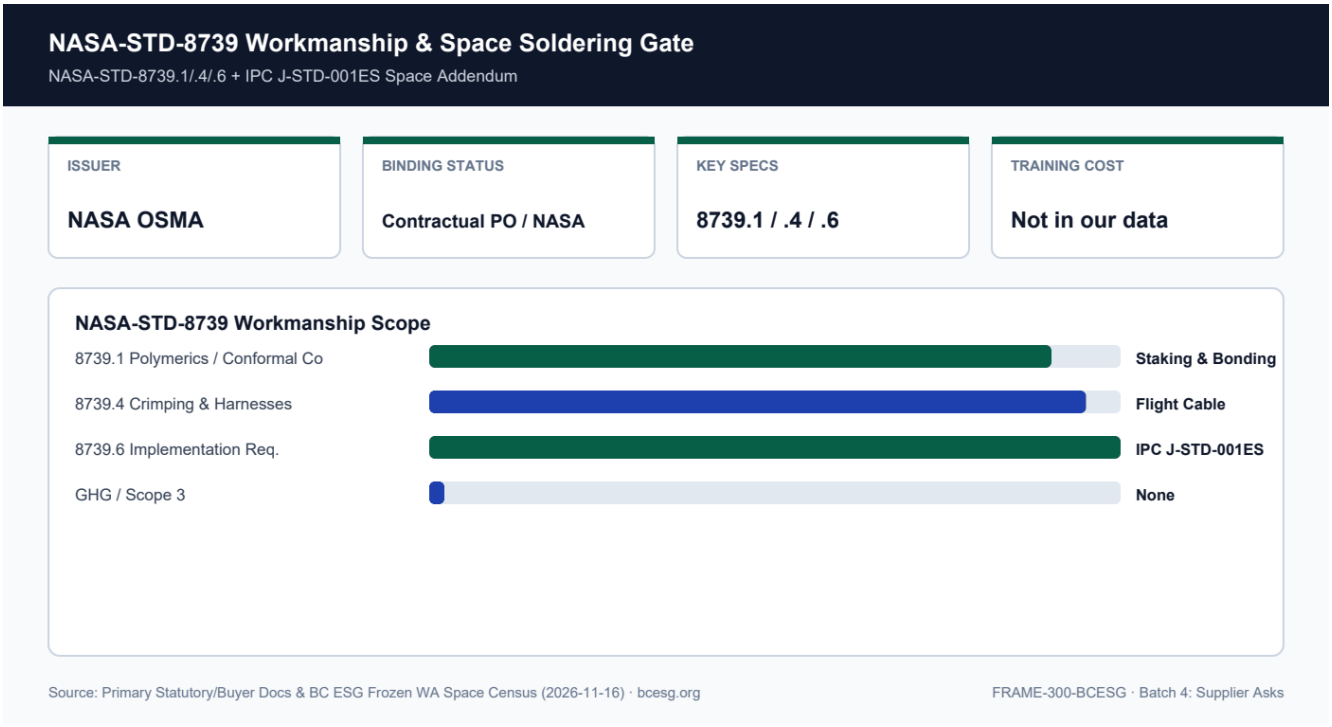
NASA-STD-8739 Workmanship, Soldering & Harnessing Flow-Downs

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Verification & Authority Baseline: Published by NASA Office of Safety and Mission Assurance (standards.nasa.gov). Binding on NASA prime contracts and subcontracts when invoked by PO or drawing; frequently paired with IPC J-STD-001 Space Addendum for flight avionics and harnesses.



Standard	Scope	Required Supplier Proof
NASA-STD-8739.6	Implementation requirements (adopts IPC J-STD-001ES)	Current IPC J-STD-001 Space Addendum certs
NASA-STD-8739.4	Crimping, interconnecting cables, harnesses	Trained operator/inspector logs + pull-test records
NASA-STD-8739.1	Polymeric application (conformal coat, staking)	Material shelf-life + cure/thickness logs

Who Issues This Ask, Authority, and Binding Status

NASA-STD-8739 requirements flow down from NASA centers and commercial/lunar primes (e.g., Blue Origin HLS, Aerojet Rocketdyne, Gravitics, Starfish Space) on flight avionics, cable harnesses, and conformal-coated assemblies.

Binding status: NASA technical standards are **binding** when incorporated into a NASA prime contract and flowed down via PO or engineering drawing.

Evidence Required & Small-Supplier Effort Cost

Suppliers provide active **operator and inspector certifications** (IPC J-STD-001 with Space Addendum ES per NASA-STD-8739.6, plus NASA-STD-8739.1/.4 training records where specified), calibrated crimp/torque tool logs, and lot inspection records.

Certification training course fees are **not in our data**.

WA Space Cluster Segments & Companies Affected

Affects avionics, harness, and power-electronics suppliers in Components & Suppliers (Xanfab, Crane Aerospace & Electronics) and In-Space Servicing.

Verified Primary Sources & Internal Bridges

- NASA Technical Standards System: https://standards.nasa.gov/
- eCFR — NASA FAR Supplement Part 1852: https://www.ecfr.gov/current/title-48/chapter-18/subchapter-H/part-1852