

Getting started with your new Metal Expansion Kit

When 3D printing with metal, certain hardware criterias must be met. These are:

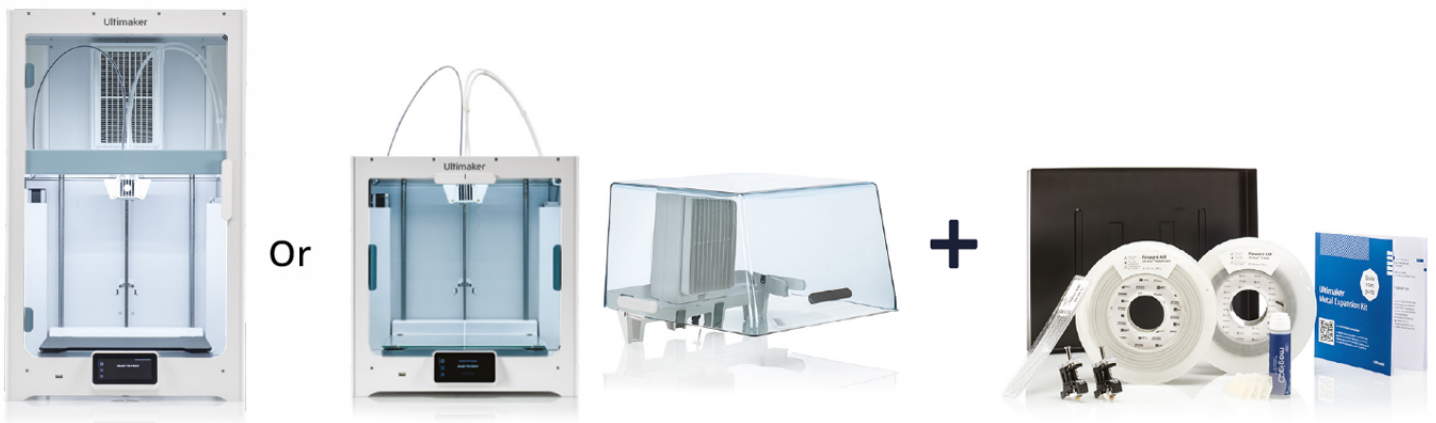
Using compatible hardware. It is recommended to use the Metal Expansion Kit with the UltiMaker S7 or the UltiMaker S5 with the S5 Air Manager. It is very important to be aware that the S5 Material Station is not compatible with the BASF Metal filament. Technically, the kit is also compatible with the UltiMaker S3, however, good ventilation with the integrated Air Manager is strongly advised to directly remove emissions.

Having an appropriate build-plate / bed. The temperature should be between 45°C and 60°C.

The right surface. The build surface requires good adhesion. Apply a thin layer of the Magioo Pro Metal glue-stick.

Appropriate extruder. A specialized hardened steel nozzle is required, and the temperature should be between 190 °C and 220 °C. We recommend using the UltiMaker DD print core.

Cooling fan / . A cooling fan is a necessity.



CMG Partnership - Debinding & Sintering

CMG Technologies provides debinding and sintering services in the UK for additively manufactured metal parts. They are highly experienced in the precision manufacture of Metal Injection Moulded components.

Metal Injection Moulding (MIM) is a manufacturing process that involves manipulating metal powders to behave like a plastic by mixing them with polymer binders to form a feedstock. This feedstock is used to injection mould net shaped, precision components. Parts are then thermally processed to remove the binder system and finally they are sintered to a high density metal component with comparable mechanical properties to wrought materials.

Intricate and complex 3D geometries that in the past have been either very difficult or very costly to produce through traditional manufacturing methods such as 5 axis CNC machining, can be readily achieved with metal powder injection moulding and at significantly reduced prices and lead-times.

Debinding & Sintering Process

When you purchase an Ultimaker Metal Expansion Kit you will be supported by our dedicated additive experts at each step of the MFFF process. We understand each business requires a specific solution to optimise the incredible ROI that this solution can generate. Please note that price per application can vary dependant on weight.

