

# CASE STUDY – HADEE ENGINEERING

## PROTECTING AGAINST PRESSURE DROPS FOR HADEE ENGINEERING

A pressure drop was causing plasma cutter problems for one Algar Air client, but we've found a solution...

### THE CLIENT:

Hadee Engineering delivers world-class fabrication, welding and precision machining services from its Sheffield base. Hadee's products are large scale endeavours for industries including defence, power generation, quarrying and more, and the business naturally relies heavily on its equipment, including a twin head plasma cutter that slices through thick steel.

### THE CHALLENGE

Hadee had a problem with its plasma cutter. During operation, a repeated one bar pressure drop was threatening the quality of its cuts.

A one-bar pressure drop may not sound like a big deal but when you're cutting through thick steel, it can make a huge difference. Inevitably, lower pressure means metal takes longer to cut.

That increase in time means that, rather than pushing molten metal through the kerf (the cut), it risks solidifying around the kerf or being blasted back to the torch. That reduces the precision of the cut, creates lots of 'dross' (solidified plasma) that then needs to be removed, and damages the life of the cutter.

We were asked to find a way to resolve the issue.

### OUR RESPONSE

The problem was one of air supply. A plasma cutter needs lots of air power and a constant supply. For the most demanding tasks, the cutter's air compressor may

not be able to generate that consistent flow and pressure. That's why we installed a 500-litre air receiver directly next to the plasma cutter, giving it a reservoir of air in reserve which ensures the cutter always has the instant supply it needs.

Is air pressure or flow compromising your standards? Ask us to find a solution. **Contact us** or call **0114 243 2347**.

















