Injection Molder

About	Plastic injection molders inject hot plastic under high pressure into mold cavities to create solid parts. The Garage has a plastic injection molder for small injection molding production runs with manual part removal. It can inject 100 mL of plastic at temperatures up to 430°C.
Category	Plastics Fabrication
Location	Back Room
Brand /Model	Morgan Press Model G-100T
Status	AVAILABLE
Materials	• Polypropylene (PP) • Polyethylene (HDPE & LDPE) • Polycarbonate (PC) • Polyurethane (TPU) • Non-toxic thermoplastics

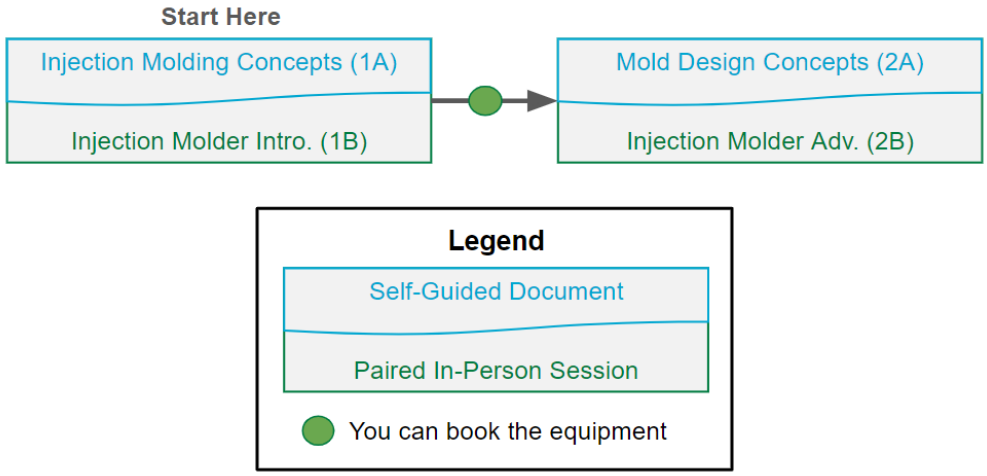
Standard Operating Procedure

⚠ **Google Apps Sign-in Required**

You must login to your uAlberta Google apps account to access these files.

Training

Injection molder training begins with an introduction to injection molding. After basic operation is understood, training expands to explore mold design & making, and advanced materials. The injection molder training flowchart outlines the training fields and levels.



Injection Molder Training Flowchart

Sign up for training here: Training Registration Calendar

Training	Type	Time Estimate	Prerequisites	Checklist/Document	Models	Other
Injection Molder - 1A Fundamentals	SELF-GUIDED DOCUMENT	0.5 hrs.	None	**Self-Guided Training Document (1A):**	N/A	**Material Specifications:**
Injection Molder - 1B Introduction	ON-MACHINE	1.5 hrs.	Injection Molder - 1A Fundamentals	**Training Checklist:** **Training Script:**	**Molding Plan:** *(Choose preferred format)* PDF: Doc: Sheet:	• **Upper Mold Files:** ◦ Upper Mold Half.stl ◦ Upper Mold Half.step ◦ Upper Mold Half.f3d • **Lower Mold Files:** ◦ Lower Mold Half.f3d ◦ Lower Mold Half.step ◦ Lower Mold Half.stl	N/A
Injection Molder - 2A Mold Design Concepts	SELF-GUIDED DOCUMENT	1 hr.	Injection Molder - 1B Introduction	**Self-Guided Training Document (2A):**	TopMUD.stl BottomMUD.stl Morgan Press 3D Model by Alexander Numann	**Machine Dimensions:**
Injection Molder - 2B Advanced	ON-MACHINE	1.5 hrs.	Injection Molder - 2A Mold Design Concepts	**Training Checklist:** **Training Script:**	**Molding Plan:** *(Choose preferred format)* PDF: Doc: Sheet:	• Training 2D Mold Setup.f3d	N/A

Top MUD Frame:	3D Printed Mold Top:
○ Top MUD.f3d ○ Top MUD.step ○ Top MUD.stl	○ 3D Printed Mold Top.f3d ○ 3D Printed Mold Top.step ○ 3D Printed Mold Top.stl

Bottom MUD Frame: ○ BottomMUD.f3d ○ BottomMUD.step ○ BottomMUD.stl	3D Printed Mold Bottom: ○ 3DPrintedMoldBottom.f3d ○ 3DPrintedMoldBottom.step ○ 3DPrintedMoldBottom.stl

Documentation

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Safety Data Sheets	N/A
Hazard Assessments	

Application Resources	**Mold Design Guide** **Molding Plan Template:** *(Choose preferred format)* • PDF: • Doc: • Sheet: **Material Specifications:** **3D Printed Molds:**
• **Manufacturer's Manuals**	