# CMF JobShop

The turnkey solution for those who want to build up their know-how & start their first production line.





## The key benefits.

Delivering metal injection molding properties, the CMF JobShop is a very economic turn-key solution for production centres and machine shops. It delivers the highest possible quality in steels and other alloys, providing users with flexibility in materials & applications. Users get all the tools to develop knowhow to scale-up their business.



#### 25 Liters for 1000's - 10,000's of parts per year

With a furnace build envelop size of 240mm x 240mm x 400mm and 100% hydrogen capability, the JobShop is a "Swiss Army Knife" for your workshop - enabling full access to the materials portfolio.



#### Affordable turnkey solution

The JobShop contains all the equipment your workshop needs to begin production - from SLS printing through to sintering. Preinstalled with the material-specific CMF programs, you can start printing enduse metal parts with the industrial quality and tolerances required to make it in the real world out there.



#### Low scrap rate

The green part strength is a gamechanger. You will not only have much less parts broken in between the printer and the furnace, but can also use a vast array of smoothening, tapping, milling and blasting processes in a green part state. Fine structures are possible.



#### Flexible manufacturing - 1 job each day

Get a finished part per shift. Thanks to 12h - 15h sintering runs, run a high volume sinter job each shift. Paired with 16h debinding runs and daily SLS prints, you have full flexibility. Easily extend your JobShop with further SLS printers to print more materials without switch-over and cleaning efforts.

## Productivity.



#### Pump Impeller

Size: 64 x 64 x 12,5 mm

Parts per job 96
Weekly throughput: 480
Annual production capacity: 24.000\*

\*Sintering capacity decides over total output. Large economies of scale possible in other solutions with furnace capacities up to 600 Liters.

## The system overview.

See technical product datasheet & brochure of respective product for details.



#### 20 Liters SLS Printer

The Farsoon HT252P is an ideal, robust production-level SLS printer with a 60W CO2 laser. Build space is 250mm x 250mm x 320mm. The material is easy to print and 100% recyclable thanks to its low processing temperature. The SLS solution can be further scaled up to more advanced processing & output later and comprises all required equipment:

- SLS printer
- Depowdering station
- Additional build box containers



#### 50 Liters Automated Debinding Station

Fully automated, integrated solvent debinding-, drying- and solvent recycling station. Optimized for CMF binder-component extraction with solvent. Closed Loop System ensures maximum safety and solvent reuse through dirt-tank to clean-tank destillation. Large tank to ensure maximum "freshness" of solvent during debinding.



#### 25 Liters Batch Sintering Furnace

A high temperature metallic sinter furnace optimized for ColdMetalFusion. Heating elements and chamber insulation are made of molybdenum and water cooled walls.

- Build envelope size 240mm x 240mm x 400mm
- 1600°C maximum operating temperature
- Ultra precise atmospheric control
- Enabled for 100% hydrogen process for highest purity of alloys

## The available materials.

Stay tuned for more materials...



high ductility & corrosion resistance

#### Ti6Al4V - Grade 5

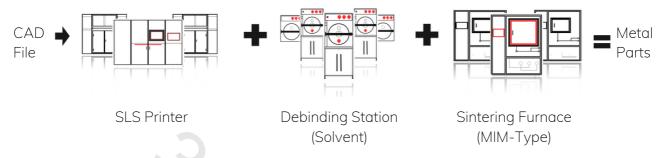
light, high strength & corrosion resistance - requires Argon Option



## You are ready to go big or automate?

Great, because ColdMetalFusion supports you with a vast array of equipment for your needs. Just measure your part's box-volume, then let us help you design your own tailor-made production solution and calculate your business case. With ColdMetalFusion you can go beyond 1,000,000's of parts thanks to economies of scale.

The minimum setup includes:



# Get In Touch.









www.coldmetalfusion.am



info@coldmetalfusion.am

