

STROUD METAL NEWSLETTER

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Jan 2024



Top News

In our Financial Year 2023 Stroud Plastics Ltd was incorporated into Stroud Metal Company Ltd to form a stand alone division within the company.

This facilitates the plastics division to operate to the same quality standards and processes as the metals division.

Check out our quality standards [here](#).

Finally Jacob moved to the development and then production teams on our shop floor. Development provided further understanding of tool and component complexities and finally production allowed him to understand the "handover" point from a project in development to full production and the requirements thereof.

At the conclusion of his apprenticeship Jacob joined Stroud Metal on a full time basis and continues to be a key resource for the company and works predominantly in Design & Development as a lead Engineer.



Meet Jacob Apprentice to Project Design & Development Engineer

Jacob joined Stroud Metal Company Ltd in 2013. He started his career path at the age of 19 and joined the design department as an apprentice. This enabled Jacob to learn the principles of tooling design for deep drawn pressings. Later he moved on to learn and incorporate the principles necessary for high speed progressive die stamping.

Starting off in design enabled Jacob to get a firm grounding and understand the principles in both disciplines.

From Design Jacob moved on to the toolroom where he spent time learning to make the tools he helped to design. Again this helped Jacob gain further understanding of the guiding principles, not only of tool design but also component design and DFM.



Sustainable Manufacturing

Stroud Metal Company Ltd is proud to announce that it has been awarded silver level on the [EcoVadis](#) business sustainability platform. This places us firmly in the top 5% of companies rated on the platform.

EcoVadis helps you manage ESG risk and compliance, meet corporate sustainability goals, and drive impact at scale by guiding the sustainability performance improvement of your company and your value chain.

Designing Plastic Injection Moulded Parts

Designing plastic parts for injection moulding can be challenging. Familiarising yourself with key guidelines is crucial to avoid moulding issues. It's essential to prioritise specific design features from the outset to prevent complications and potential delays:

- **Material Selection:** Choose the appropriate material based on the part's usage, environmental conditions, and potential contact with the human body.
- **Part Wall Thickness:** Maintain uniform wall thickness to ensure even plastic distribution during injection moulding, enhancing structural stability.
- **Gate Location:** Strategically place gates to minimize visible marks on the finished part, reducing the need for post-processing and overall project costs.
- **Draft Angle:** Incorporate positive draft angles (around 1° to 2°) for easy part ejection, minimizing wear on the part, mould, and injection-moulding machine.
- **Bosses:** Properly design bosses with an outside diameter 2.0 to 2.4 times that of the screw or insert. Avoid merging bosses with sidewalls to prevent thick sections leading to sinking.
- **Shrinkage:** Account for inherent shrinkage in plastic parts during the cooling process. Adjust materials if necessary and design the mould to accommodate shrinkage.
- **Part Features:** Consider special features like inserts, secondary processing, and post-processing early in the design process. Incorporate texture in the mould for enhanced finishes.

Should you require any help in designing your injection moulded component do not hesitate to contact us [here](#).