

## Pym and Wildsmith case study

Pym and Wildsmith are located in leafy Staffordshire and are one of the country's leading trade wet-paint and powder-coating specialists. Among many other customers, they are an approved main supplier to an ACE market OEM.

Already very efficient and cost effective as demonstrated by their increasing workload, Steve Pym decided to review all of their operations to:

1. improve energy efficiency
2. improve corrosion resistance
3. reduce labour costs monitoring and maintaining pretreatment systems
4. minimise environmental impact

Trials were arranged using Envirometal Technologies' innovative Toran 3 product and a bespoke batch processor 'EcoJet' was installed. Toran 3 is a unique product which, like the whole Envirometal range, degreases and polymer-coats all metals in one, unheated stage. Toran 3 is specifically aimed at customers who powder coat their products as it gives up to and beyond **1,000 hours** of salt-spray corrosion proofing.

Pym & Wildsmith's previous heated, water-based multi-stage pre-treatment "batch processor" cost over £20,000 per annum to run and couldn't match Toran 3's corrosion proofing. Hours were spent every day in managing the chemical baths, rinses, heating etc, together with regular, expensive disposal of waste water and sludge. It also had a limited capacity, slow process time and limited load capacity in terms of weight, which was a problem due to the large products they can handle.

Currently Pym & Wildsmith shot blast many products prior to phosphating and then need to paint quickly to avoid flash rust.

Before they changed to Toran 3, as they work to a "just in time" process for their clients, sometimes the orders change at short notice and a batch which had been blasted, phosphated and was due to be painted is delayed in favour of another batch, which prevents painting of the first batch – meaning that when the original batch is required later, it has to be blasted and phosphated again in order to paint it.

In contrast, once treated with Toran 3 and dried, the delayed batch can be stored inside for up to 6 months without rusting, and painted later.

Process time in the EcoJet can be as short as 8 minutes rather than 1 hour.

The Pym and Wildsmith EcoJet is also four times as large as the old heated system, (for a similar cost due to being so simple in structure), so it actually handles up to 32 times as much (and heavier) work per hour than the old heated system.

As Envirometal Technologies' system uses **no gas** and just a small electric pump and extraction fan the gross energy savings will result in a capital payback period of approximately 2 years.

