

Space Technology Mission Directorate Game Changing Development Program COSM Electron Beam Delivery System (CEBDS)

Additional Information

www.cosmtd.com, 80NSSC21C0006

Project Overview

Wire 3D printer with integral real-time process control, flaw detection and dimensional measurement capabilities enables simultaneous part qualification and fab in space.

Technical Approach

System integration complete; operational testing now underway to demonstrate beam and control capabilities.

Contributing Partners and/or Infusion Plans

SBIR Phase 2 Sequential:
COSM Advanced
Manufacturing Systems

Infusion: In-space servicing, assembly and manufacturing (ISAM) for space exploration, including ISS and Artemis missions.

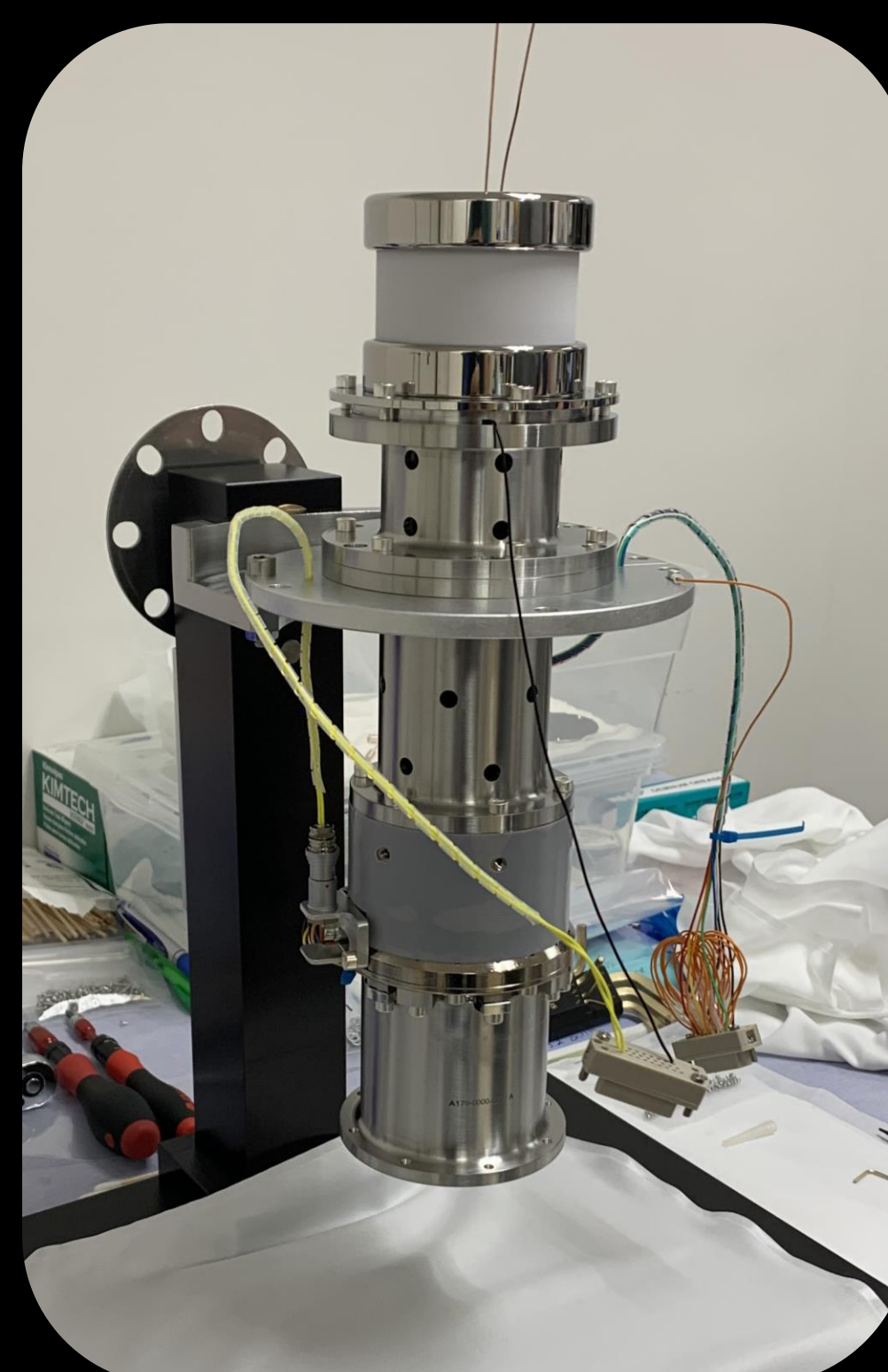
Non-NASA: Commercial and military aerospace, automotive, tool and die, and general manufacturing industries



*External
wire feed
on chamber*



*Vacuum
chamber*



*CEBDS
electron
beam
assembly*



*Internal
build
platform*