

## Components & Parts

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### Experience matters

1991 Founded as RETEK Goslar Recycling GmbH as spin-off from German ore mining company **PREUSSAG** AG – Germany, first solutions for recycling of WEEE development of delamination systems for compound materials to recover and separate metals

2007 Take over by E-Waste Solutions Inc. Canada, driven by Alfred Hamsch former owner and president of **GEEP** – Canada (Global Electric and Electronic Processing Inc., Barrie, Ontario, Canada)

2008 Renaming to RETEK Engineering GmbH, adaptation of technology to compound materials like e.g. mixed metal scrap.

2013 Renaming to UMS – Urban Mining Solutions GmbH

2014 Founding of Mesatex as production center on loan basis and as UMS development and testing center



Since machines were not available on the market or did not meet the requirements, UMS developed and continues to develop its own components and solutions to increase the efficiency of material processing and separation.

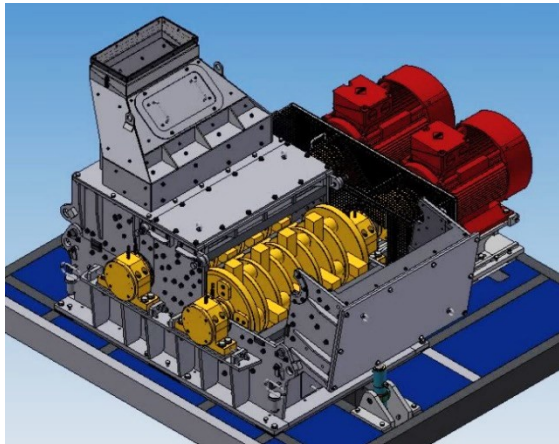
UMS extended this even to operational parts based on its own processing and operational know-how experienced during running Mesatex production center.

### Double Rotor Hammer Mill (DHM)



## Double Rotor Hammer Mill (DHM)

The DHM ensures best delamination results of complex compound materials and cleaning of mixed metals. UMS-customer around the world value the exceptional performance processing e. g. shredder residuals, E-scrap (WEEE), populated and unpopulated boards, aluminum-copper radiators, aluminum scrap, Non-ferrous composites, fiber-metal-compounds, adhesive connections, vulcanized connections or productions scrap.



The DHM crushes the input material with fast rotating hammers smashing the material against the grinding tracks and material that is already inside the machine. Due to the permanent acceleration and deceleration of the material as well as the rolling between the hammers and the grinding tracks the material is mechanically stressed. This leads to a perfect delamination of the compound and a maximum cleaning of the surface. In addition, the material is transformed and homogenized regarding grain form and size. Hence, the processed and delaminated fraction is optimal prepared for all separation steps to follow.

The DHM is the key aggregate to enable successful high quality output fractions after delamination and subsequent separation, meeting the criteria for secondary raw materials or “end-of-waste”. This is the major plus of the DHM compared with conventional shredders, which can shred smaller but do not change the nature of composites at all. The heavy construction, derived from UMS's ore processing experience with screwed wear plates inside makes the DHM relatively insensitive to impurities in the material. Further advantages are an easy adaptation to many different types of input materials, high-energy efficiency, ease of maintenance, low tool and wear and tear cost as well as a long lifetime. The range of application starts from coarse (input size approx. 80 mm) down to fine and superfine mills for special cases.

### Technical data

Model	Beating circle (mm)	Working width (mm)	Power of drive (kW) at 400 V	nominal speed (rpm)	weight (kg) approx.
DHM 650/500	650	500	2 x 55	1,500	4,800
DHM 650/1000	650	1,000	2 x 90	1,500	7,000
DHM 650/1000	650	1,000	2 x 90	3,000	7,000
DHM 1000/1500	1,000	1,500	2 x 200	1,500	23,500

Other dimensions are available on request. The throughput depends on the purpose and setting of the DHM. We offer the DHM as single machine with drives and base frame and without or with the necessary control system or as a complete system.

### How to Proceed

If you request an offer or want to purchase a Double Rotor Hammer Mill (DHM) directly, please contact our department for component and parts as follows

phone: +49 (0) 21 91 / 422 22 64

email: [parts@urbamine.de](mailto:parts@urbamine.de)