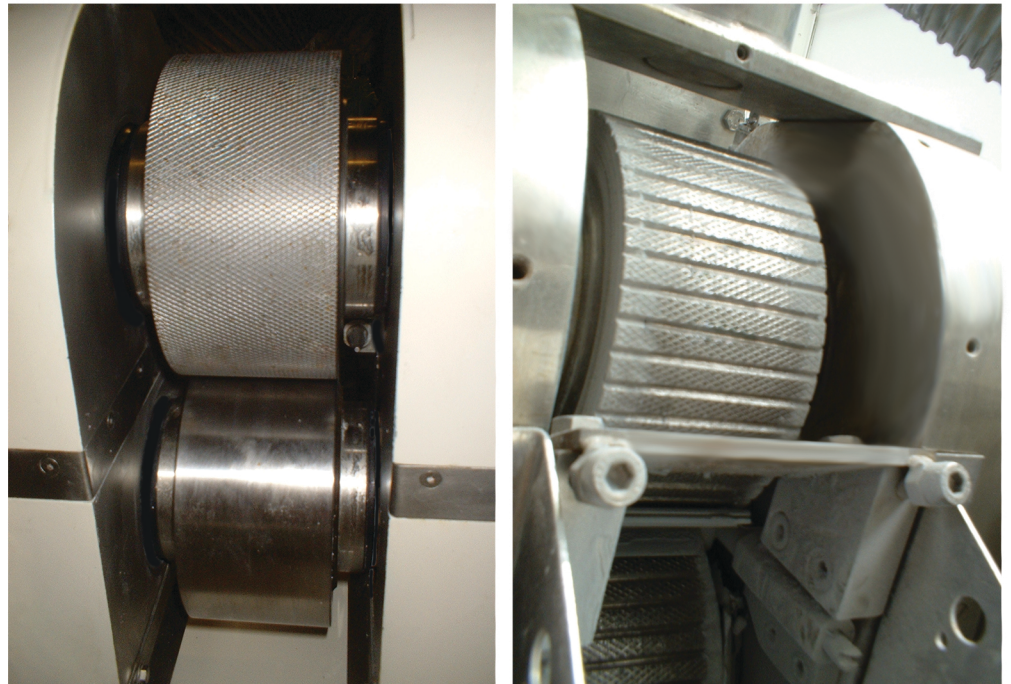


## COATINGS CASE STUDY 4 Surface Coating Processing of Waste Streams

### Customer Requirements

A powder coating manufacturer contacted Exwold to establish whether a process could be established to recycle fines (the fine powder generated and removed during powder coating manufacture).

It was estimated the company was sending 10-25mt of fines to landfill each year and naturally wanted to reduce the environmental and financial impact of its manufacturing process. The fines ranged in PSD but were typically 150 microns.



### Exwold's Solution

Exwold proposed using compaction to produce a granule that could be readily reintroduced into the process. Samples were provided by the client of various streams that they were generating and an initial tablet test was carried out. This involved applying pressure to a small quantity of product. If the product forms a tablet which gives a crisp break it is a good candidate for compaction.

The test on the powder coating fines suggested compaction would be a good solution. 10-20kgs of the powder coating fines were then processed through the pilot scale compactor which replicates larger scale manufacturing. This reconfirmed the fines would compact and form a good compaction ribbon. By varying the screen that is used to break (or mill) the compacted ribbon, different granule sizes can be produced. In these trials a range of granule sizes were developed between 0.5mm to 5mm. Samples were sent for evaluation and a proposal for commercial manufacture submitted.

“EXWOLD STRIVE TO FIND  
THE PERFECT SOLUTION”



Exwold Technology Ltd  
PO Box 270, Brenda Road, Hartlepool, TS25 2BW  
enquiries@exwold.com  
01429 230340