

DATE: March 25, 1988
REV: May 31, 1988

ACCEPTANCE RATIONALE

DESIGN: Review of assembly documents and Specification Material Document (SMD) MC276-0030 has provided design data points to be complied with for acceptance rationale.

Design data points:

Per QQ-c-120A Chromium plating (electrodeposited) for corrosion protection per type III servicing fluid NH₃. Operational envelope is to exceed the expected use envelope. Dual seals are provided for leakage prevention. Manual engagement and closure with assurances of positive locking feature. No visible spillage at any pressure when disconnected.

TEST:

PRE-OPERATIONAL: Per OMI V1027, V3519 : pressure test to system operating pressures with GN₂ psig, are conducted prior to ammonia servicing. Controlled amounts of NH₃ are used to wet the GSE lines prior to full servicing.

INSPECTION:

PRE-INSTALLATION: Per MC276-0030 (5.1 - 5.1.5) Acceptance Test: Examination of product, The AHC, the AHC cap the GHC, and the GHC cap shall each be carefully examined to determine conformance to the requirements of this specification. Particular attention shall be given to weight, workmanship, finish, dimensions, construction, identification, marking, traceability level, and to the use of certified materials and processes.

AGE LIFE: Per OMI S6013 (V6D41), the assembly is inspected annually for compliance to the material and assembly specifications.

PRE-OPERATIONAL: Per OMI V1027, V3519 - components are inspected for cleanliness per MAQ110-311, level 500 by visual inspection of bagging and sealing of interface ports and/or research of applicable TAIR books prior to each use.

OPERATION: No application to risk reduction.

DETECTION:

Visual and olfactory detection of ammonia discharge and the use of hand held sniffers to detect leakage.

CORRECTION: Isolation and replacement.

FAILURE HISTORY:

Review of PRACA Data Base has provided no failure history on item MC276-0030, ECLSS Operations.