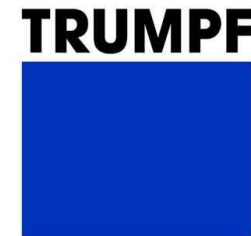


The Swedish Arena for Additive
Manufacturing of Metals



3DMetPrint

Erling Svensson, erling.svensson@3dmetprint.com

Company profile

A 3D Metal Printing company providing parts in tool steel and stainless steels.

Metal Additive Manufacturing

Offers Printing service, hardening and post processing.

Dimensions: max 240*240*300 mm

Activities Prototypes, small scale production, spare parts, fashion design parts and many more.



Infrastructure / Technical platforms / relevant methods / etc.

PRO X300 printer, Powder bed fusion with laser

Post treatment: Hardening, removal of support structure and finishing.

Web page

www.3dmetprint.com

Additivt Teknikcenter

Joakim Svensson, joakim@atcab.se

Company profile

We offer several training courses. From industrial technical high school, 3D technician vocational college, adult training for CNC operator and die casting technician as well as customized training for companies.

We are also a manufacturing unit. We take care of the entire production chain, from design and construction to manufacturing and post-processing.

Metal Additive Manufacturing

Education

- 3D technician vocational college
- Industrial technical high school
- Adult Training
- Customized training for companies

Printing service



Infrastructure / Technical platforms / relevant methods / etc.

We have around thirty different 3D printers at our disposal and many different materials such as polymers, resin and metal in our SLM 280.

Web page

www.atcab.se

AIM Sweden AB

Stefan Thundal, stefan.thundal@aimsweden.com

Company profile

Commercial spin-off from Mid Sweden University.

Service bureau focusing primarily on orthopedics and molded fiber industry but also special projects from other industrial segments.

Serving customers with engineering services, design for AM, process optimization, production of prototypes as well as serial production.

ISO13485 certified.

Metal Additive Manufacturing

Offers

Printing services, Engineering, Process optimization

Tooling solutions for molded fiber processes.



Infrastructure / Technical platforms / relevant methods / etc.

EBM, Electron Beam Melting (titanium)

SLS, Selective Laser Sintering (PA2200)

Web page

www.aimsweden.com

Carpenter Powder Products AB

Per Ingo, pingo@cartech.com, Customer service,
sales@carpenteradditive.com and powersales@cartech.com

Company profile

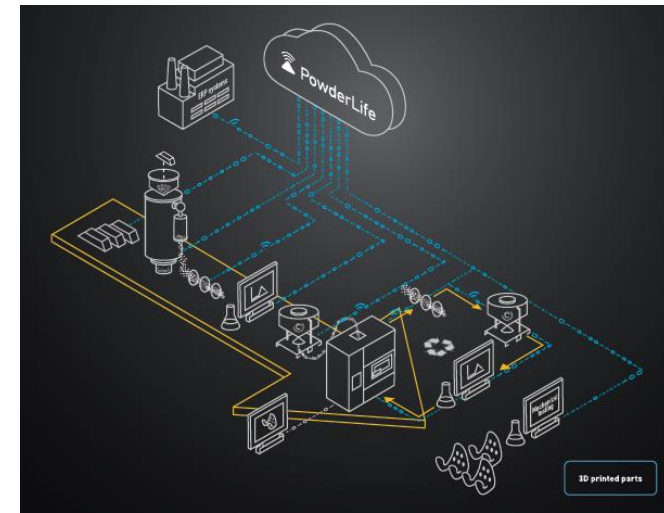
CPP is a company within Carpenter Additive, who is the market leader in the manufacture, development and processing of high-quality metal powders and solutions and services, among others for additive manufacturing.

We produce and process high-performance powders for HIP near net shape and HIP mill forms, thermal spray, gas turbine refurbishment, additive manufacturing, high-temperature brazing, PTA welding and MIM processing. Carpenter Additive's PowderRange series of fully optimized, off-the-shelf powders for AM are supplied to quality management standards AS 9120, AS 9100, ISO 9001 and ISO 13485, and are dispatched within 24 hours of receipt of order.

A business unit of Carpenter Technology Corporation, Carpenter Additive has metal powder facilities in, Sweden, the UK and the USA.

Metal Additive Manufacturing

The Carpenter Additive team of expert's partner with customers from concept to creation to ensure success and add value throughout the AM process. We offer standard and custom powders, material handling strategies and consultative development to industrialize your AM needs with a variety of production additive systems.



