

## Observations & Quote By Martin Cook - Cutting Technologies

"Nitrogen represents a significant percentage of a laser company's costs and anything we can do to reduce this is beneficial to our profitability and our competitiveness against other processes".



"We purchased the above nitrogen generator from MSS in November 2005. We were previously running on MCP's (manifold cylinder packs), the most expensive option of nitrogen supply, but were struggling to get our Landlord's approval for external bulk storage. As an example of the high cost, we had to charge £80.00 per hour just for nitrogen when cutting 12mm stainless. We only run two lasers, but we run them long and hard and a high percentage of our work is decorative stainless, aluminium and brass, up to 15mm thick in stainless steel, 10mm in aluminium and 6mm in brass. We're currently running the generator at 90ppm oxygen impurity and achieving a flow-rate in excess of 70m<sup>3</sup> per hour.

Prior to purchase we carried out numerous trials at different ppm oxygen levels and showed the results to our most critical clients. We had no negative feedback at levels below 150ppm, so proceeded with the installation. We chose a generator that would cope with 80% of our work and expected to have to supplement it's output occasionally with MCP's.

We've run solely on the generator since November 2005 and have had no customer complaints due to edge quality, no breakdowns, no "gas-outs" and never had to supplement the generator output with bottled nitrogen. In other words, the generator has done exactly what it says on the tin. The most it has coped with across the two machines has been 10mm stainless on one and 5mm aluminium on the second machine, again with no issues and the generator was filling the tank quicker than we were emptying it.

We've negotiated a 5 year maintenance contract which is next to nothing per month, our efficiency has improved dramatically through not having to constantly change MCP's, the factory is a much safer place because we're not constantly moving the MCP's around and we dare not print how much we're saving per month on the nitrogen!. We're really pleased the landlord stopped us installing external bulk storage, he's saved us a fortune".