

Moulded-Part Readiness Checklist

An early DFM review for injection-moulded housings and components before tool design begins.

Wall design and cooling

- Nominal wall thickness is appropriate for the selected polymer and flow length.
- Thick-to-thin transitions are gradual to reduce sink, voids and uneven cooling.
- Ribs and bosses are proportioned to the surrounding wall rather than matching full thickness.
- Local mass around fasteners, inserts and corners has been reviewed for sink risk.

Draft and tool direction

- A primary tool-opening direction has been identified.
- Draft is applied according to depth, material, texture and toolmaker guidance.
- Undercuts, side actions, lifters and hand-loaded inserts are intentional and commercially justified.
- Parting-line position and likely witness marks are acceptable.

Assembly and product integration

- Bosses, clips and fasteners have assembly clearance and realistic tool access.
- PCB, connector, cable and component keep-out zones are defined.
- Snap fits include strain, tolerance and repeated-use considerations.
- Ventilation, ingress, sealing and thermal requirements are reflected in the design.

Supplier package

- Material grade, colour, texture and regulatory requirements are specified.
- Cosmetic surfaces and unacceptable defects are identified.
- Expected quantities, tool life and production location are stated.
- The supplier is asked to review gate, ejector, venting and weld-line assumptions.

Final check	Draft is not a universal fixed number. Confirm it with the material supplier and toolmaker, particularly where texture, deep features or cosmetic surfaces are involved.
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