

Advanced Products Design and Manufacturing

Core Capabilities

Products

- Ground Support Equipment
- Electronic Rack Assemblies
- Junction Box Design
- Wire Harness Design
- Training Equipment Design

Services

- Manufacturing Services
- Engineering Services
- 3D Modeling
- Technical Drawing
- ISO Certification



Products

Ground Support Equipment (GSE)

- Compact Aircraft Support Cart (CASC) Model 125P-CASC45DC
- Oxygen Servicing Cart Model A/M26U-14
- Logistics and spare parts support

Electronic Rack Assemblies Design, Assembly and Fabrication

- Turnkey systems
 - Populated/non-populated (components and wiring)
 - Single and multiple rack systems
- Design
- MIL-STD Testing

Junction Boxes Design, Assembly and Fabrication

- Power entrance panels, power distribution units, transformers, etc.
- Signal entrance panels, signal interface panels, etc.
- RF entrance panels, patch panels, etc.
- Component types such as
 - Terminal boards, lugs, in-box wiring, etc.
 - Circuit breakers, relays, etc.
 - Electrical connectors, bulkheads, etc.
 - Power supplies, transformers, etc.
 - EMI / RFI filters
 - Grounding and bonding components
- Wire harness design, assembly and fabrication
 - Power cables and wiring
 - Signal / data cables and wiring
 - MIL-STD-1553 data bus
 - RF cables and wiring
 - Connector types such as
 - MIL-circular (MIL-DTL-22992, MIL-DTL-26482, MIL-DTL-38999, etc.)
 - N-type, C-type, BNC, SMA, etc.
 - U-183, U-228, U-229, etc., six pin audio
 - DB-type, HD-type, USB, etc.
 - IT / telephonic (RJ45, etc.)
 - Fiber optic ST, SC, FDDI, T-FOCA family, etc.

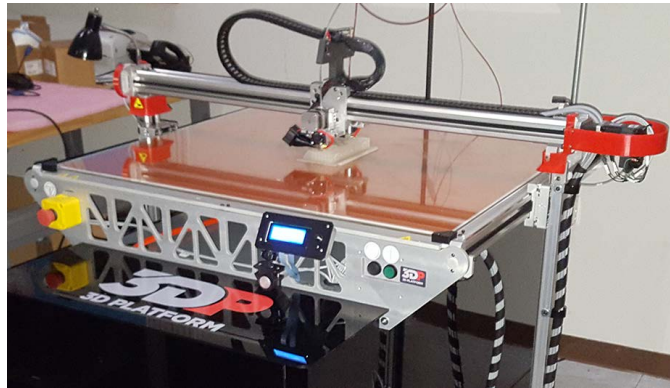
Contact

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Customers

- Naval Air Warfare Center (NAWC)
- Naval Surface Warfare Center (NSWC)
- Naval Undersea Warfare Center (NUWC)
- National Aeronautics and Space Administration (NASA)
- Naval Ship Systems Engineering Station (NAVSSSES)
- Various Commercial Aerospace and Aviation Companies
- Foreign Militaries



Services

Manufacturing Services

- Build to Print
- Contract manufacturing
- 3D printing (additive manufacturing)
 - Bed Size: 1m (39.37") x 1m (39.37") x 0.5m (19.68")
 - Min Layer Height: 70 μ m (.0027")
 - Available Materials: PLA, ABS, XT CF-20 (carbon fiber blend), Ninja Flex, PETG, specialty filaments upon request

Engineering Services

- Finite Element Analysis (FEA)
- Computational Fluid Dynamics (CFD)
- Thermal Analysis
- Integrated System Design (electrical and mechanical design from prototype to final product)
 - Validation and verification
 - Critical and final design review
- Programming (LabVIEW, microcontrollers)
- Rapid Prototyping
- Engineering test plans
 - Mechanical and electrical test plans
 - Design and development of test fixtures and systems

3D Modeling (Electrical, Mechanical, Hydraulic and Pneumatic Systems)

- SOLIDWORKS models for concept, prototyping, detailed design and manufacturing

Technical Drawings IAW ANSI Y14, NAVSEA, and NAVAIR Formats

- Conceptual level
- Developmental level
- Production level
- Electrical schematics and wiring diagrams

ISO Certified (9001:2015)

- Full Design