



PLASTIC ENGINEERING
SOLUTIONS LIMITED

CASE STUDY - RE-ENGINEERING

Overview

BSB is a leading manufacturer of ventilations systems in the UK. Their clients include the Shakespeare Globe Theatre in London and Newcastle Football Club.

Challenge

To enable BSB to continue to realise a cost advantage within the ventilation industry, they sought alternative manufacturing methods to reduce the overall production costs of their dampers, used within their ventilation systems.

A number of components used within the manufacturing process of the damper were made out of metal. These metal components offered an opportunity to reduce overall manufacturing costs if re-engineered in plastic. BSB sought an engineering company who could not only provide them with the skills to re-engineer these components into plastic, but, have the additional expertise to re-design the components to further reduce installation time and associated costs.

BSB also wanted to develop their product to further meet the requirements of their customers and required an additional engineering solution to improve the efficiency and reduce noise levels of their damper.

Solution

BSB met Plastic Engineering Solutions Ltd (PES) at an industry event and subsequently arranged a meeting to discuss their requirements.

James Pickford, Managing Director at PES re-designed 8 metal components for the damper into plastic. The re-design into plastic also allowed components which were originally a 5 part sub assembly to become single component.

PES also provided a plastic engineering solution which enabled tighter tolerances to be maintained on critical parts, thereby reducing loss of air flow and cutting down the noise level of the damper.

Results

- 30% reduction in production costs has been achieved through clever re-engineering from metal to plastic, which has reduced both material and assembly costs
- A reduction in installation time as number of components required has been consolidated by re-engineering to plastic
- Noise levels reduced to and improved efficiency of damper through the tighter tolerance levels gained through newly created engineered components
- Greater accuracy of mouldings has been achieved through re-engineering to plastic, enabling every component to be identical

For more information please contact James Pickford at Plastic Engineering Solutions Ltd on 02392 492907 or email jpickford@plasticengineeringsolutions.co.uk