Equipment and Facilities

Equipment and Facilities available at Omega Verksted

- Instruments
  - Elektronisk last
  - Frekvensreferanse
  - LCR meter
  - Multimeter
  - Network Analyzer
  - Oscilloskop
  - Signalgenerator
  - Spektrumanalysator
  - Strømforsyninger
  - Uvral TMF Spark Tester Mk3
- Soldering Equipment
  - Loddeavsug
  - Metcal MX 5200
  - Reflow Oven
  - Stereo microscope
  - Weller WX 2
- PCB Manufacturing Equipment
  - Manuell pick & place Fritsch LM901
  - PCB drillpresse
  - PCB Etching
  - PCB Mill - LPKF S100
    - Brukerinstruks.
    - Drift- og brukerinstruks
    - HMS-instruks.
  - Specialized or Alternative Lithography/Etching Processes and Materials
  - Stencil printer
  - Transparent
  - Ultra Violet Lamp - AZ210
  - Viapresse - Favorit
- Mechanical Tools
  - Air tools
    - Nibbler
  - Borsliper - Drill doctor 750X
  - Hand Tools
  - Heat Gun
  - HMS approved personnel mechanical tools
  - Power tools
    - Angle Grinder
    - Bench Grinder
    - Lathe - Dreiebenk
      - Brukerinstruks
    - Søylebor
      - Grease søylebor
    - Table Saw
  - Slagghakke
  - Welder
- 3D-Printing
  - Anycubic Photon Mono 4k
  - Form 2

Equipment status

Type	Name	Status	Comment	Estimated fix date	Last updated
SLA 3D Printer	**Form 2**	Up			10 Dec 2020
FDM 3D Printer	**Jamre**	Up			2020-08-31
FDM 3D Printer	**Prusa i3 MK3S (PRUS-A)**	Up (no octoprint)	Posts status updates on slack channel #prus-a.		22 Feb 2021
FDM 3D Printer	**Prusa i3 MK3S (PRUS-B)**	Up (no octoprint)	Posts status updates on slack channel #prus-b.		
FDM 3D Printer	**Prusa i3 MK3S (PRUS-C)**	Up (no octoprint)	Posts status updates on slack channel #prus-c.		
FDM 3D Printer	**Prusa i3 MK3S Multifilament (TORE-JOHNNY)**	Up (no octoprint)	Works, but needs new filament-holders.		
Laser Cutter	**Bodor BCL-1309XU**	Up	Works, but routines for using it need updating.		04 Mar 2021
Water Jet	**Wazer**	Up	Unknown error		07 Sept 2021
Lathe	**Lathe - Dreiebenk**	Up			24 Apr 2021
CNC Router	**X-Carve**	Up	No dust/chip collection		14 Mar 2021
PCB Etch	**PCB Etch**	Up-ish	Rinse function in the middle section is not working, use the sink.		28 Feb 2021

Status for equipment being set up

Type	Name	Status	Comment	Estimated completion date	Last updated
CNC Router	**Jamme**	Building	Needs new motors	N/A	2020-08-19
PCB Router	**LPKF S100**	Installing	Setting up software	N/A	2020-09-25

    - Guide til 3D-printing
    - Jamre (FDM-Printer)
    - MMU3 - flere materialer
    - Prusa i3 MK3S
        - Octoprint
        - Overvåkning
    - Regler for 3D-Printing
    - Ultimaker 2
- Board Games
    - Gløsmonopol
- Computer Workstations
- Heat Camera
- Kitchen Facilities
    - Eggkoker
    - Kaffedispenser
    - Pizzaovn
    - Riskoker
    - Tappetårn
- Laserkutter Bodor BCL-1309XU
    - Kutteparametere
    - Priser
    - Design av "tabbed joint"-bokser
    - Dithering
    - Eksempelprosjekter
    - Identification of Polymers
    - Laserkutte Altium filer
    - Programvare
    - Vedlikehold
        - Justering av endestopp
        - Justering av lasersti
        - Vasking av linse
        - Vasking av speil
    - Plakat.
    - Finurligheter og triks ved Laserkutting [WIP]
    - Gravering med rotasjonsakse
    - Feilsøking
    - How to get RDWorks8 running without admin on laser cutter PC
- Library
    - Tales
- Mediaservere
    - Blink
    - Mopidy
    - MPD
- Poison Fridge
- Punktsveis
- Radio (LA1OHM)
- Vacuum Laboratory
    - Fjasekammer
    - Hitachi TM-1000 electron microscope
    - Misc. Electronics documentation; Pinouts, Datasheets
    - NTNU Nanolab Facilities
    - Pfeiffer/Balzers Omnistar GSD 300 O2 RGA (Residual Gas Analyzer)
    - Possible suppliers
    - Random Bullshit Deposition ideas
    - Superconducting Nb-AlOx Process Development

        - Varian 3119 Vacuum Chamber
            - Cooling System
            - Electrical System
            - Upgrades [WIP]
- Wazer Water Jet
    - Bruksinstruks, Wazer
    - HMS-instruks, Wazer
    - Q&A med WAZER Support
    - wazer-kriteliste
- CNC Router (X-Carve)
    - Reference information for CNC router
- Trykkfat
- Pressurized air
- DJ kontroller
- Symaskiner og Overlock
    - Elektronisk - Singer Stylist Model 9100
    - Heavy Duty - Singer Denim HD6335M
    - Janome MB4 broderingsmaskin
    - Overlock - Singer Model 14SH754
- Silhouette Cameo 4 - Vinylkutter
- Tilbehør til lodding
- Jamme CNC
- Printers and accessories
    - Canon LBP663C Laserskriver
    - Datacolor Spyder Print
    - Datacolor Spyder X2 Ultra
    - Epson Ecotank ET-8550 A3+ blekkskriver
    - FARGO DTC4500 kortprinter
- Bookbinding
    - How to Hotbinder