

Technology Platform Mechanical Recycling



Components & Parts

Experience matters

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

Take over by E-Waste Solutions Inc. Canada, driven by Alfred Hambsch

2007 former owner and president of GEEP – Canada (Global Electric and Electronic Processing Inc., Barrie, Ontario, Canada)

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

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.

Rotor chain crusher (RCC)

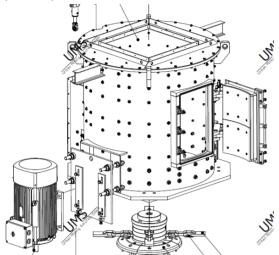




Rotor Chain Crusher (RCC)

The RCC is a very flexible and universal machine for first treatment, dismantling, delamination and cleaning for many different input materials.

UMS-customer around the world value the exceptional performance in processing E-Waste (WEEE), automotive shredder residuals (ASR), shredder rest fractions, Non-Ferrous com-



pounds, aluminum scraps, production scraps, coolers, many other composites and mixtures containing metals.

The rotating and beating chain tools break down the input materials into their components. These maybe deformed but not destroyed substantially. Consequently the RCC can be even used to release components containing hazardous substances e.g. batteries etc. The grade of disintegration and the output size is determined by the different physical properties of the input material, the operating time, the quantity of chains in use, the choice of operating mode (continuous, Batch- or Mix-mode) and the position of the continuous adjustable exit door of the RCC.

The flexible chain tools give way when hitting large resistances. This makes the RCC relatively insensitive to impurities in the material like stones, big solid metals pieces etc. and keeps tool costs down. Therefore, the RCC works very energy efficient and avoids excessive heating.

De-dusting of the operating chamber and suction of gases (ATEX) is secured by exhaust connections installed directly at the cylinder and the material exit area.

The heavy construction, derived from UMS's ore processing experience, guarantees a long lifetime and low wear and tear. All tools and the screwed wear plates are easily accessible and replaceable.

A machine with 2,000 mm diameter can process materials with maximum size up to 600 x 600 x 600 mm edge length (respectively one side extended to 800 mm and possibly longer, other sides shorter) and single unit weight of more than 100 kg.

Technical data

Model	diameter	height	Power of drive	weight
	(mm)	(mm)	(kW) at 400 V	(kg)
			at 400 V	approx.
RCC 1200	1,200	1,200	110	7,000
RCC 1600	1,600	1,600	200	9,600
RCC 2000	2,000	2,000	250	14,800
RCC 2500	2,500	2,500	355	19,200

The throughput depends on the purpose and setting of the RCC. We offer the RCC as single machine with drive 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 Rotor Chain Crusher (RCC) directly, please contact our department for component and parts as follows

phone: +49 (0) 21 91 / 422 22 64 email: <u>parts@urbamine.de</u>