

Medical Silicone and Elastomer Molding Technologies

Process Options Expand Design Freedom



Customized Processing Options

By offering a broad range of options for the fabrication of components and finished devices, Parker's technology capabilities enable expanded design freedom for medical device and pharmaceutical OEMs.

Our specialty is in medium- to high-volume liquid silicone injection (LIM/LSR) molding and high volume "flashless" vacuum molding of medical grade organic rubber (HCR) compounds.

In clean environment ISO 13485 facilities in Mexico, California, and Indiana (Class 8 cleanrooms when required), we manufacture medical grade products that meet quality requirements and customer dimensional specifications.



Contact Information:

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Our Capabilities:

- Medium to high volume semi-automatic, automatic cold-runner and conventional runner liquid injection molding (LIM/LSR)
- Medical grade silicone base materials and high consistency rubber (HCR)
- Custom compounding
- Multi-material overmolding and insert molding
- Injection and compression molding
- Flashless transfer molding, high cavitation tooling
- Prototype and production tooling
- Medical device assembly
- Finished device secondary operations: coating, die cutting, printing, sterilization, packaging

ENGINEERING YOUR SUCCESS.

Broad Range of Materials and Technologies

Silicone Base Materials

All silicone medical components are manufactured from medical grade silicone materials from DuPont, Momentive, NuSil, Shin-Etsu, and Wacker that will pass ISO 10993 tests.

Custom Compounding

Parker can provide custom material formulations to match performance and functional requirements of molded components. Base materials offerings include:

- Silicone
- EPDM
- Nitrile
- Organics
- Polyisoprene



Quality Assurance

Parker's Composite Sealing Systems Division operates under a fully documented quality assurance system per ISO 9001:2000 standards. Additionally, our facilities are ISO 13485:2016 certified. We follow strict mold validation protocols and procedures in compliance with customer specifications and requirements.

Liquid Injection Molding



With presses ranging in size from 28 tons up to 300 tons, we provide medium to high volume semi-automatic, automatic cold-runner and conventional runner, Liquid Injection Molding (LIM/LSR) capabilities to our medical and pharmaceutical customers.

Injection and Compression Molding

Our competency includes complete capabilities to mold horizontal and vertical high consistency silicone and organic rubber through injection and compression molding methods.

Flashless Transfer Molding



Parker's proficiency in medium-to high-volume silicone and organic rubber flashless transfer molding is supported by press sizes up to 500 tons and utilization of high cavitation tooling.



Prototype and Production Tooling Available

Medical Device Assembly and Secondary Operations

In providing complete idea-to-finished medical device fabrication, our Medical Systems Business Unit site offerings include certified Class 100,000 Cleanrooms, plus:

- Sterile/purified water per USP standards
- Cryogenic deflashing
- Chlorination
- Custom packaging
- Die cutting
- Mechanical assembly
- Parylene coating
- Plasma etching

