

## Waste wood – raw material or secondary raw material?



Ecological ranges are recirculated to the material recycling (fabrication of derived timber products as chipboards, the use of bulking material for compost plants or as litter for riding stables). Polluted ranges are offered for the thermal recycling in accredited plants.

In today's view the way of material recycling is described as follows: The owner hands the no longer required wood over to the recycler. He transports the wood to a waste management company or processes it himself. The waste management company presorts, breaks, screens and brings it to the corresponding material recycling plants. The recycling plant either produces new products (e.g. chipboards) or hands it over to the combustor. A theoretical complete waste wood processing plant is shown in the adjoining graph. The separate steps of a modern complete waste wood processing contains usually the following steps:

Exact sorting according to contamination criteria – type-sorted pre-shredding – ferrous separation – screening – secondary shredding – separation of non-ferrous metal – screening – evacuation to the recycler.

In the Federal Republic of Germany accrue beyond the wood-working industry and business also approx. eight million tonnes of wood waste. They come among others from the sectors of construction and demolition, packaging and bulky waste.

These lumbers attain over sorting plants and wood processing plants in a dimension of approx. five million tonnes per year for recycling in material and energetic form respectively. Approximately three million tonnes per year have been deposited in the past. The main reasons could be seen before the conversion of Technical Instruction Communal Waste also in the German

landfill fees at this time.

The processing of the wood occurs in dependence to the various requirements for the lumbers: on the one hand for the material recycling and on the other hand for the energetic recycling. In certified wood processing plants incoming material is already classified at the beginning of the process through targeted control of delivered mono batches and pre-sorting into the following groups:

- A I: untreated lumbers**
- A II: painted, lacquered and coated lumbers without organ halogen covering**
- A III: painted, lacquered and coated lumbers with organ halogen covering**
- A IV: with wood preservative covered lumbers**

source: Bundesverband der Altholzaufbereiter und -verwerter e.V. (German Association of waste wood processors and recycler incorporate society), www.altholzverband.de

### Imprint

**Editor**  
HAMMEL Recyclingtechnik GmbH  
Leimbacher Straße 103  
D-36433 Bad Salzungen, Germany

phone: + 49 (0)3695 6991-0  
fax: + 49 (0)3695 6991-23  
e-mail: info@hammel.de  
www.hammel.de

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HAMMEL Recyclingtechnik GmbH  
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D- 36433 Bad Salzungen

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## Customer portrait: IRV Interroh



Wood is a precious and multifunctional applicable raw material, which one knows to use for the most different functions from time immemorial.

Firstly, wood was utilized as energy supplier to warm people and for the preparation of meals. Then, people manufactured weapons for hunting

out of this raw material and with the growing of civilization things for everyday life.

Only a little part of this material has been recycled. Has the item been disused or has become unusable, it either ended as heating material in the oven or up on the scrapheap.

Today, used wood is brought to a professional use, whereby the service life is extended and a contribution to the resource and environment protection effects.

In the course of only 20 years an independent wood-recycling branch has developed out of the first

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## “Adapted technology as key to your success“

Offering market-driven processing solutions is our daily business. Therefore we designed a new pair of shafts – following customer-specific wishes for a smaller product end size and a constant high throughput. These shafts have been exactly adapted to those requirements and have been optimized for the use in green waste and roots. For about 6 weeks, we are doing a demo tour throughout Europe with our new “aligator shafts” for green waste and roots to demonstrate to all interested parties this new processing technique. With these shafts a product end size between 0 and 150 mm at a throughput rate of approx. 20 to 25 t/h is achieved. This has been proven by the success of the demo tour in the south of Germany and France. Due to the

persuasive end product, a client from Paris, France has decided to integrate the new “aligator shafts” into its already ordered HAMMEL- primary shredder type VB 750 DK. Under the aspect of noise emission during operation, our HAMMEL- shredder could also convince. With a maximum noise pressure level of about 92 dB (A) measured one meter away, the HAMMEL- primary shredder type VB 750 D belongs to the most quiet shredders. With this combination a fine, compostable end product is provided in only one step and our ears are preserved. Willingly, you can convince yourself of the new shaft generation during a demonstration near by you. **We are looking forward hearing from you.**



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## Appointments, you should not miss...

October 16<sup>th</sup> 2008  
October 18<sup>th</sup> 2008

**Expo-  
bioenergia**

in  
Valladolid / Spain

hall 2  
stand 255

October 27<sup>th</sup> 2008  
October 30<sup>th</sup> 2008

**POLEKO**

in  
Poznan / Poland

pavillon 4  
stand 40

November 5<sup>th</sup> 2008  
November 8<sup>th</sup> 2008

**ECOMONDO**

in  
Rimini / Italy

pavillon A3  
stand 026

\* dates without engagement

## jokes, jokes, jokes

In a quiz show a pastor and a shepherd sit opposite to each other as rivals. The programme draws to a close and in astonishment of the audience there is a tie. Then the quizmaster says: “You both had earned the win, but we need a winner and the programme draws to a close. Therefore you both get the same task and the applause of the audience should decide who wins. The task is: compose a quatrain on the word Timbuktu.” The audience thinks that this is unfair. How should a man-in-the-street out of the nation win here. Both rivals back out in their chamber. After a few minutes the pastor is the first who comes out and brings forward his poem: “I was a Rabbi all my life, I had no children – had no wife, I read the bible trough and trough on my way to Timbuktu.” The audience applaud enthusiastically. Now the shepherd comes out of his chamber and brings forward his poem: “When Tim and I to Brisbane went, we met three woman in a tent. As they were three and we were two, so I booked one and Tim booked two.”

