

## CASE STUDY

# Cut Through the Norm to Deliver Efficiencies

### The Challenge

**Eggleston Steel Ltd** is one of the oldest companies in Derby dating back to 1809. Originally an ironmongers, they now stock, process and supply a wide range of mild steels and non-ferrous metals.

Their operations use CO<sub>2</sub> lasers for cutting the steels and metals and the industry norm had been to use N<sub>2</sub> in the beam guide due to two key qualities—it is moisture and CO<sub>2</sub> free. Molecules of either of these would weaken the beam by diverging it.

Maziak, however, through its partnership with Parker were able to offer an alternative solution at much reduced cost.

### Maziaks' Solution

Parker's product portfolio included a best selling CO<sub>2</sub> removal dryer for the laboratory sector. In trials with a market leader in the laser cutting industry, they discovered that the dryer could be adapted to remove the need for N<sub>2</sub> from the beam guide of the laser cutter.

The Parker dryer is compact and can be integrated into any existing system. It offers significant efficiency savings due to lower feed air usage and higher CO<sub>2</sub> removal efficiency. It also significantly reduces the cost of N<sub>2</sub> with no impact on product quality.

At Eggleston Steel, the dryer was installed on a 3-way valve on an N<sub>2</sub> input line so that in the unusual event of a problem on the compressed air line, they can switch immediately back to N<sub>2</sub> with no down time.

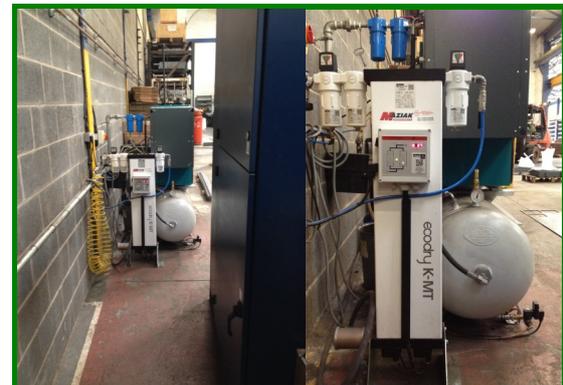
### Results

Eggleston Steel have reduced their N<sub>2</sub> costs by almost 85%. In addition to the cost reduction and efficiency savings, they have the peace of mind that they have installed the market leading product to strengthen their operations.

### Client Testimonial

"The installation of the dryer was quick and easy and has resulted in a reduction of our cutting costs, as well as keeping the machine running for longer as the need to change the bulk nitrogen packs has been reduced significantly. We are really pleased with the advice and service which Maziak provided and would definitely recommend them."

**John Ready, General Manager**



Co<sub>2</sub> Removal Beam Path Dryer

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