THE PROCESS

Mold Making — ERMO

> In house mold design and mold manufacturing to fit to the exact CAD drawing.

Feedstock — Supplier

> With Zirconium oxide, there is 80% powder in the mixture.

Molding — ERMO

> Parts are molded as for plastic injection molding.

Inspection — ERMO

> A first inspection is realised to check parts.

Debinding — ERMO & its suppliers

> The binder material is removed by solvent extraction.

Sintering — ERMO & its suppliers

> Parts are sintered in either an oxidizing atmosphere, a reducing atmosphere, or in vacuum.

Final Inspection — ERMO

> A final inspection is realised.

ERMO's Medical Testing Centre

CERAMIC INJECTION MOLDING
METAL INJECTION MOLDING

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CIM/MIM TECHNOLOGY

The CIM/MIM process uses sophisticated mixing technology to compound very fine ceramic or metal powders with thermoplastics binders to produce a homogenous pelletized fedstock. Parts are molded using molding machines as used in conventional plastic molding.

> Then it goes through 2 thermal processes: debinding and sintering where the parts goes in a high temperature kiln and shrinks uniformly by 20% to became a fully dense ceramic component.

ISO CERTIFIED

At ermo all the production process is ISO 13485 certified.

ERMO

GREAT BENEFITS

> High surface finish **quality** without the need for additional finishing processes.

> Superior material **performance**: hardness, corrosion, resistance.

> Accommodates **complex** geometric components and micro parts.

CIM/MIM parts find applications in medical devices: chirurgical tools or dental implants for example.

MEDICAL APPLICATIONS

But also:

> Luxury (watches, bracelets, ...)

> Cosmetics (spray insert, ...)

> Chemistry

> Electricity

> Weapons