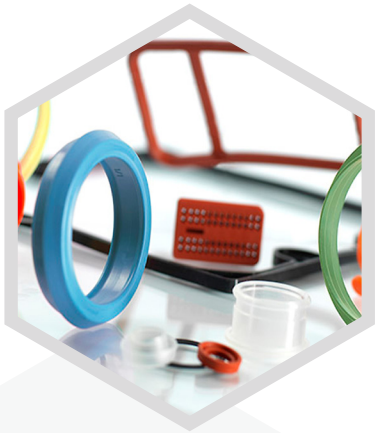
LIQUID SILICONE RUBBER (LSR)

PLIABLE, DURABLE PARTS IN HIGH VOLUME



MEDICAL • OPTICAL • ELECTRICAL • CONSUMER • AUTOMOTIVE

Liquid Silicone Rubber (LSR) is a high purity platinum-cured silicone with reliable stability that is capable of resisting extreme temperatures and many chemicals. The injection molding of LSR uses a thermoset process of two A & B components mixed together in a 1:1 ratio that is injected in a cold state into a heated mold. The heat accelerates the cross-linking and curing of the mixed A & B components into a solid state.

1

In a cooled process, the A & B liquid resins are combined using a static mixer and fed into a cooled injection barrel. A zero compression screw measures to the proper shot volume. A high precision of pressure and position is critical.

2

The mixed A & B components in liquid form are injected into the mold via runner or cold runner (cold deck) system. Precise injection velocity and pressure control are required to prevent overfilling (flash).

3

Heated mold (300-425F) via electric cartridges, controlled by the Roboshot, cures the injection LSR material into a solid form.

4

Typical cycle time can be from seconds to minutes depending on curing rates and thickness.

Connect with a Milacron representative: **513-536-2000** | **sales@milacron.com** | **www.milacron.com**

LIQUID SILICONE RUBBER (LSR)

PLIABLE, DURABLE PARTS IN HIGH VOLUME

EXCEPTIONAL FEATURES
MILACRON ADVANCED LSR SYSTEM

- **Vacuum pump configurations**
  - Standard vacuum sequencing and pump included
  - Available vacuum switch interfaced with the control as part of mold file

- **Mold heater control**
  - Available in 4, 12, 16 or 24-zone configuration as machine-mounted and interfaced to the Roboshot controller and saved with mold file
  - OPC-UA communication on 16- & 24-zone units
  - Configurable as J- or K-type thermocouple

- **Flexible eject / core sequences**
  - 3-stage independent air eject is standard
  - Multiple advanced eject sequences for part removal
  - Standard core interface software with customized sequencing
  - Optional pneumatic core valves

- **Standard valve gate sequence**
  - Standard 8-valve gate sequencing interface
  - Optional additional 8-valve (total 16)
  - Pneumatic valves available with filter and regulator

- **Standard clamp tonnage and sequencing**
  - Low-tonnage auto-set with in-cycle adjustment
  - Minimum tonnage set for improved venting
  - Standard pre-injection (venting) sequence

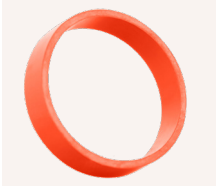
- **CLAMP DESIGN**
  - Extended tie bar allows for larger mold stack height
  - Rigid platen designs for minimized deflection and flash
  - Precision control for venting
  - Vacuum pump and sequence included

- **LSR NOZZLE**
  - Designed for repeatability and reliability
  - LSR pneumatic shut-off nozzle included
  - Internal needle operation for higher precision
  - Radius or diving tip nozzle designs available

- **INJECTION DESIGN**
  - Bolt-on static mixer adapter to barrel
  - Easy, clean-out and low maintenance
  - Slide-on, removable water jackets
  - Advanced sealing system for leak-free operation
  - Capable of switching between LSR and thermoplastic

- **ADVANCED SCREW TIP DESIGN**
  - High performance screw tip design
  - Quick shut-off for high precise shot control
  - Advanced sealing area and tolerances for reduced slippage
  - Roboshot backflow monitor detects flow slippage

MEDICAL • OPTICAL • ELECTRICAL • CONSUMER • AUTOMOTIVE


Connect with a Milacron representative: **513-536-2000** | **sales@milacron.com** | **www.milacron.com**