



Valcun

<https://www.valcun.be/>

Novel Aluminum 3D Printing process (Molten Metal Deposition) unlocking new Aluminum alloys for AM. 3D Printers and services for AM Aluminum parts

ValCUN is a Belgian tech SME focusing on unlocking new applications and industrial parts by making metal additive manufacturing within reach of the industry. Because we believe that finding new ways of manufacturing will lead to disruptive innovations that were not possible today.

We are doing this by focusing on the deployability of metal additive manufacturing. The deployability of a technology covers a wide range of factors, ranging from feedstock, integration in the work environment, sustainability, throughput, yield, user experience, product value, postprocessing, reliability. In the end it all boils down to 'is the cost in balance with the value that can be provided'.

With that in mind ValCUN has developed a patented technology with initial focus on aluminium alloys. The deployability focus allows ValCUN to target more mainstream applications for providing economic benefits.

ValCUN offers both the metal printer (Minerva) with ValCUN's technology, printhead as well as feasibility studies, design guidelines, prototype printing and even realizing the first serial parts.

The type of applications is very versatile ranging from near net shaping of enclosures and structural components, low weight parts, design ornaments, heat exchangers and catalytic convertors, manifolds, etc.

Guidelines for the current applications/designs are:

- Diameter 120mm x height 200mm / Diameter 200mm x height 300mm
- Wall thicknesses for different nozzles: 0.8mm-1.2mm, 1.5-2.5mm, 4-5mm
- Alloys: Aluminum 4043 and 6061
- Supportless overhangs: up to 75° (with 0° being a vertical wall)

Important to note is that the technology is not limited to the range of an enclosed machine but installing the printhead on a robotic arm will allow parts with higher complexity and dimensions.

For more information, please visit our website www.valcun.be and view [this](#) video to get a glimpse of the whole process.

Interests for Tech Demonstration:

- Companies, Research Institutes & Universities interested in collaboration projects on ALU 3DPrinting
- Funding opportunities for above mentioned projects
- Partners in software and in-line monitoring
- Part printing demonstrations