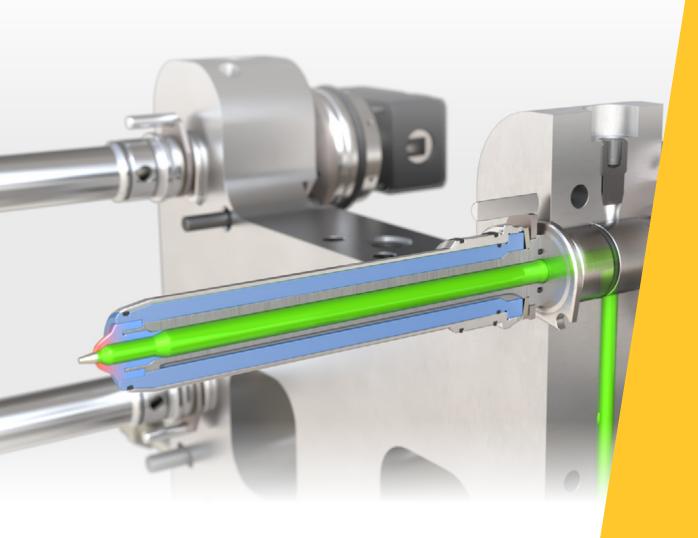
HUSKY®

RUNNERLESS INJECTION MOLDING FOR LSR APPLICATIONS





REDUCE WASTE, SAVE COSTS

AND MAXIMIZE PRODUCTION

Liquid Silicone Rubber (LSR) applications are gaining popularity among injection molders as medical, technical, and automotive molders diversify their service offering. This meets the needs of brands and the ever-expanding product portfolio to meet the needs of consumers.

WHAT IS LSR?

LSR is an abbreviation for Liquid Silicone Rubber. It is created by blending a base silicone, a catalyst, and a cross-linking agent. It is commonly used by many in the industry to describe the material family and explain the molding application at its basic level. Similar to injection molded plastics, there are several grades of LSR material. All have their own manufacturers, chemistry, curing methods, flow characteristics, and final part properties.

These properties can be similar to those of an elastomer, rubber, or urethane, offering a wide range of shore hardness, elasticity, and compressibility.

LSR INJECTION MOLDING

By direct-gating with a Husky cold deck, material delivery is conserved by directly gating to the mold cavity. Rather than sacrificing material and adding expense, otherwise-discarded material is conserved and converted to usable and sellable product. Husky's unique cold deck design considers all your LSR molding needs with specially designed features based on decades of field experience in valve-gating and material-delivery technology:

- Active thermal uniformity management
- Construction considerate of the unique aspects of thermal expansion
- Leakproof design for reliability and minimal disruption
- Full consideration of the need to access, rebuild, and maintain equipment
- Several gate actuation options for perfect gate quality
- Easily replaceable nozzle tips with constant preload for continuous sealing
- Individual cavity fill balance control and fine-tuned and adjusted through individual actuators
- Custom-designed insulator board to separate cold deck from heated cavity plate



Unique nozzle technology designed especially for LSR molding applications efficiently and effectively delivers material to every cavity.

The thermal sensitivity of LSR is considered and managed with ingeniously designed features. The sprue, manifold, and nozzles are actively cooled for optimal temperature maintenance. This extends the time between maintenance intervals to maximize production. These cooled areas also include dedicated thermocouples for immediate monitoring, minimizing risk for setup error and unproductive time. These important components are also easy to access, dismantle, clean, and reassemble. This minimizes maintenance downtime brings you quickly back to production.

These features combine to make Husky's cold deck a value-added investment for your LSR production; simplifying production, enhancing process control, and reducing the need for operator intervention.

Husky offers several construction options for every cold deck application. Each of these considers the production requirements and priorities of different industries:

- Four nozzle lengths and three gate diameters, stocked for reduced delivery lead time
- Custom manifold design options enabling injection pressure resistance up to 1800 bar/26,100 psi
- Individual valve gate pneumatic actuation
- Valve gates with individual servo control available as an option for optimized independentstem position and velocity control for cavity balance tuning and performance monitoring

Husky's Individual Servo Valve Gate (ISVG) actuator supplies excellent gate quality control with immediate process control and direct feedback enhance every LSR molding operation.



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MANIFOLD DESIGN FEATURES

Split Bolted manifolds are a standard offering for Husky's Cold Deck, providing easy access to the LSR flow channels, simplified maintenance, and a quicker recovery.

Manifold flow channels are designed for geometric balance, and the manifold halves are fastened together. Because each application and manifold is unique, bolt patterns specific to that manifold are used to manage sealing and prevent leakage.

Both manifold halves are water-cooled to protect the LSR from heat and extend time between maintenance events. Thermocouples are used for each half to ensure cooling is active and under control. These offer more flexibility for meeting requirements of pitchand supplying water cooling for manifold temperature regulation.



GET STARTED

Husky offers the right combination of experience, expertise, and innovation to ensure a successful adoption for your LSR applications.







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