

CASE STUDY

Water recycling, Distribution and
Operation of Existing Effluent
Treatment Plant



➤ CLIENT OVERVIEW

Mettis Aerospace Limited is a leading manufacturer of aircraft and aeroengine components based upon world leading forging, machining and metallurgical skills. Operating from the heart of England, Mettis Aerospace has a comprehensive range of design, logistics, manufacturing processing, machining and kitting services all on one site. The ideal 'one stop supply centre' for the complete service.

➤ CLIENT'S REQUIREMENTS

Mettis Aerospace was looking to reduce the overall cost and quantity of process water required for their operational site in Redditch. They approached VWIO to improve their site water balance by installing a water recycling plant and a dedicated distribution system.

➤ OUR SOLUTION

VWIO assessed the operation of the existing effluent treatment plant and carried out process design to provide the required standard of water for recycling.

Site trials were carried out to validate the process and to prove the water was compatible with the manufacturing process.

VWIO has successfully provided the following services:

- Management, operation and optimisation of existing effluent treatment plant.
- Water recycling to provide a process water supply.
- Outsourcing of the whole water cycle with:
 - Design, build and funding of a new process water treatment plant
 - Management and operation of the new process water treatment plant for 10 years.
- Make-up and delivery of chemical etch solutions utilised within the production process.

The technology offered was:

- Filtration and Reverse Osmosis to provide the recycled water at a maximum supply of 1,011 m³/day.

■ **By outsourcing responsibilities for water and wastewater management to VWIO, Mettis Aerospace is able to concentrate on its core business and has reduced its water and wastewater utility bill. ■**

David Smith Commercial Director
METTIS AEROSPACE LIMITED