

**Objective
Quality
Evidence
Definitions:
Submarines**



Objective Quality Evidence Definitions

Revision	Published	Summary of Changes
22.0	1 December 2023	'CC' definition updated to specify DEF STAN 5-42 as source standard for cleanliness level CHARN 800; and ISO 4406 18/16/10 listed as an acceptable alternative, as per CCP 1872 and TS-031.

ASC's purchase orders and contract documentation require objective quality evidence (OQE). This table provides descriptions of the OQE attributes.

Abbreviation	Attribute	Description
AC	Assembly Check	Is a statement of the build state of the delivered item (Babcock items only).
AHTR	Alternate Material Heat Treatment Record	<p>Is a statement that a heat treatment process has been performed on the batch of nickel aluminium bronze material used in the delivered item, in accordance with DEF-STAN-02-833 (NES 833), with this material being the agreed alternative to DGS 1043.</p> <p>The statement may be reported on a separate document or the CAR or MPT. The BN of the material shall be stated.</p> <p>NOTE: In accordance with NES 833 Part 2 Issue 2 paragraph 0814, the heat treatment report will only be required if the material is:</p> <ul style="list-style-type: none"> a. an extruded rod or section of size 40mm and below; or b. a rolled and forged rod or section of size 30mm and below.
ANN	Annealing	<p>Is a statement that an annealing process has been performed on the batch of material used in the delivered item, in accordance with a material standard that is approved for use on Collins Class submarines (CCSM).</p> <p>The ANN report shall state the BN.</p> <p>The ANN statement may be reported on the CAR or MPT.</p>
ASC	Purchase through ASC	<p>Indicates that the item is to be purchased through ASC.</p> <p>NOTE: Background OQE documentation is retained by ASC and the delivered item will be issued to the Commonwealth of Australia (CoA) with a COC.</p>
BN	Batch Number	<p>A BN is a unique identification number for each batch of material used in the manufacture of the delivered item, as required by applicable standards and specifications.</p> <p>Where required by applicable standards and specifications, the BN shall be permanently stamped, stenciled, etched or engraved on the delivered item(s) in a clearly visible location, except where an engineering determination deems this unacceptable.</p> <p>The BN shall be recorded in the MDR and cross-referenced to any other applicable documentation.</p>
CAC	Calibration Certificate	<p>Certifies that all test equipment used to provide test results for the delivered item were calibrated in accordance with an ISO 17025-accredited laboratory. Certificates should be completed by a company that is certified by an International Laboratory Accreditation Corporation (ILAC) member, such as the National Association of Testing Authorities (NATA).</p> <p>In lieu of a certified statement, copies of CACs may be provided.</p>

Abbreviation	Attribute	Description
CAR	Chemical Analysis Report	<p>Certifies the results of a chemical analysis performed on the batch of material used in the delivered item, in accordance with a material standard that is approved for use on CCSMs. The preference is that the laboratory undertaking the testing is ISO 17025-certified.</p> <p>The report shall state the BN.</p> <p>The CAR may be combined with a MPT.</p>
CC	Cleanliness Certified Statement	<p><i>Hydraulics</i></p> <p>Certifies that the delivered item has achieved a level of cleanliness equal to, or better than, either:</p> <ul style="list-style-type: none"> - CHA(RN) 800 as per DEF STAN 05-42; or - ISO 4406 18/16/10. <p><i>Breathing air</i></p> <p>This item shall be supplied in accordance with SPEC NO.A203959 Department of Defence (Navy) specification for “The cleanliness of hyperbaric oxygen and breathing gas components and systems” cleanliness level, paragraph 7.3 Breathing air.</p> <p>NOTE: If an alternate cleaning regime is specified in “Additional Notes”, compliance with this regime shall be deemed acceptable.</p>
COC	Certificate of Conformance	<p>A certified statement by the supplier that the delivered item(s) meet(s) all requirements specified by the Purchase Order or Contract. Where an unserviceable item is sent to a supplier, refurbished and subsequently returned to ASC as a refurbished item (PO Condition Code: Repaired), the refurbished item shall be clearly identified as refurbished on the Certificate of Conformance; and where the supplier is required to submit a Manufacture Data Report (MDR) as supporting OQE, it will be clearly identified within the MDR.</p> <p>Each delivered item is to be identified as follows:</p> <ul style="list-style-type: none"> - purchase order/contract number; - line or item number; - item description; and - NATO Stock Number (NSN) (or ASC catalogue number if ordered that way). <p>If specified as a deliverable OQE attribute, the following additional information shall also be included:</p> <ul style="list-style-type: none"> - SN - BN
CT	Continuity Test	<p>Certifies that the delivered item has successfully met the requirements of a CT.</p> <p>The record may be a separate document, or form part of the FPT.</p>
DIR	Dimensional Inspection Record	<p>Certifies that a dimensional inspection of the delivered item has been performed and that it complies with standards, specifications or drawings approved for use on CCSMs.</p> <p>All Inspection Measuring and Test Equipment (IMTE) used shall be referenced/identified (including measurement range) and traceable where applicable to the CAC.</p>
DOM	Date of Manufacture	<p>States the date on which the delivered item was manufactured. The date is to be stated on the packaging.</p> <p>The date may be stated on a separate document or stated on the COC.</p> <p>NOTE: When the UBSL is also an attribute, and a use-by date is provided, the DOM is not required.</p>

