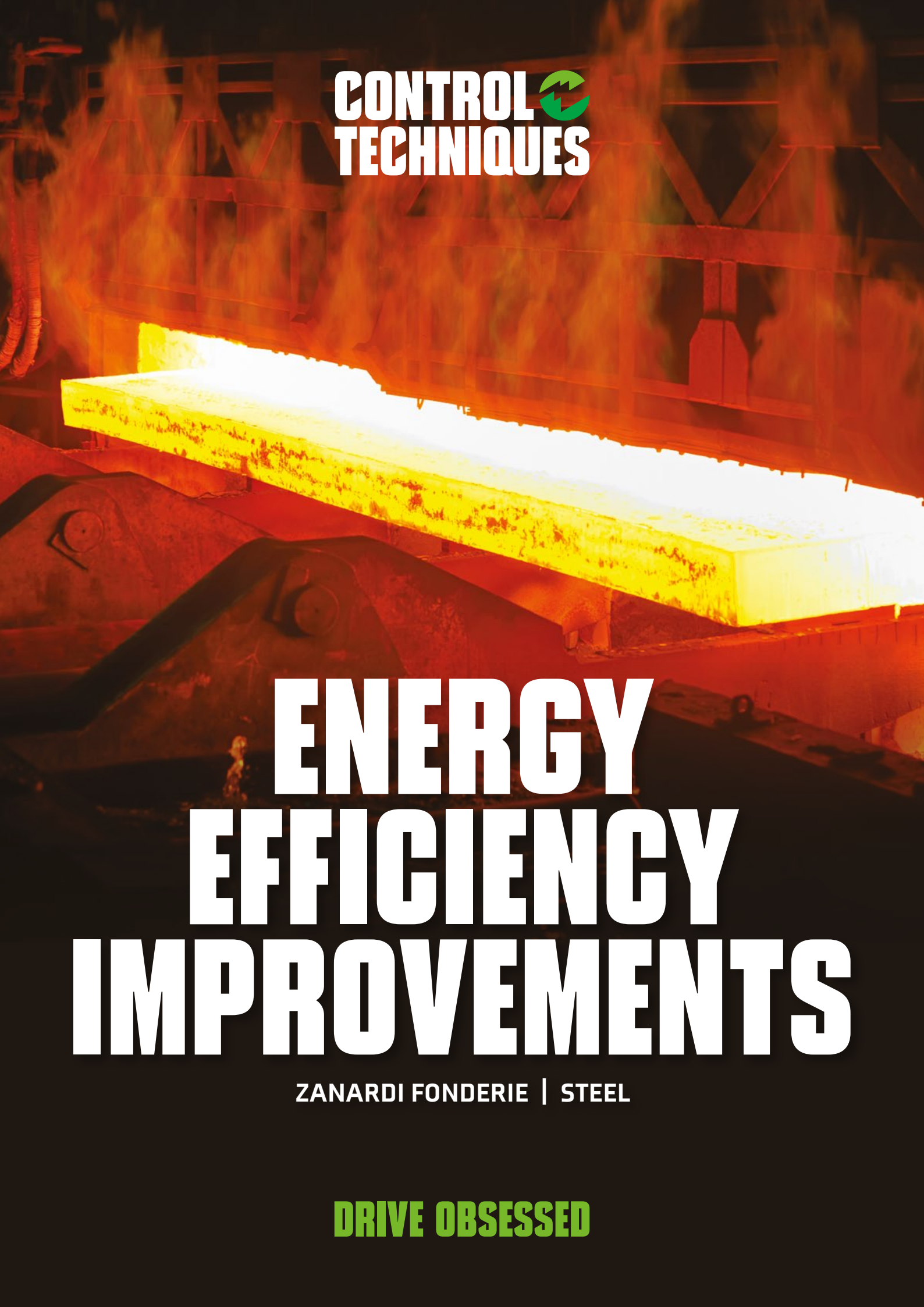




**CONTROL  
TECHNIQUES**



**ENERGY  
EFFICIENCY  
IMPROVEMENTS**

ZANARDI FONDERIE | STEEL

**DRIVE OBSESSED**

# CUT ENERGY COSTS BY AROUND 40%

Zanardi Fonderie is a leading producer of Austempered Ductile Iron. The business, based in Italy, is a family-owned company that has spanned four generations – originally founded in 1931. All production is located in Zanardi's factory in Verona, which manufactures about 22,000 tons of iron every year.

## The Challenge

The company is constantly seeking ways to optimise the productivity of its manufacturing operations including a strong focus on reducing energy consumption.

In 2014, Zanardi approached GBM, a Milan-based supplier to the foundries industry. GBM in turn asked Control Techniques and Leroy-Somer to look at reducing the energy consumption of Zanardi's central fume aspiration system. The aspiration system, which removes harmful gasses from the air inside the foundry, is essential to protecting the health of factory operators but consumes an enormous amount of energy. Zanardi wanted to investigate ways in which these costs could be reduced without impacting on employee safety.

## The Benefit

**The drive and motor solution has delivered a 40 percent reduction in energy costs for the aspiration system.**

Which now consumes less than 1,200 kWh per day on average (down from 2,000 kWh per day previously) and will have a payback period of less than two years. The upgrade project was awarded a recognised energy efficiency certificate.

## Overview

- 40% reduction in energy costs
- Payback period of less than two years
- Energy savings of 800 kWh per day

## The Solution

**Energy saving experts from Control Techniques and Leroy-Somer, working in collaboration with Zanardi staff, collected data to provide a clear picture of how the equipment operated.**

Engineers replaced the existing drive system with an upgraded high-efficiency AC motor and a Powerdrive MD2 variable speed drive.

The drive system was updated in parallel with the existing electromechanical start-up meaning that it is possible to use the old system as an emergency bypass.

