A.L.P.®

Medical Molding Capabilities

World-Class Services — from Concept to Design to Production

A.L.P. is an industry leading provider of engineered thermoplastic injection molded components. Long recognized for designing and manufacturing the finest optical lighting components, A.L.P. also leverages the same world-class resources to supply other industries requiring the timely, economical, and precise production of injection molded components, including medical equipment.

Known for its expertise in injection molding, product design and tool building, A.L.P. offers diverse capabilities, all of which can be combined to meet your unique requirements to maximize potential and profits.

MEDICAL EXPERTS

A.L.P.'s expert molding team approaches medical molding projects as true partnerships, forging strategic alliances with our customers. Past/current medical projects include graduated containers, surgical lighting, and PPE.

We are your comprehensive resource for:

- Innovative Designs
- Materials Expertise
- Superior Tooling
- Production Excellence
- Economical Pricing
- Competitive Lead Times
- Quality Products

CUSTOM SERVICES

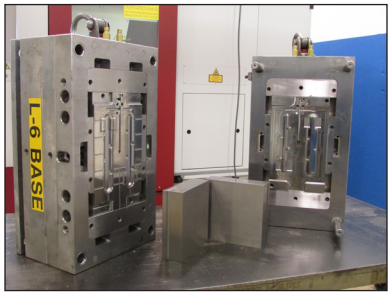
Design and Engineering

Product design and engineering services for a wide range of products, with expertise in new product development from design to final production.

Tooling and Prototyping

Design, build and maintain high efficiency injection molds. For all molds that are built by A.L.P., the customer will pay for the original purchase of the tool but in most cases will not have any additional mold maintenance or repair charges for the lifetime of the tool.

- Rapid Prototyping
- Economical Fast-Track Tooling with standard mold inserts
- 5-Axis Laser
- High Speed Machining
- Lifetime Tooling Management and Mold Maintenance



Product Testing

A.L.P. experts use in-house labs for rapid analysis of fixture, material, and coating performance.

- Absolute Photometry
- Relative Photometry
- UV Testing
- Heat Testing

Contract Assembly

When time-to-market and efficiency matters, you can consider the assembly capability of A.L.P. as an extension of your own manufacturing team.

- Experience with lighting electronics and wiring
- Economical Labor Cost
- Lower Overhead
- Quality Protocols
- Demand-Based Flexibility

Warehousing and Logistics

A.L.P. dedication to supply chain excellence gives customers a competitive advantage.

- Logistics Planning and Support
- Just-In-Time and Safety Stock Inventory
- EDI Order Processing
- Bar Coding
- Economical Packaging Solutions

MANUFACTURING CAPABILITIES

PRODUCTION

- 100 -1,650 ton presses
- Shot size from 4 to 260 ounces
- Mold base sizes up to 60 inches
- Servo Robot Technology
- In-line extruder/thermoformer
- Compression molding
- Gasketing

SECONDARY OPERATIONS

Metalizing

- Vapor Deposition batch vacuum metalizing
- Fast cycle sputtering with in-chamber top coating capability

Coatings

- First and second surface painting

Laser cutting

- Precision two- and three-dimensional shapes for plastic, steel, and aluminum
- Edge polishing for plastic

Fastening and assembly

- Sonic welding, spin welding, hot stamping, post mold machine and assembly

Engineering Services

- Product Design
- Optical Engineering
- Rapid Prototyping
- Testing
- Performance Verification

Silicone Injection Molding

- 100-ton, 180-ton, 220-ton, three 240-ton and 660-ton
- Mold base sizes up to 175 sq in

Unique performance characteristics including:

- UV Resistant
- 92-93% Light Transmittance
- No Yellowing or Cracking
- Self Gasketing
- F1 rated for Weatherability
- Flammability: HB rated for Flammability
- Relative Thermal Index (RTI): 150 degrees C (300 degrees F)

Specialty Injection Molding

- Edgelit
- Light Pipe
- Microstructures

SPECIALIZED EXPERTISE

Quality Materials

A.L.P. production processes can accommodate all thermoplastic resins, specializing in clear and transparent colored materials.

- UV Resistant Acrylic
- UV Enhanced Polycarbonate
- ABS
- Optical Silicone
- PP
- PS
- Nylon
- PETG
- Noryl
- Polyetherimide

Manufacturing Facilities

A.L.P. has three injection molding plants, strategically located near medical OEM customers to promote collaboration, speed production, and minimize freight costs.

A.L.P. continuously improves the efficiency and productivity at all of our manufacturing plant locations by investing in new systems and equipment.

Charlevoix, MI

The A.L.P. Charlevoix, MI facility is **ISO 9001:2015 certified** for the manufacture and assembly of plastic components.

10163 US31 N Charlevoix, MI 49720-9649
231.547.6584 | Fax: 231.547.5833

Dickson, TN

The A.L.P. Dickson, TN facility is **ISO 9001:2015 certified** for the manufacture and assembly of plastic components.

IATF 16949 compliant with certification pending.

One Gum Branch Road, Dickson, TN 37055
615.446.7733 | Fax: 615.446.3007

Monterrey, Mexico

The A.L.P. Monterrey, MX facility is **ISO 9001:2015** for the manufacture and assembly of plastic components.

Calle Avenida Industrial 303, Parque Industrial La Silla, Apodaca, Nuevo Leon, MX 66648
52.818.288.0500 | Fax: 52.818.288.0519

A.L.P.®

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