Leading the way with world-class capabilities & innovative solutions.





APEX

### A Commitment To Excellence

We are **committed** to high quality performance and lean manufacturing principles. Hilco's diverse client base values our dedication to excellence in every aspect of the business.



#### INNOVATION

Innovation is what sets Hilco apart from its competitors. Innovative leadership, superior engineering, attention to detail and quality makes Hilco uniquely suited to take on a variety of complex custom injection molding projects.



#### QUAIITY

Hilco is an ISO 9001 accredited company. This certifies that consistent business processes are applied across all key areas of manufacturing. This includes quality control, monitoring and facilitating continual improvement. Hilco's mantra is zero defects on a daily basis. Because of its commitment to quality assurance and zero defect policy, Hilco has become a trusted "go-to" partner to its customers.



#### TEAM ORIENTED APPROACH

Team oriented approach to solving problems is the way of life at Hilco. Hilco team members are often viewed as an extension of their customer's team.



#### CUSTOM SOLUTIONS

Hilco's experienced professionals will work with your team every step of the way to translate concept ideas into custom workable solutions.



#### **ROBOTIC SOLUTIONS**

State-of-the art robotic solutions minimize manual errors, inconsistencies of manual operations and results in improved accuracy of production output.

### Equipment for High Performance

Hilco has **significant experience** working with high performance materials including:

- Acetal
- ABS
- PEEK
- Polyimide
- Nylons
- HMWPE
- PPS (Ryton)
- PPO
- Polycarbonate
- Polyethylene
- Polypropylene
- Polyesters
- PEI (Ultem)
- Acrylic
- Phenolics
- DAP
- TPR



Toshiba ISG390

- - PVC



Toshiba ISGT720

Thierica Class 1000 clean room

## Leading the Way

### WORLD-CLASS CAPABILITIES, INNOVATION & STRONG SOLUTIONS

Hilco is one of a few US companies that offers a UV-curable, robotically-sprayed and abrasion-resistant hard coater contained within a class 1000 clean room.

#### WHAT SETS HILCO APART

- Over 200 years of combined technical experience that assists customers with engineering, prototyping, material selection and process improvement.
- Impeccable reputation amongst its customers and suppliers and is especially known for its problem solving capabilities.
- Highly **experienced employees** are focused on operational excellence and lean manufacturing.
- ✓ Operates from three modern facilities totaling 94,500 square feet. Certified by DuPont<sup>™</sup> as a high performance molder.



66 Hilco is a creative and rock solid partner."









**66** Hilco is doing things that you wouldn't think are normally injection molded."

## Technology That Works For You

### INNOVATIVE, QUALITY-DRIVEN, PLASTIC INJECTION MOLDING SOLUTIONS FOR DIVERSE MARKETS

Hilco's **experienced professionals** will work with your team every step of the way to translate concept ideas into custom solutions.



#### CUSTOM SCIENTIFIC INJECTION MOLDING

Molding machine tonnages ranging from 45 ton to 1000 ton, composed of both fully electric to fully hydraulic, including robotic part extraction capabilities, specializing in engineering materials, clear lens, light piping and high temperature materials.



#### ABRASION-RESISTANT HARD COAT (UV CURED)

Used on both interior and exterior products to prevent degradation due to the sun's Ultra-Violet (UV) effect and to maintain clarity. High solids help firms comply with low VOC standards, while giving parts outstanding hardness, chemical resistance, scratch resistance and impact resistance.

#### RAPID PROTOTYPING

With the advancements in 3D plastic printing, we are changing the way prototypes are done. Utilizing the latest 3D printers and our talented engineering department, we can take your part from concept to reality in the matter of days, if not hours. We also offer other standard prototype options as well.

#### GAS-ASSISTED INJECTION MOLDING

Developed to overcome the limitations of conventional molding and the most effective method for applying low pressure to reduce part weight and reduce clamp tonnage required for molding.



#### INSERT MOLDING / OVER MOLDING

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#### PAD PRINTING & SMALL ASSEMBLY

State-of-the art robotic solutions minimize errors, inconsistencies of manual operations and results in improved accuracy of production output.

> PROVIDING DIVERSE INDUSTRIES WITH INNOVATIVE PRODUCTS

### **3D Printed Injection Molds**

#### WHAT IS IT?

**3D printing** is commonly used by businesses to create prototype parts for the detection of issues in a part's form, fit, or function. Yet 3D printing cannot always provide a complete assessment of a part's functional performance because 3D material properties may be different than those used in injection molding. With the help of Stratasys 3D Polyjet technology, we can now print an injection mold that fits in our standard injection molding machine.

#### WHAT ARE THE BENEFITS?

#### Lead Time Reduction

- Average Lead Time Savings: 70%-90%

#### **Cost Reduction**

- Average Cost Savings: 50%-70%

#### Spec Resins

- Functional evaluation with production plastics

#### **Early Confirmation**

- Validate part performance and tool design
- Validate thermoplastic selection



#### OUR CAPABILITIES:

- Current Maximum Part Size 10" x 13" out of 3D printed Plastic, Rapid Proto Aluminum 18" x 27"
- Design, Print & Sample All under one roof
- We are continually learning more ways to use this new technology. If you have a part you're not sure would fit in the build envelope, please send it over for our review.

#### MATERIAL SELECTION & TOOL LIFE:

When using PolyJet molds, both tool life and part quality will be dependent on the thermoplastic material used during the injection molding process. As melt temperature, viscosity, and abrasiveness rise; tool life will decline. Size, shape, complexity, tool design and material selection all play a large role in the success of PolyJet 3D Printed molds.



Figure 1: Estimated number of parts obtained per tool, based on type of material used (see table).



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#### MEDICAL

- Hospital Beds
- Cots
- Gurney Components
- Surgical Tools



#### AUTOMOTIVE

- Lighting
- Wire Management
- Mirror
- Interior Components



#### AEROSPACE

 Airplane Gauge Lenses

- Military
- Components



#### MARINE

- Battery Boxes
- Seating
- Components
- Pole Holders



#### FURNITURE

 Seating Components and Assemblies

# What can Hilco Technologies do for you?

Get a fast, rapid prototyping or production quote today.



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