

## Advanced Forming Research Centre

# Wyman Gordon

### Customer issue

In order to reduce energy wastage, Wyman Gordon approached the Advanced Forming Research Centre (AFRC) to carry out a thermal efficiency survey of its heat treatment furnaces.

### How the AFRC helped

AFRC engineers carried out research on site at Wyman-Gordon. During this time, engineers inspected the physical condition and thermal performance of the heat treatment furnaces. This inspection was conducted using specialist photography and thermal imaging equipment from the AFRC.

A detailed report was produced on the thermal characteristics of the heat treatment furnaces at Wyman-Gordon.

In addition, opportunities for improving the general physical condition of the furnaces were identified and a number of recommendations to lower the energy costs of industrial furnaces were presented. This is usually achieved by maximizing the efficiency of three processes—heat generation, heat containment and heat recovery.

### Business impact

The thermal imaging data shows clear evidence that there are reductions in wasted energy (and therefore financial savings) to be achieved from such improvement/maintenance activities.

It is anticipated that the thermal image data will bring a step change in the way Wyman-Gordon conducts their heat treatment processes and this could potentially make significant energy savings.

“At Wyman-Gordon we strive to ensure that we can provide our customers with the lowest cost processes to achieve a consistent, high quality product.

Working with the AFRC has provided us with valuable data on how we can be more energy efficient with our heat treatment processes and this is vital for our company as we strive to continuously improve.”

Derek Rae, Manufacturing Manager at Wyman Gordon

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