



# Beyonics iPark Campus, Malaysia

Beyonics iPark in Malaysia manufactures precision-engineered components with extensive expertise in tool design & fabrication, plastic injection molding, aluminum die casting, precision machining, precision metal stamping, polymer compounding, PCBA, product assembly and associated value adding processes.

Beyonics iPark specializes in providing customized technical solutions by working together with its customers to analyze product design, offer material and manufacturing solutions, and implement optimized production and supply chain programs to fulfill customers' specific needs.







# **Manufacturing Capabilities & Services**

### **Tool Design & Fabrication**

- Fully integrated 3D software for mold design: Siemens NX
- Advanced CAD/CAM software: SolidWorks, AutoCAD, DraftSight, ZWCAD, Master CAM
- Product and mold design capabilities
- CNC EDM (electric discharge machining), CNC high speed milling, wire-cut and grinding
- Multi-cavitation design and tooling up to 8 cavities

## **Plastics Injection Molding**

- Machine range from 20 to 850 tons
- Horizontal, Vertical, 2K injection molding

## **Polymer Compounding**

- Extrusion machines with full range of accessories; cutter, vibrator, horizontal mixer, vertical mixer
- Single screw & Twin screw machines

#### **Powder Coating**

Complete with automatic line & oven

## **Precision Metal Stamping**

- Deep draw stamping
- Machine range from 25 to 300 tons
- State of art transfer stamping technology
- Highly complex & high precision metal stamping

# **Aluminum Die Casting**

- Alloys: ADC12, A380, A383.1, ADC10, LM6, A413, A360 and other special composition alloys upon request
- Machine range from 125 to 850 tons
- Casting wall thickness at 1.0mm (0.040"); Tolerance ± 0.125mm (0.005") – as per NADCA standard
- Smelting furnaces & holding furnaces
- Auto deburring machine
- Tumbling bowls & shot blast hangars

## **Precision CNC machining**

- Machining tolerance ± 0.025mm (0.001"); Hole diameter machined tolerance up to 0.009mm (0.00035")
- Roughness of Ra0.6 for sealing surface, Fit 6 tolerance for shafts and holes, and roundness up to 4µm
- CNC milling machines
- Lathe

## **Washing Facility**

 Aqueous cleaning line that meets VDA 19.2 meeting particle requirements of 400m cleanliness levels

# **Clean Room Assembly**

- Class 1000 Room
- Class 100 laminar flow hood
- Form-in-place (FIP) gasket for leak proofing or EMI shielding

## **Electronics Assembly**

- Surface mount technology, up to 0105 chip size capability
- 3D Auto solder paste inspection (SPI)
- 2D Auto inspection (AOI)
- Wave solder
- Manual and auto-soldering
- PCB router
- In-Circuit testing (HP3070)
- Flying probe testing (Takaya)
- Conformal coating (PVA)
- X-Ray (Dage)
- PCBA functional testing
- Radio frequency manufacturing and test
- Online Component traceability



## **Manufacturing Capabilities & Services**

## **Box Build Assembly**

- Box build assembly lines
- Configure and build to order fulfilment service
- System build test
- Online process traceability and shopfloor control system

## **Engineering Services**

- Liquid particle counter (LPC)
- Fourier-transform Infra-red (FTIR)
- Ion chromatography (IC)
- Gas chromatography mass spectrometry (GCMS)
- Non-volatile residue test
- Surface energy

## Traceability

- Laser marked data matrix
- Label printing

#### Inspection

- CMM
- Spectrometer
- X-Ray CT Scanner
- Surface roughness tester
- FTIR spectrophotometer
- Melt flow index machine
- Instron machine
- Impact tester
- Contracer
- Smartscope
- Leak testing

#### **Industries**



Automotive



Healthcare & Medical



Technology



**Industrial Automation** 



Communication

#### Certifications

• ISO 9001: 2015

• ISO 13485: 2016

• ISO 14001: 2015

• ISO 45001: 2018

• IATF 16949: 2016

• C-TPAT Compliance

• Electronics Assembly: IPC-A-610

• Compliance to VDA6.3 Requirement

# **Beyonics iPark Campus**

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Beyonics is a global advanced precision engineering and manufacturing solutions provider. We design, build, and deliver products and applications for customers in the medical, automotive, and technology sectors.

