

JB Engineering (Hatton) Ltd. Laser, Bending and Small Fabrication Department

Case Study 1- Automotive Test Equipment – Exhaust Extraction.

Our Customer manufactures Automotive Test Equipment for the car industry. They design their own parts for sub-contract fabricating and on this occasion required 4 sets of exhaust extraction parts. Nathan Laban went through their designs and priced the parts individually. The parts were fairly complex, time consuming to manufacture and the lead time was fairly tight as they were required to install one set of the parts on a shutdown which was less than two weeks away.

Innovative Cost Savings –

Each set consisted of a Right Hand & Left Hand Extension Assembly, originally quoted at £528.75p each.

With the first set being required in less than two weeks I (Nathan Laban) needed to speed up the fabrication and was also asked if I was able to reduce the price of the above parts. The parts originally were designed to be fabricated from angle and required a lot of man hours to mitre angle, drill holes and then be welded together etc. I redesigned this particular part to be laser cut from flat sheet, CNC bent and welded. Whilst the base material cost slightly more, the fabrication was a lot quicker and more accurate, this enabling us to give the customer a saving of £170.00p per assembly (a total of £680.00p over the 4 sets).

The First set was fabricated and powder coated Ral 1004 (golden yellow) then delivered to the customer within two weeks from the receipt of the order. The customer was able to install the parts over the shutdown period, they then identified problems with their designs and we accommodated the changes over the further 3 sets we supplied 4 weeks later as planned.

Total Saved £680.00p

Case Study 2- Sculpture

A local Company approached us to see if we were able to supply the profiles for a sculpture designed by a student from a local College. The customer supplied us with a CAD file of the profiles required, which we then programmed into our laser profiling machine; the parts were cut within 3 days of receiving the order. The customer then completed the manufacture and the sculpture now stands outside the college.

Case Study 3- Micro Switch Brackets



The customer required a fairly simple but complex bracket to hold a micro switch on to their product, we were able to offer support with their design and create specialised tooling which was required to complete the parts. The parts are now ordered on a regular basis and are laser cut from 0.9mm 304 SS and bent using the specially made tooling. The parts bend back on themselves which allows an M3 nut to locate and lock in the bracket, which then eases the final assembly of the product for the customer.