



# Beyonics Headquarters, Singapore

Beyonics is headquartered in Singapore and provides Advanced Precision Engineering and Manufacturing Solutions for the Medical, Automotive, and Technology sectors, with vertically integrated capabilities in tool design & fabrication, plastic injection molding, product assembly and associated value-adding services. Our customers rely on Beyonics to provide comprehensive solutions for mission-critical, zero-defect products and applications.







### **Manufacturing Capabilities & Services**

## **Tool Design & Fabrication**

- Fully integrated 3D software for: Siemens NX,
  Autodesk Moldflow, Solid Works 2020, Magma
- High cavitation molds up to 48 cavities
- Molds with complex multiple axial movement (5 Axis)
- Vertical injection molding
- Hot molds for high-performance engineering plastics
- Sequential molding
- Optimized cooling design with conformal cooling
- Insert molding / Over molding
- Unscrew molds
- Aluminum die casting tools

#### **Plastics Injection Molding**

- Machine range from 15 tons to 550 tons
- 2K molding/Over-mold/Insert molding (vertical and horizontal)
- Automated insert molded assembly by using scara robot/ 6 axis robot
- Plastic machining
- Fully automated assembly process which include pick and place, glue dispensing, vision inspection, tray loading & unloading
- 100% automated vision inspection

#### **Clean Room Molding**

- Class 8, 100K cleanroom molding & assembly
- Machine range from 50 tons to 550 tons
- FDA certified manufacturing site
- Fast cycle injection molding upto 6 sec/cycle

## **2K Molding**

- 500 ton machine with rotating mold and dual injection to mold products with 2 different materials /colors
- Adopting conformal cooling for achieving lower molding cycle time
- Capable of combining soft and hard plastic to improve product functionality /durability

#### **Controlled Environment Molding**

- Machine range from 15 tons to 450 tons
- Machine type range from fully electric, hybrid & hydraulic machine.
- Fully automated molding & inspection process
- High speed injection up to 500mm/s
- Thin wall molding up to 0.2mm

#### **Clean Room Facilities**

- Manufacture Class 3 medical devices
- Bioburden control environment
- Capability of reagent filling
- Medical parts assembly

#### **Box Build Assembly**

 Vertical integrated solution for customer, from mold making, stamping, molding upto box build level



# **Manufacturing Capabilities & Services**

#### **Engineering Services**

- Early design improvements and reviews for sustainable manufacturing
- Real Time, collaborative CAD based design review and improvement
- Full DFM (Design for Manufacturability) review support and VAVE (Value Analysis/Value Engineering)

#### **R&D Lab**

- Stratasys Objek 30 Prime 3D Printer
- Roland MDX 540 Precision Desktop CNC
- Working tool box

#### Inspection

- 5 Axis CMM
- Spectrometer
- Roughness surface test surface 1500DX
- Melt flow index machine
- Impact tester
- Smartscope

#### **Industries**



Healthcare & Medical



Automotive



Technology



**Industrial Automation** 

#### **Certifications**

ISO 9001: 2015ISO 13485: 2016ISO 14001: 2015IATF 16949: 2016

• FDA Certified Reg No: 3003080184









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