Technical platforms:

- AIM and VIM (VIGA and EIGA) gas atomization.
- PowderLife powder handling and life cycle optimization
- Powder Range products off the shelf powders for AM

Web page

www.carpenteradditive.com

Ditwin AB

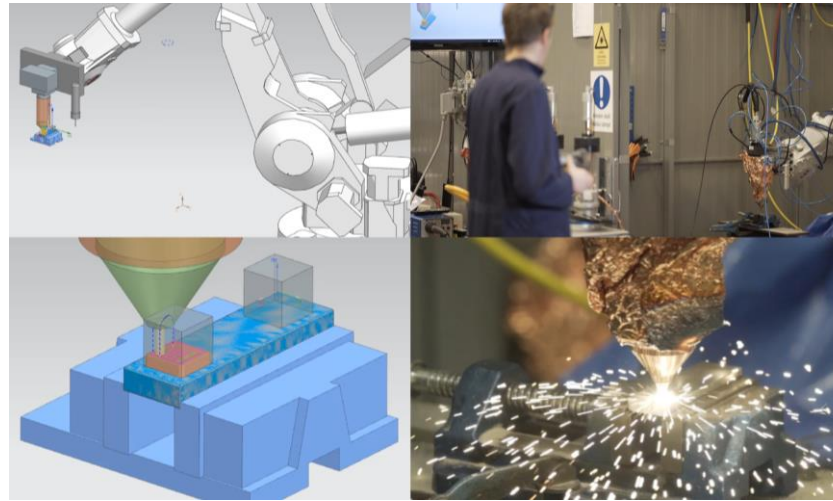
Jonas Näsström, jonas.nasstrom@ditwin.se

Company profile

Ditwin offers comprehensive solutions and services for virtual product and production development using CAD, CAM, CAE, PLM and Digital Manufacturing.

Metal Additive Manufacturing

Offers Education and services for design, simulation and preparation for AM.
Development and maintenance of digital twin of manufacturing machines, e.g. for additive manufacturing using industrial robots.



ditwin
SOLUTIONS AND SERVICES

Infrastructure / Technical platforms / relevant methods / etc.

Market-leading software from our partner Siemens Digital Industries Software, including Siemens NX, Solid Edge, Simcenter and Plant Simulation.

Web page

www.ditwin.se

Duroc Laser Coating AB

Joachim Andersson, joachim.andersson@duroc.com

Sören Isaksson, soren.isaksson@duroc.com

Company profile

Sweden's leading company in laser surface treatment who offers surface enhancements and surface restoration through laser technology.

Metal Additive Manufacturing

Offers Re-manufacturing and repair of metal surfaces as well as production of components in small and large series.

And/or

Activities Laser Cladding (DED), Laser Impregnation, Laser Hardening



DUROC
LASER COATING

Infrastructure / Technical platforms / relevant methods / etc.

Laser DED with robot held laser optics.

2 pcs 8kW IPG Laser sources.

2 pcs ABB IRB 4400 robots.

CAD/CAM for complex geometries.

Web page

www.duroclasercoating.com

Kanthal AB

Mikael Kjellén, mikael.kjellen@kanthal.com

Company profile

Kanthal® is a world-leading brand for products and services in the area of industrial heating technology and resistance materials.

We develop materials for high temperature applications at up to 2 000°C (3 632°F). We specialize in resistance heating, high temperature corrosion and high temperature creep.

We produce wires, heating elements, heating systems, as well as tubes and components. We also provide services for thermal processing solutions.

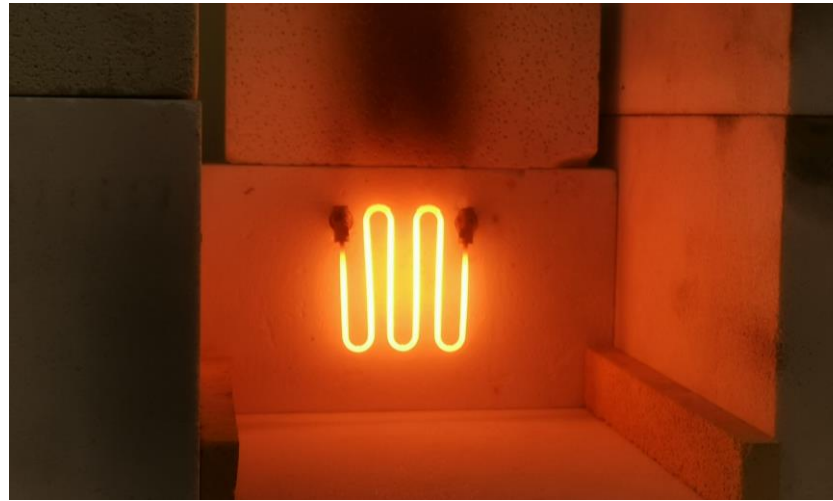
Metal Additive Manufacturing

Offers Printing service with Kanthal® AM100 alloy (FeCrAl)

