

Roboshot #1: Control Utilization

Two-Day Outline

Menus

- Machine Description
- Operator Panel & LCD/MDI Controls
- Temperature Control Menu
- Clamp Set Up Menu
- Ejection Control Menu
- Extruder Control Menu
- Process Monitoring
- Process Monitor Graph
- Product Management Setting
- Injection Profile Monitor (Menu 32)
- Injection/Pack Settings Menu
- Velocity Controlled Filing
- Process Timers
- Automatic Die Height Adjustment
- Sprue Break Menu
- Automatic Purging Menu
- Process Relation Graph
- Process Management Setting

The above Menus include subtopics not shown

Operator Panel LCD/MDI Controls

- The push-button assembly
- Soft Key Usage
- Direct menu access keys
- Manual and Single Cycle
- Manual Operation Keys

Temperature Control Menu

- Setting the Feed Throat Temperature
- Barrel Temperature Profiles
- Setting Temperature Alarm Bands
- Nozzle Temperature Control

Process Timer

- Components of a Molding Cycle
- Position Controlled Filling
- Pack and Hold Time Division
- Cooling Timer Set Up
- Fill Time Readings
- Cycle Time Readings

Velocity Controlled Filling

- Setting the Fill Pressure High Limit
- Advantages of Fast Filling Rates
- Maximizing the Filling Rate
- Monitoring Fill Time Variations

Clamp Setup Control Menu

- Automatic Die Height Adjustment
- The Mold Closing Sequence
- Setting the Mold Touch Point
- The Mold Protection Pressure
- The Mold Opening Sequence
- Slow Breakaway Set Up

Ejection Control Menu

- The Ejector Forward Sequence
- Dwell and Pulse Settings
- Ejecting During Mold Opening
- The Ejector Retract Sequence
- Setting up Retract Override
- The Air Eject Sequence

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Injection / Pack Settings

- Setting a Single Injection Velocity
- Establishing the Shot Size
- Setting the Fill Pressure High Limit
- Setting an Injection Speed Profile
- Monitoring the Velocity Shot Trace
- Establishing a Transfer Position

Evaluating Shot Traces

- Shot Traces Over Screw Position
- Superimposed Graphing Techniques
- Velocity Plots and Traces
- Fill Pressure Traces
- Shot Traces Over Time
- Holding Pressure Plots and Traces
- Sprue Break Settings
- Auto Purging
- Process Monitoring & Production Management

Optional Screens or Menus

- AI Extruder Control (Menu 14)
- Clamp/Ejector Settings (Menu 21)
- AI Mold Protection (Menu 23)
- AI Ejector Protection (Menu 24)
- AI Extruder Control (Menu 14)
- Die Height Adjustment (Menu 25)
- Mold File (Menu 51)
- Date/Time Menu (Menu 84)
- Servo Diagnostic (Menu 72)
- Velocity Controlled Molding

The Molding Machine

- Clamp Tonnage & Projected Area
- Screw Diameter & Amplification Ratio
- Shot Size Evaluation
- Non-return Valves

Plastic Materials

Process Troubleshooting

Hands-On Exercise: Short-shot Start Up & Troubleshooting Exercises

Course conducted by Polymer Training Resources®

For more information or to schedule an injection molding training seminar contact
Milacron Customer Training Administrator at: (513) 536-2265 or training@milacron.com