# C-103 Niobium Parts – Drawing & Quotation Checklist

For machined C-103 (UNS R04295, Nb-10Hf-1Ti) niobium alloy parts

Project / RFQ ref: _____ Company: _____ Date: _____

| Item | Requirement (tick / fill in) |
|---|---|
| **1. Drawing** | Drawing no.: _____ Rev: ____ [ ] PDF [ ] STEP model Critical dims / GD&T marked: [ ] yes<br>Surface finish (Ra): _____ Threads / class: _____ Features machined after coating: _____ |
| **2. Material** | C-103 (UNS R04295) to: [ ] ASTM B655 [ ] AMS 7857 (bar) [ ] ASTM B654 [ ] AMS 7852 (sheet/plate) [ ] other: _____ |
| **3. Feedstock** | [ ] bar / rod [ ] plate [ ] forging [ ] extrusion [ ] supplier choice [ ] free-issue (attach cert)<br>Grain direction requirement: _____ |
| **4. Condition** | [ ] annealed [ ] stress relieved Post-machining / post-weld stress relief: [ ] vacuum [ ] inert gas Temp: _____ |
| **5. Environment** | Peak temp: _____ °C Atmosphere: [ ] air / combustion gas [ ] vacuum [ ] other: _____<br>Duration / cycles: _____ Thermal shock or vibration: _____ |
| **6. Coating** | Supply: [ ] uncoated (for customer coater) [ ] coated Coating spec (e.g. silicide R512E): _____<br>Approved coater: _____ Masked surfaces: _____ Thickness / inspection: _____ |
| **7. Inspection** | [ ] EN 10204 3.1 cert [ ] dimensional report [ ] FAI (AS9102) NDT: [ ] PT [ ] UT [ ] RT Acceptance std: _____<br>Weld / braze qualification: _____ Cleaning: _____ Traceability marking: _____ |
| **8. Quantity & delivery** | Prototype qty: ____ Production qty / year: ____ Packing: _____<br>Required date: _____ Incoterm: _____ Destination: _____ |

**Sample request (illustrative, not a customer order):** 4 nos. thruster nozzle extension to drawing XYZ-101 Rev C; C-103 (UNS R04295) to ASTM B655, machined from annealed bar; vacuum stress relief after machining; supplied uncoated for customer silicide coater; full dimensional report and dye penetrant inspection; EN 10204 3.1 certificate; individually packed.

**Check before sending:** current drawing revision · material specification named · service environment stated · who coats, and which surfaces are masked.

ASC LLP (Amardeep Steel Centre LLP), Mumbai · steelpipesuppliers.com/contact-us/ · Send this checklist with your drawing.