

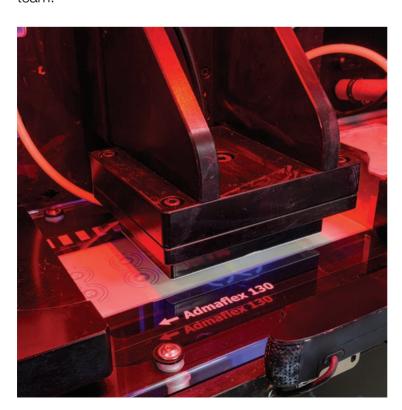
A Nano Dimension division, provides a proven service solution for the production of metal and ceramic industrial-scale parts - from design to production, leveraging the combination of ceramic and metal injecton molding and additive manufacturing.

## **3D Printing Services**

Formatec offers a wide variety of advanced ceramic materials and metals utilizing Admatec technology which allows fast printing cycles, smooth surfaces, high dimensional accuracy, and optimal efficiency in serial production.

Formatec can generate a range of cost-effective and rapid net-shape fabrication ceramic components, that either would not be possible with traditional ceramic production techniques or would be costly or time-consuming.

Your design is evaluated for manufacturability, the final model is prepared, the parts are printed, sintered, and machined to specific dimensions, inspected, and packed for shipment by our dedicated AM production team.







# FORMATEC 3D MATERIALS PORTFOLIO INCLUDES:

#### **Al<sub>2</sub>O<sub>3</sub>**

(Alumina 99,7%)

#### **ATZ**

(Alumina Toughened Zirconia)

#### ZTA

(Zirconia Toughened Alumina)

#### **ZrO<sub>2</sub>-Y<sub>2</sub>O<sub>3</sub>**

(Yttrium Stabilized Zirconia)

Other materials on request

## **Powder Injection Molding Services**

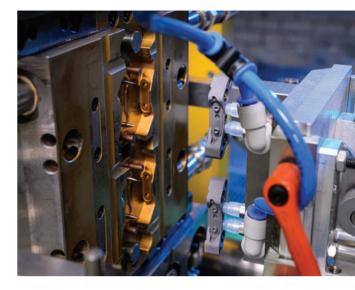
Powder Injection Molding (PIM) is an efficient and costeffective production technique widely employed to produce complex, precision and net-shape components. When you need moderate to large volumes of complex components from ceramics or metals with high accuracy and strength, PIM is the right choice.

Compared to conventional subtractive production processes such as milling, turning, or grinding, PIM prevents material waste, is very controllable, provides a high geometrical freedom, and is very cost effective.

Together with our tooling and process engineers, the mold is designed to realize a robust, automized production of so-called green parts, that are then sintered in our high-end sintering furnaces. All necessary post-treatments, like (hard) machining, polishing, heat treatments etcetera, are done in house or at a carefully selected supplier base, to guarantee only the highest quality.

In combination with the 3D print services, Formatec provides a unique package of production solutions. Initially the designs can be 3D printed with similar material properties and then be functionally tested and optimized. After the design freeze, the mold can be produced. By using Formatec's AM capability, the number of iterations on the mold can be reduced, or even eliminated. As a result, time-to-market and costs are significantly reduced.







## FORMATEC PIM MATERIALS PORTFOLIO INCLUDES:

### **Technical ceramics:**

Al<sub>2</sub>O<sub>3</sub>, ZrO<sub>2</sub> (Natural white, black and ESD)

#### Stainless steels:

316L, 17-4PH

Other materials on request



Digital version brochure



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