

# Case study: Plasmet T for sludge rollers

# Wear resistance for effluent sludge rollers.

#### Client

Water and waste industry, UK.

## **Application date**

September 2004.

# Scope of work

Rebuilding and protecting severely worn sludge rollers to original dimensions.

#### **Products**

Plasmet T and glass fibre reinforcing fabric.

#### Substrate

Fabricated steel rollers.

### Coating system

- Pre-machine to get back to good surface.
- Grit blasted to ISO 8501-1 cleanliness standard SA 2½.
- Plasmet T applied with 100mm wide glass fabric reinforcement.
- Post machine to final drum sizes.

# Coating credentials

Plasmet T is a high solids epoxy coating loaded with Silicon Carbide to provide added abrasion resistance. Plasmet T, when coupled with glass fibre reinforcing, as in this application, builds strength and thickness to these worn sludge rollers. The specification of these drums also utilised Plasmet T's ability to be machined and ground to a very smooth finish.

Designed primarily as a cosmetic top coat for Plasmet R and WR, Plasmet T provides excellent chemical resistance and a good gloss appearance. Using coating as a method of refurbishment has proved cost and time effective on these sludge rollers. Traditional methods of welding and machining have a turn around time of weeks, and replacement is expensive. Corrocoat's solution can be turned around in days and is around half the cost of a new roller.

An additional benefit with the refurbishment option is that, with the enhanced properties of Plasmet T, the life of the component will now be greater than that of a new roller – adding to the cost benefits of using Corrocoat coating systems.

# **Photographs**

Left: Rollers on arrival into our works.

Middle: The roller is pre-machined, and grit blasted

before the application process begins.

Right: The post-machined roller ready for packing

and despatch.