

COATINGS CASE STUDY 6 Coating Additive Size Reduction & Blendings

Customer Requirements

Exwold received an enquiry from a potential customer to produce a blend which, prior to blending, required size reduction of a raw material (Product A). It was essential that the material was <1mm in size and the blend homogeneous. The solution also needed to be cost-effective.

Exwold's Solution

Firstly, a laboratory scale preparation was carried out at Exwold and this determined that Product A size reduction was feasible. A two-stage process was initially considered:



As a two-stage process, two pieces of equipment were potentially needed: reducing yield, increasing cost, increasing cleanowns/waste and reducing flexibility. The Exwold team therefore evaluated alternative ways to process this with the aim of using a single piece of equipment.

A small plant trial (50kgs) was completed using a sifter which reduced the particle size but blinded frequently, so would not achieve commercially viable rates.

A second trial using a Gericke to reduce the particle size was completed and successfully reduced particle size and improved the production rate.

Plant modifications were carried out by Exwold's in-house engineering team to position the Gericke above the blender and full plant trials (10mt) were completed with excellent results.

