristics



At the beginning of the 90's the HAMMEL-shredder has been modified according to the demands of the waste-shredding sector. Due to our long term experience in processing of different kinds of waste the HAMMEL- shredder was developed further to one of, if not the market leader. Various shaft configurations make it possible that the input materials are pre-shredded to the requested end product size. Our HAMMEL- primary shredders find its use in incineration plants - for fuel production and as primary shredders before sorting lines or just for volume reduction. The input material is pre-shredded to a homogeneous end product by the 2-shaft-system and is therefore perfectly prepared for further applications.



Volume Reduction - Renewable Energy - Profit

Recyclingmaterial

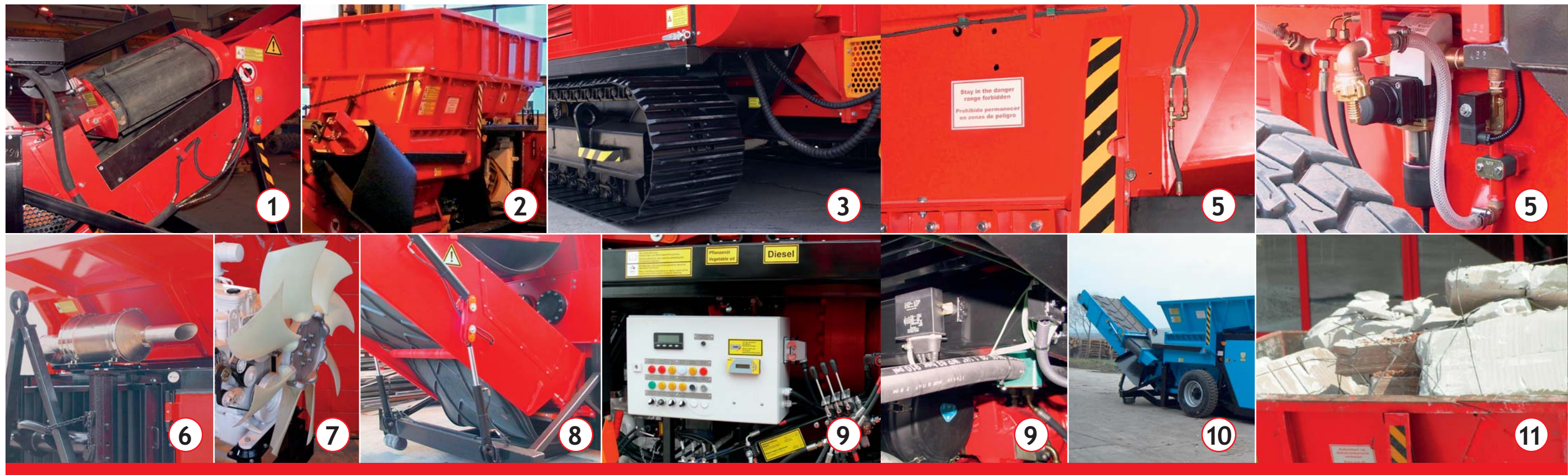
HAMMEL Shredder Type

*primary shredder**

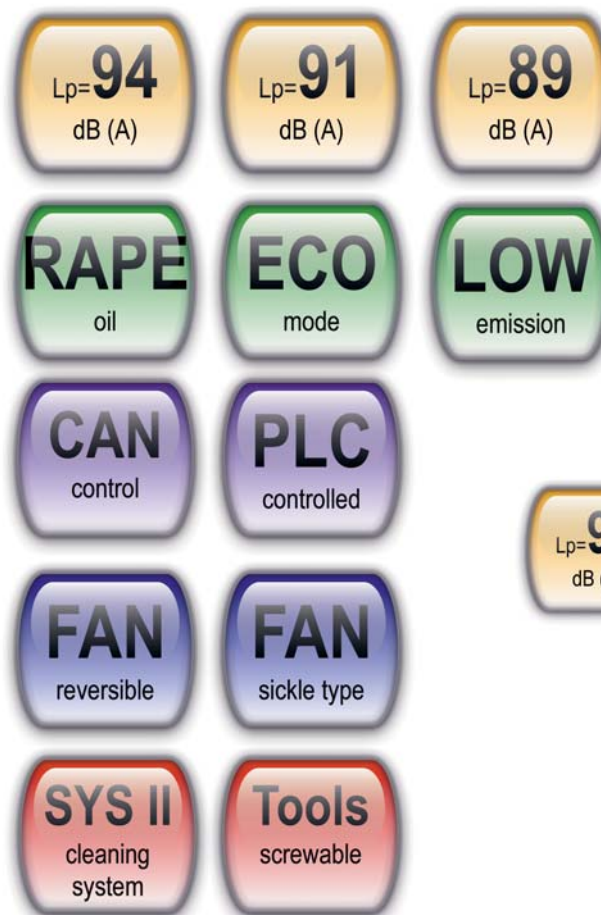
	450 D/E	650 D/E	750 D/E	850 D/E	950 D/E
domestic waste	15 t/h	30 t/h	50 t/h	100 t/h	200 t/h
industrial/commercial waste			45 t/h	60 t/h	150 t/h
bulky waste			30 t/h	60 t/h	110 t/h
C&D			35 t/h	80 t/h	150 t/h
paper		10 t/h	20 t/h	45 t/h	70 t/h
paper rolls		10 t/h	15 t/h	30 t/h	60 t/h
used tyres			20 t/h	30 t/h	50 t/h
aluminium profiles	5 t/h		12 t/h	20 t/h	40 t/h
car bodies					50 t/h
high caloric fuels 150 mm			20 t/h	30 t/h	70 t/h

* performances up to approx.

With a HAMMEL-primary shredder an end product size between 150 mm – 400 mm can be reached depending on the selected shaft configuration.



Your choice - supplementary equipment



Lp=94
dB (A)

noise reduction

Lp=91
dB (A)

For an ideal performance expansion every machine will be adapted to your individual requirements. Intensive counselling interviews are at the beginning of any development to assure the best possible outcome for you as to throughput performance and product size.

Options

1. metal separation

permanent-over belt magnet that selects ferrous metal parts

2. hopper extension

a higher volume avoids the dropping of the input material

3. chassis

stationary, wheel axle, track system

4. breaker bar

with and without combs or breaker basket, to produce a smaller end product

5. water sprinkling system

for dust minimisation

6. particulate filter

for all diesel machines

7. sickle fan

provides additional noise reduction

8. hydraulically height adjustment of the discharge belt

for a perfect adjustment of the discharge height for optimising of the discharge quantity

9. alternative fuel

alteration for use of bio-diesel, rape oil, etc.

10. special painting

according to your company colour

11. stone crusher specification

for the shredding of stones and concrete ties

