

Waste Recycling

WEEE Shredding Line

Objective

To design, manufacture and install a new WEEE waste shredding and dismantling line.

Problem

Prior to the waste sorting line, all WEEE waste was outsourced by the client to re-processors around the country.

Solution

GAME's client invested in a turnkey WEEE processing line. The plant was been designed and installed with a state of the art Quad Shredder fitted with a sizing screen to reduce product down to a uniform size for separation and sorting further down the line.

The shredding plant was capable of handling up to 3TPH of assorted WEEE, from small desktop PCs and printers to mainframe servers (with some prior dismantling). Items were placed onto an intake conveyor and dropped into the Quad Shredder feed hopper. Once the shredding operation has taken place, the distribution conveyor passes fractions beneath a high powered over-band magnet, which pulls off the ferrous material and drops the fragments into a transfer chute feeding to a collection point underneath.

Following on from the over-band magnet the remaining items were passed over a drum magnet. A vibratory feeder then evenly spreads the remaining items on a belt conveyor, which were then passed over an Eddy Current Separator, with each stream being sent to a separate collection points. For ease of movement the collection points hold 1T bulk bags so that the separated materials can be palletised and then transported onto various processors.

Result

Feasibility studies completed by GAME demonstrated that with correct operation the new plant would have a <2 year payback. The new plant means that all recycling and secure destruction of confidential systems takes place under one roof without the need for any items to leave the building, thus giving the client customers total peace of mind.