For sending us this joke, we would like to thank Mr Kaindl of the company CBE Consulting Plus in Kirchzarten.

for more information



+49 3695 6991-0

[www.hammel.de](http://www.hammel.de)

## How able is your shredder to work under pressure?



High operating times and a long lifetime are only two characteristics for what our shredders are known for and they give back your investments as a reliable tool. But how old can such a shredder grow? For this we would like to introduce our Russian customer Spestrans from St. Petersburg.

At the beginning of the thirties a public controlled municipal waste management was opened in St. Petersburg for the first time. This waste company collected the rubbish of the inhabitants and brought it to a central area. In the nineties the municipal waste management has been privatised bit by bit by what the company Spestrans has been developed. This company is today with about 1300 employees one of the biggest employer on the Russian employment market.

In order to rapidly and effectively dispose the rubbish of 4 million people, our Russian customer developed his specific waste management concept. This concept started with the production of own waste bins of several sizes and was completed with powerful logistics. On developing of the waste containers they emphasised also on the design to make St. Petersburg more beautiful.

Annually 300.000 tonnes of house,

business, industry and bulky waste are collected and transported to the landfill. Meanwhile 350 company-owned lorries are in use to handle this masses.

Since 2006 the collected waste is transported to two processing areas. There the 300.000 tonnes material are shredded and afterwards pressed with meanwhile three HAMMEL-primary shredder type 750 D before the waste is



transported to the two landfills. This method serves as a reduction of capacity on the landfills and saves transport costs through a lower material dump. To deal with this masses the three shredders work in two shift operation on approx. 300 days per year and already have a proud stand of hours of operation after two years. In the meantime the fourth shredder line with a new HAMMEL-Shredder has been planned, because the reliability of

our shredders in connection with high operating times mainly pays off in view of the new Russian federal law over the sorting of waste.

So the rails for the future are laid down. With this, the company Spestrans can realize the aim to expand their business area with a sorting plant for the value creation of potential recyclable right from the start.

## Customer portrait: IRV Interroh



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expiciencies. For this sector of the recycling industry we develop empirically operations and recycling opportunities to separate impurities from the wood and to identify contaminants until a recyclable product occurs.

Our customer IRV Interroh is one example for professional recycling of waste wood according to actual European instructions. Since 1995

and refuse material for the carbon dioxide neutral energy extraction and for the material recycling in terms of the recycling management and in the responsibility for a lasting and sustainable development.

At IRV Interroh the waste wood is processed with a HAMMEL-processing plant, which is designed for the requirements of IRV Interroh. With the HAMMEL-primary shredder type VB 850 E the waste

wood is crushed in one step at a product size of 300 mm. The shredded material is transported over the conveyor belt to a magnet station where the ferrous parts are separated and discharged separately over a lateral belt. The non-ferrous material falls on a vibration channel. Through this, the material is shook and consistently spread on the sorting belt. Integrated contraries as synthetics, aluminium etc. can easily be selected in the sorting cabin. The non-contrary material, depending on the quality, is discharged over several movable belts into the appropriate box and is available for further recycling.

This is only one example of various possibilities of how waste wood is processed into new usable goods. Whether as high calorific fuel, for the furniture and chipboard industry or for other re-use – waste wood is a precious and multifunctional applicable raw material.



IRV Interroh operates a waste wood reprocessing and sorting plant licensed by the 4. BimSchV (Federal Immission Control Ordinance) in the urban area of the Bavarian capital city of Munich and has already been certified to a specialist recycling company in 1998.

Their attention concentrates on the environmental and ecological use and recycling of biomass, resource



### Used- and demo machines

type, construction year, approx. operating hours

**HAMMEL-Shredder**  
type VB 450 DK, 09 / 06, 310

**HAMMEL-Shredder**  
type VB 450 D, 12 / 07, 100

**HAREMA-Shredder**  
type 650 D, 02 / 94, 9.850

**HAMMEL-Shredder**  
type VB 750 D, 02 / 06, 2.600

**HAMMEL-Shredder**  
type VB 750 D, 05 / 07, 770

**HAMMEL-Shredder**  
type VB 750 DK, 03 / 06, 1.000

**HAMMEL-Shredder**  
type VB 750 DK Duo, 04 / 06, 900

**HAMMEL-Shredder**  
type VB 750 E, 05 / 03, 7.000

**HAMMEL-Shredder**  
type NZS 700 D, 05 / 06, 870

**HAMMEL-Screen**  
type HSS 1.100 D, 12 / 05, 20

**HAMMEL-Screen**  
type HSS 1.500 D, 05 / 05

**Forus-Shredder**  
type HB 371, 06 / 01, 2.100

**Doppstadt-Shredder**  
type AK 300, 02 / 95, 3.400

**EUREC-Shredder**  
type S 25.00 E, 06 / 02, 3.500

all machines are prior to sale

### In brief

#### Ship Ahoy!

We are already use to test drive our primary shredders for interested clients only under extreme conditions. But a boating trip over Lake Balaton in Hungary is a new experience even for us and our primary shredders.

#### Service NEWS

We winterize your HAMMEL!

Please contact your HAMMEL-service agent for an individual offer.