Activities Prototypes, small to large scale production, aiming to expand material offer and AM methods

Applications:

Special heating element, catalyts carrier, sensor housing, burner nozzle, special tubing, and other high temperature components, etc.



KANTHAL®

Infrastructure / Technical platforms / relevant methods / etc.

Internal:

- Powder bed fusion with laser
- Powder atomizer

External:

- Subcontracter network mainly focusing on PBF-LB

Web page

www.kanthal.com

www.kanthal.com/en/products/kanthal-additive-manufacturing/

Lasertech LSH AB

Linnea Nilsson, linnea.nilsson@lasertech.se

Company profile

A leading supplier in advanced laser processing services with a focus on laser welding and industrial 3D-printing in metal and polymer.

The range of services also includes LMD, non-destructive testing, laser marking and laser hardening.

Metal Additive Manufacturing

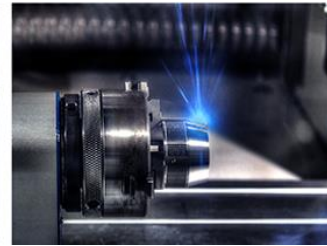
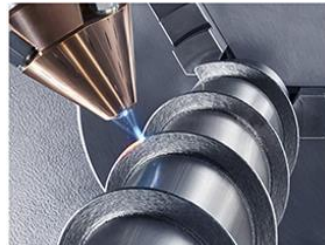
Offers industrial 3D-printing in metal and polymer as prototypes, small scale production and serial production.

EOS M290 Metal Powder bed fusion with laser

Material: MS1, Inconel718, Ti6Al4V, AlSi10Mg, 316L, CX

TruCell 5020 LMD (Laser Metal Deposition)

Material: on request



Infrastructure / Technical platforms / relevant methods / etc.

3D-printing:

EOS M290 Metal Powder bed fusion with laser (4x)

EOS P396 Powder bed fusion with laser (1x)

Laser Welding:

TRUMPF TruCell 3000, 5kW

TRUMPF TruCell 5020, 8kW

TRUMPF TruDisk 5001, 5kW

TRUMPF TruDisk 3001, 3kW

LASAG – Microlaser Welding

Web page

www.lasertech.se

Quintus Technologies

James Shipley, james.shipley@quintusteam.com

Company profile

Quintus Technologies is the global leading provider of isostatic pressing equipment such as equipment for Hot Isostatic Pressing (HIP).

The company designs, manufactures, installs, and supports isostatic pressing systems for the additive manufacturing industry and other industries.

Quintus is headquartered in Västerås, Sweden and have since the start delivered over 1900 systems globally.

Supporting Metal Additive Manufacturing

Offers HIP systems, RnD support and collaborations

Activities RnD support, proof-of-concept trials, consulting within HIP



Infrastructure / Technical platforms / relevant methods / etc.

HIP Application Centers with state-of-the-art capabilities:

- Rapid cooling and quenching HIP systems
- Intergrated heat treatment in HIP
- Gas atmosphere analysis during HIP
- Etc.

Web page

<https://quintustechnologies.com/>

Sandbacka Science Park

Sima Valizadeh, sima.valizadeh@sandviken.se

Company profile

- Together with companies, partners in the regional support system, and academia – Sandbacka Science Park develop ideas to sustainable innovations, products, services, businesses and collaboration – with people in focus.
- We have focus areas to meet our present and future challenges: Green transition, Digital development and Courage to develop. Such as additive manufacturing, digitalization of SMF and inclusive innovation.
- Mission to increase small and midsize companies competitiveness within a national and international context.
- Offer: business development, coaching, contact and network with experts, potential customers and suppliers, seminars and events.
- Project partner and initiator of new projects within our focus areas.

Metal Additive Manufacturing

We believe knowledge is power. We are supporting our SME in different sectors with 3D printing materials guide and knowledge about the existing materials with the standard and specification commonly used 3D printing available today in market. The focus is always to take advantage of industrial 3D printing to differentiate oneself from the competition and lay sustainable foundations for the future.



