

ELECTRONIC SCRAP TURNED INTO GOLD – RECYCLING PLANT WITH THREE RS30 SHREDDERS

The Royal Mint

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What began with a single enquiry for an RS30 shredder quickly developed into a groundbreaking collaboration with several technical specialists. Now, three UNTHA machines form the heart of one of the most advanced e-waste processing plants in the world. The Royal Mint's sustainability vision is changing the face of what is possible in the UK e-waste industry.

- Gary Moore, Sales Manager at UNTHA UK

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» MATERIAL
Electronic scrap

» SHREDDER
RS30

» THROUGHPUT
4.400 tn/year





CUSTOMER

As the official manufacturer of British coinage, The Royal Mint can look back on a history spanning more than 1,100 years, making it the oldest company in the United Kingdom. Throughout its history, the company has always stood for precision, technical excellence, and an unwavering commitment to quality – from the production of national coins and commemorative medals to the provision of investment opportunities in gold and silver.

APPLICATION

With the declining demand for labor in traditional coin production, The Royal Mint recognized the need to diversify its business activities. Over the years, the United Kingdom has become the second largest producer of electronic waste per capita. This presented The Royal Mint with an opportunity to reduce exports of discarded electronic equipment and keep the value of the precious metals it contains in the country. A new process was developed, and a corresponding plant was planned. As a starting point for recycling, suitable shredders were sought that were particularly suitable for shredding circuit boards.

SHREDDING SOLUTION

The plant is an industry first, recovering precious metals from electronic devices. At the start of the process are three UNTHA shredders – model RS30. They shred the circuit boards into precise particles and ensure that metals and non-metals can be separated for further treatment. The material goes through a series of complex steps. Base metals are extracted and sold to refineries, while gold-bearing fragments are treated with a unique chemical. In just a few minutes, the solution selectively leaches out more than 99 % of the gold, which is processed into gold nuggets for recycling. Every year, over 4,400 tons of circuit boards are processed in this way, yielding up to 1000 lb of gold.

REQUIREMENTS

- » Efficient and precise shredding
- » Robust machines for e-waste
- » Seamless integration into the processing line
- » Long-term reliability and performance
- » Maintenance support

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Our installation team was one of the first on site. This shows how important our machines and our contribution to this precious metal recovery plant are in supporting The Royal Mint's goals.

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— Marcus Brew
Managing director, UNTHA UK