

AREA 51: TECHNICAL ARSENAL (2026)

Facility: Gozo Graphics Industrial Hub, Gozo, Malta

Classification: Micro-Factory & Hardware Accelerator

Jurisdiction: European Union (GDPR & IP Protected)

1. ADDITIVE MANUFACTURING (3D PRINTING)

Technology	Machine Model	Build Volume (X,Y,Z)	Key Capabilities
Industrial FDM (Large)	Dowell DM1220-16 Pro	2000 x 1600 x 1200mm	Monolithic parts, 150°C heated bed, industrial enclosures.
High-Speed Batch	Bambu Labs P1S/A1 Fleet	256 x 256 x 256mm	Rapid production of mechanical sub-assemblies.
Precision Prototyping	Mingda A128 / AnyCubic	Various up to 400mm	Versatile R&D for engineering components.
Technical Textiles	PrintPro UV DTF	300mm Wide	TPU 3D Embossing and tactile branding on flexible surfaces.

- Materials: PLA, PETG, ABS, Carbon-Fiber PA, Polycarbonate, TPU, Resin.

2. SUBTRACTIVE & METAL FABRICATION (CNC)

Technology	Max Bed / Power	Precision / Speed	Material Applications
Multi-Head CNC Router	4000 x 2000mm	9kW / High Speed	Tool changer, oscillating blade, creasing tool. Ideal for wood & composites.

Technology	Max Bed / Power	Precision / Speed	Material Applications
4-Axis Precision CNC	3000 x 1500mm	Water-Cooled	Suitable for Non-ferrous metals (Alu, Brass) and high-density plastics.
Acrylic Suite	Dedicated Workshop	Forming & Bending	Full acrylic fabrication for enclosures and displays.

3. PRECISION LASER & MARKING

Technology	Power / Source	Max Area	Performance
Fiber Laser Cutter	3000W Jinan	3000 x 1500mm	High-speed cutting of Steel and Stainless Steel.
MOPA Fiber Marker	100W Industrial	300 x 300mm	Color-marking on Titanium/SS; Deep engraving & Serialization.
Dual-Source CO2	300W + 150W	3000 x 1500mm	Thick substrate cutting + Optical Eye for printed graphics.
Laser Welding	Jinan Fiber Welder	N/A	High-strength industrial joining for hardware frames.

4. ADVANCED TEXTILES & LUXURY PRINT

Technology	Width / Type	Inks / Features
Direct-to-Fabric	3.2m Roll-to-Roll	Dual Ink (Cotton/Polyester). Industrial soft goods & upholstery.
Hybrid UV Rigid	2.2m Width	CMYK+RGBO + White + Varnish + Foil. Prints on glass, metal, wood.

Technology	Width / Type	Inks / Features
Fluorescent Line	3.2m UV / 60cm DTF	High-Viz and Fluorescent safety/fashion applications.
Fine Art (Archival)	Epson SC-P9500	Hahnemühle Gold Certified. 12-color pigment for museum quality.

5. REVERSE ENGINEERING & DESIGN

- **3D Scanning:** Metrology-grade scanning for Scan-to-CAD workflows.
- **Design for Manufacture (DFM):** In-house support for optimizing files for 3D printing and CNC paths.
- **Documentation:** Fully equipped media studio for documenting the R&D and manufacturing journey.