

Cryogenic Testing Capabilities

Three LHe-capable “bucket” test dewars and two cryocooler cooled test cryostats are operational in Bldg. 314.

Test dewar features:

- All three dewars incorporate integral LN₂ thermal shielding
- All the dewars are capable of operating with the LHe volume under vacuum
- The top sealing plates of the dewars can be configured to match the components or assemblies undergoing test

Test dewar capacities:

- 5RD — LHe: 8 L LN₂: 11 L LHe Volume Radius: 5 in.
- 9CNRD —LHe: 26 L LN₂: 24 L LHe Volume Radius: 9 in.
- CSM12515 8— LHe Volume Radius: 12.5 in. LHe Volume Depth: 158 in.



Cryocooler cooled cryostat features:

- Both cryostats are designed for the use of Sumitomo RDK cryocooler systems
- An integral M.L.I. covered copper thermal shield attached to the cold head first stages is available for both cryostats
- Multiple ports are available on both cryostats for power, instrumentation, or additional cryogenics
- A Sumitomo RDK-415 cryocooler system is available for use on either cryostat

Cryocooler cooled cryostat capacities:

- Small unit
 - Overall vacuum vessel depth: 48 in.
 - Vacuum vessel I.D.: 15.5 in.
 - Thermal shield I.D.: 11.88 in.
 - Thermal shield depth: 32.5 in.
- Large unit
 - Overall vacuum vessel depth: 58 in.
 - Vacuum vessel I.D.: 30 in.
 - Thermal shield I.D.: 26 in.
 - Optional 40-L internal LHe reservoir

