

# Plastic Injection Moulding RFQ Checklist

P&A International — injection moulding, mould tooling & over-moulding · [www.pa-international.com.au](http://www.pa-international.com.au)

Share as much of this as you can and we will return a proposed tooling and moulding approach with indicative pricing, typically within 48 hours. A 3D model is ideal.

## 1. Part & material

- Plastic or rubber material / grade (ABS, PC, PP, nylon, TPU, silicone...)
- A 3D model (STEP/IGES) and a drawing
- Optical / cosmetic requirements (e.g. transparent lens, texture)
- Annual volume — drives tooling class

## 2. Tooling & process

- New mould tool, or transfer of an existing tool
- Single or multi-cavity; hot- or cold-runner
- Over-moulding / co-mould or inserts
- Tolerances and any critical dimensions

## 3. Finish & delivery

- Finish / texture, painting, chroming, pad printing
- Post-machining, assembly and packaging
- Target cost and call-off pattern
- Compliance: RoHS, REACH, FDA / food-contact if relevant

Email this with your drawing to [support@pa-international.com.au](mailto:support@pa-international.com.au) or use the quote form on the page.

# Injection Moulding — Quick Reference

Tooling, materials and design at a glance

## Tooling class

Class	Best for	Trade-off
Prototype / soft tool	Low volume, fast first parts	Limited life and cycle count
Production single-cavity	Mid volume, lower tooling cost	Lower output per cycle
Multi-cavity / hot-runner	High volume, best piece price	Higher tooling cost, justified by volume

## Design factors

Decision	Rule of thumb
Wall thickness	Keep walls uniform (typ. 1.5–3 mm); thick sections sink and warp.
Draft	Add draft to all faces (typ. 1–2 deg) so parts release cleanly.
Ribs & bosses	Rib thickness ~60% of wall to avoid sink marks.
Material	Match polymer to strength, temperature, optics and compliance.
Over-mould	For soft-touch or seals, confirm material compatibility early.

How we work: P&A International is an engineering-led contract manufacturer. One dedicated engineer engineers your part, free off-tool samples are provided before mass production, and volume is produced through our vetted partner-factory network — every supplier is ISO 9000 certified or better.

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