



# "We prove power" -Technical specifications

The HAMMEL-primary shredder processes extremely difficult materials like wood waste, railway sleepers, root stems, green waste, industrial- and bulky waste, paper rolls, tires 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 tons  | 450 DK | 11 tons |  |
| 650 D/E  | 16 tons | 650 DK | 19 tons |  |
| 750 D/E  | 17 tons | 750 DK | 20 tons |  |
| 850 D/E  | 25 tons | 850 DK | 30 tons |  |
| 950 E    | 30 tons | 950 DK | 42 tons |  |

<sup>\*</sup> approx. value for base model without options

| Engine performances |        |       |        |  |
|---------------------|--------|-------|--------|--|
| 450 D/DK            | 140 hp | 450 E | 110 kW |  |
| 650 D/DK            | 280 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 |  |





### All inclusive

Every HAMMEL - primary shredder is equipped with a high quality basic configuration to meet your requirements.

### 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

noise-reducing construction

#### 5. remote control

with different customized functions

### 6. tilting hopper

for ideal feeding







### We were born in wood!



In 1984 the first HAMMEL-machine was developed for shredding root stems. 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 a leading primary shredder for all kind of wood in the recycling sector.

We rely on our years of experience to find the most suitable shaft configuration for every customer and application.

Very low wear and tear and energy consumption as well as high performances are reached by sophisticated engineering and perfectly matching shafts.

Innovation - Experience - Economy - Satisfaction







\*approx. values

| WOINI     | ng length* | overall length<br>(folded conveyor)* | $\wedge$ |                                       |
|-----------|------------|--------------------------------------|----------|---------------------------------------|
| Type 450: | 24'8"      | 19'10"                               |          |                                       |
| Type 650: | 31'10"     | 26'4"                                |          |                                       |
| Type 750: | 31'10"     | 26'10"                               |          |                                       |
| Type 850: | 39'2"      | 31'8"                                | 1/       | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
| Type 950: | 48'        | 41'7"                                |          |                                       |
|           |            |                                      |          |                                       |
|           |            |                                      |          |                                       |

| overall hei | ght*  |
|-------------|-------|
| Type 450:   | 6'2"  |
| Type 650:   | 8'10" |
| Type 750:   | 8'10" |
| Type 850:   | 10'3" |
| Type 950:   | 10'6" |

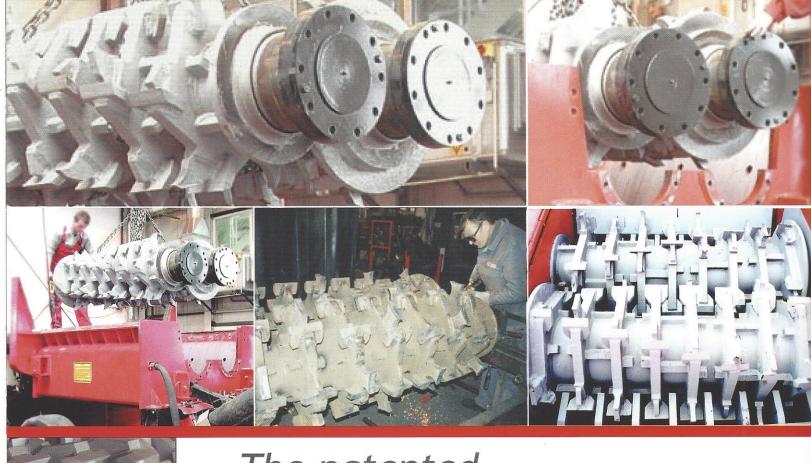
| overall widt |      |  |  |  |
|--------------|------|--|--|--|
| Type 450:    | 5'7" |  |  |  |
| Type 650:    | 8'2" |  |  |  |
| Type 750:    | 8'2" |  |  |  |
| Type 850:    | 8'5" |  |  |  |
| Type 950:    | 10'  |  |  |  |

dB (A)

### **ADVANTAGES**

high performance 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 bolted

<sup>\*\*</sup>illustration incl. special equipment \*\*\*as special equipment available



# 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. 6"-16" 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.



### Performance Characteristics

### Recycling Material 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  | 80 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 tires                  |         |         | 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  |

<sup>\*</sup> performances up to approx.

With a HAMMEL-primary shredder an end product size between 6" - 16" can be reached depending on the selected shaft configuration.



## Our innovations -Your choice

























# Performance Characteristics

| Recycling Material         | 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.

With a HAMMEL-primary shredder an end product size between 6" - 16" can be reached depending on the selected shaft configuration.

<sup>\*\*</sup> up to Ø 16" \*\*\* up to Ø 3'



### 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

#### 7. sickle fan

provides additional noise reduction

### 8. particulate filter

for all diesel machines

### 9. alternative fuel

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

### 10. special painting

according to your company color

### 11. stone crusher specification

for the shredding of stones and concrete ties

### 6. hydraulic height adjustment of the discharge belt

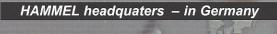
for a perfect adjustment of the discharge height for optimizing of the discharge quantity











Bad Salzungen

### HAMMEL - in the United States

















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