High precision
Micro Injection Molding

Ortofon offers services and solutions for High Precision Micro Injection Molding components. Micro Injection Molding is one of the most suitable micro manufacturing processes for flexible mass-production of multi-material functional micro components.
The newest high precision technology

The cornerstones of Ortofon’s technology platform

Solid industrial background, expertise in acoustics, magnetism and material properties, TPE and Technical Rubber compounds and micro assembly are the cornerstones of Ortofon’s technology platform. Ortofon’s technology platform allows us to continuously optimise quality and expand product portfolio of high precision Micro Injection Molding components.

Benefits of Micro Injection Molding precision production:

- High precision mass-manufacturing of highly functional 3D multi-material
- Optimal micro part quality
- Effective product and process control
- Micro manufacturing on a mass production scale
- One-component and multi-material micro components
- High accuracy with tolerances in the micrometer range
- High quality production level according to ISO 13485

Our experienced operators and technicians operate and service Wittman-Battenfeld MicroPower 15 machines for Micro Injection Molding.

Improving the existing technologies

Production of high quality micro-components with several materials integrated is the functionality that brings an additional value to the production chain. Industrial production goes faster, is more robust, consistent and more economical.

We improve the existing technologies by integrating the stand-alone technologies in the production, which allows for achieving more streamlined and uniform industrial process. By applying the new technology, we are able to manufacture new complicated micro-components, and as an integral part of the production process perform 100% uniform advanced measurements.

2C Micro molding with electrical conductive polymers

We replace an expensive precision metal component with 2C micro technology:

- Insert and overmolding of multi-material functional micro components

Electrical conductive polymer used for manufacturing of a cartridge connector component

Connector assembly

Cartridge assembly, rear view

a) high performance DJ cartridge
b1) Magnet
b2) TPE suspension ring
b3) Aluminum cantilever
c4) Diamond tip
c) 2D visual inspection of produced suspension rings

We have the facilities necessary for manufacturing of high precision Micro Injection Molding components, including clean room modules.

The newest high precision technology, modern machinery, experienced engineering team ensure effective and high quality production according to ISO 13485.

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Continuously optimizing micro manufacturing processes

We have benefited from participating in the HINMICO project, that was targeted to develop manufacturing processes for the mass production of multi-material functional micro-components.

Working in close collaboration with DTU Mechanical Engineering, we optimized on micro molding process monitoring, quality control and metrology.

Participation in the European Innovative Training Network MICROMAN provides us with an all-round, comprehensive and specialized training in the field of micro manufacturing.

Extensive global network of suppliers and customers

Our supplier portfolio is one of our most important assets. We have developed an extensive global network of suppliers and technology partners, among others Danish Technological Institute, Technical University of Denmark and Wittmann Battenfeld Group. Our company has a global customer base within the medical and hearing aid industries.

Total solutions

We offer total solutions covering material definition, development and design of tooling equipment, samples production, test and evaluation of the final product. On request we conduct mold validation. We develop and produce Technical Rubber compounds according to our own recipe. Additionally Ortofon provides partnership for compounds, as we work closely with European compound suppliers in order to develop and test new custom-made new TPE and Technical Rubber materials.

Quality and service

High quality production process, traceability of production, reliability of deliveries and customer service par excellence have always been the focus of Ortofon’s attention. The key benefit of working with our company is high level support for our customers.

Please feel free to contact Ortofon if you need any further information: btbsales@ortofon.dk