Infrastructure / Technical platforms / relevant methods / etc.

We have the opportunity to help small and midsize companies within the Vanguard Initiative, e.g. starring of knowledge. A European network which is meant to promote the European industry's international competitiveness. Within the Vanguard Initiative, a development project in additive manufacturing, biochemistry, efficient manufacturing, nanotechnology and optimization of products/services in the offshore industry has been created.

Web page

www.sandbackasciencepark.se

Siemens Energy

Martin Lindbäck, martin.lindbäck@siemens-energy.com

Company profile

Siemens Energy AB (SE) develops, manufactures, and services industrial gas turbines rated from 15-62 MW and heat pumps. Additive manufacturing technology is an established technology within SE including the whole chain from design to manufacturing.

Metal Additive Manufacturing

Offers Engineering and re-engineering services, design optimization, testing and 3D print services, DFAM Training, metrology & scanning, digitalization of spare parts

Activities Prototypes, small series and serial production



SIEMENS
ENERGY

Infrastructure / Technical platforms / relevant methods / etc.

PBF-LB/M (EOS-M400x4 & EOS-M290),
FDM 3D printing, carbon reinforced Onyx,
milling, 5-Axis machining, blasting,
Brazing, heat treatment,
3D Hand Scanning and GOM Scan Box,
CMM, flow tests, material testing, SEM

Web page

www.siemens-energy.com

The Swedish Arena for Additive
Manufacturing of Metals

TRUMPF Maskin AB

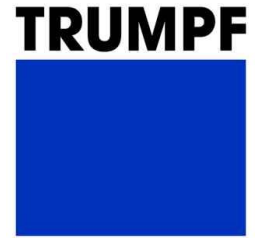
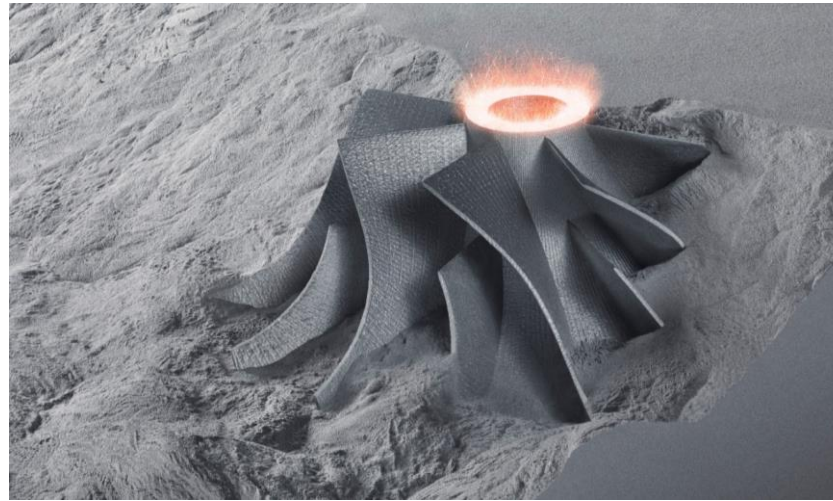
Mikael Olsson, mikael.olsson@trumpf.com

Company profile

Technology leading machine builder within laser technology and additive manufacturing

Metal Additive Manufacturing

Offers Machines, software solutions and services



Infrastructure / Technical platforms / relevant methods / etc.

Powder Bed Fusion
Laser Metal Deposition

Web page

www.trumpf.com

VBN Components AB

Pär Arumskog, par.arumskog@vbncomponents.com

Company profile

VBN Components was the first company world-wide to focus on the development of additively manufactured materials with high carbide content. Today its Vibenite® alloys are used to produce components for a number of industries, such as the automotive, energy and food sectors. VBN's Vibenite® alloys stand for increased wear resistance, high fatigue life, improved service life and complex shapes. Within the range of materials are Vibenite® 290, known as "The world's hardest steel" (72 HRC), and Vibenite® 480, a cemented carbide with approx. 65vol% of carbides.

Metal Additive Manufacturing

Offers: Extremely hard, wear and heat resistant alloys. Custom made components and license solutions (powder sales and assistance to set up production).



Infrastructure / Technical platforms / relevant methods / etc.

Electron Beam Melting (also Laser Powder Bed Fusion for Vibenite® 480).

Heat treatment services, such as HIP and hardening
Grinding or EDM.

Web page

www.vbncomponents.com

