



“How much will a plastic injection mould tool cost?”

This is one of the most important questions asked as the mould tool cost represents a significant expense. Many factors go into determining full tooling expenditure.

There are various ways to reduce this initial outlay as follows:

Part Complexity:

The intricacy of the part design, including the number of features, undercuts, and surface finish, affects both the design complexity and cost of the mould tool.

Material Selection:

The type of plastic material used can impact the tool design due to different flow properties, cooling rates, wear and shrinkage factors.

Tool Material:

The choice of tool steel or other materials for the tool mould affects durability, precision, and cost.

Number of Cavities:

Multi-cavity moulds can produce more parts per cycle, however, these are more complex and costly to design and manufacture.

Cooling System:

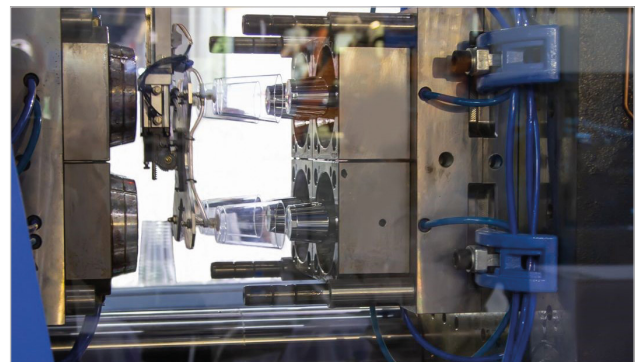
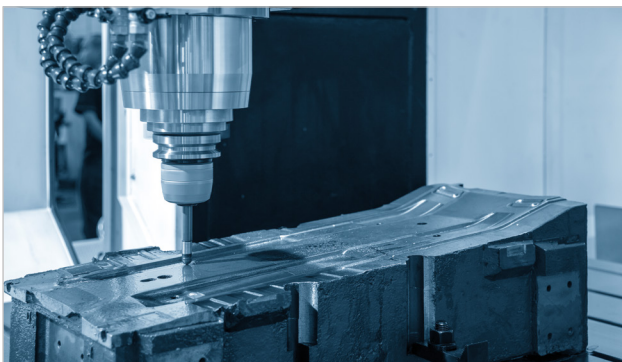
Effective cooling designs such as conformal cooling channels can improve cycle times but add to the complexity and cost of the tool.

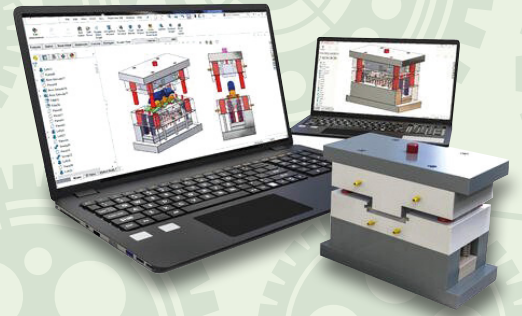
Ejection System:

The method of ejecting parts from the mould (e.g. ejector pins, plates, or lifters) can influence both design and cost.

Runner System:

The design of the runner system (hot or cold) impacts material usage and mould complexity.





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Tolerance Requirements:

Tighter tolerances require more precise machining and quality control, this can increase the cost.

Surface Finish:

Specified surface finishes such as polished, textured, or matte, can add to the mould cost due to additional processing.

Cycle Time:

Design considerations to optimise cycle time can affect the tool design such as cooling channel layout and material flow.

Production Volume:

High-volume production might justify the cost of more durable and complex tooling, whereas low volume might lean towards simpler and less expensive tools.

Maintenance and Repair:

Design for easy maintenance and repair can reduce long-term costs but may increase initial design complexity and cost.

Lead Time:

Tight deadlines can influence the choice of manufacturing processes and materials, potentially increasing costs to expedite the process.

Considering these factors during the planning and design phase can help optimise both the design and cost-efficiency of plastic injection mould tools.

We can help advise you on the various plastic injection mould tool costs and can discuss the best pathway forward to achieving your personalised injection mould tool. Get in touch with our specialist team for more advice.

New Tool Making Enquiry

If you would like to make a new enquiry, please let us know the following details:

- Is it a high or low volume moulding?
- Which material would you like moulded?
- Do you require associated CAD drawings?
- What is the number of impressions/cavities required?

We can advise and assist on all aspects of the above.