Abbreviation	Attribute	Description
EXP	Certification Expiry Date	<p>Certifies the date on which the pressure vessel must be re-tested/re-certified in accordance with a pressure vessel standard.</p> <p>The certificate is to include the standard to which it was tested.</p>
FOD	Foreign Object Damage	<p>Certifies the item/component is free of foreign object debris.</p>
FPT	Functional/ Performance Test Record	<p>Certifies the results of manufacturer's tests and inspections carried out on the delivered item.</p> <p>The record shall contain details of the procedure carried out, the pass/fail criteria and the results achieved from each test and inspection.</p> <p>NOTE: If assembly OQE does not require a SN, then the FPT does not require reference to a SN.</p>
FSDR	Forging Surface Defect Report	<p>Certifies the results of dye penetrant testing performed on the batch of nickel aluminium bronze material used in the delivered item.</p> <p>The report shall state the BN or SN.</p> <p>NOTE: In accordance with DEF-STAN-02-833 (NES 833) and DGS 1043, the SDR will only be required if the material is a Class 1 or 2 forging and is not required if material used is bar stock.</p>
GR	Gauging Record	<p>Is a statement that the delivered item has been subjected to dimensional inspection using specific gauging tools (Babcock items only).</p>
HTR	Heat Treatment Record	<p>Is a statement that a heat treatment process has been performed on the batch of material used in the delivered item, in accordance with a material standard that is approved for use on CCSMs.</p> <p>The statement may be reported on a separate document or the CAR or MPT or COC.</p> <p>The BN of the material shall be stated.</p>
HVT	High Voltage Test	<p>Certifies that the delivered item has successfully met the requirements of a HVT. The record may be a separate document, or form part of the FPT.</p>
ICT	Intergranular Corrosion Test	<p>Is a statement that intergranular corrosion testing has been performed on the batch of material used in the delivered item, in accordance with a material standard that is approved for use on CCSMs.</p> <p>The ICT report shall state the BN.</p> <p>ICT results may be reported on the CAR or MPT.</p>
IT	Insulation Test	<p>Certifies that the delivered item has successfully met the requirements of an IT. The record may be a separate document, or form part of the FPT.</p>

Abbreviation	Attribute	Description
ITP	Inspection and Test Plan	<p>This attribute requires the vendor to provide an ITP for the manufacture or refurbishment of the PLM catalogue part.</p> <p>ASC is to agree with the vendor the hold and witness points required to verify critical stages of the work prior to proceeding to the next stage.</p> <p>The ITP shall be provided with the quotation for review and acceptance by an appropriately authorised ASC representative.</p> <p>The ASC-accepted revision of the ITP is to be signed and dated by both parties and scanned into CONTROL with the purchase order for the part.</p> <p>This revision of the ITP is to be completed, signed and dated at the time of conducting each identified task, hold and witness point, by the designated vendor and/or ASC representative.</p> <p>The ITP shall be delivered by the vendor with the package of OQE stipulated by other attributes in the PLM catalogue and/or the purchase order for the part.</p>
LCS	Load Certified Statement	Is a statement that the delivered item has been tested and certified, in accordance with a nationally approved standard, to be capable of lifting/carrying the specified load.
MDR	Manufacturers Data Report	<p>A folder (or similar) which contains all compiled documentation required as OQE, the extent of this OQE being specified in the purchase order or contract.</p> <p>For single-item deliveries, the deliverable item identification (i.e. purchase order/contract number, line item number, item description, NSN or ASC catalogue number) is to be clearly stated on the front cover of the MDR. For multiple-item deliveries, the front cover shall identify the purchase order/contract number and the MDR shall contain an index that cross-references each line item and item description to its NSN (or ASC catalogue number) and OQE documentation.</p> <p>Additional item identification information may be stipulated by other attributes.</p>
MLT	Magnetic Leakage Test	<p>Certifies that the delivered item has successfully met the requirements of a MLT.</p> <p>The record may be a separate document, or form part of the FPT.</p>
MPT	Mechanical Properties Test Report	<p>Certifies the results of the MPT performed by an ISO17025-certified laboratory on the batch of material used in the delivered item, in accordance with a material standard that is approved for use on CCSMs.</p> <p>The report shall state the BN.</p> <p>The MPT may be combined with a CAR.</p>
OCR	Open/Close report	A report for the refurbishment of ASC plant and equipment. This report should include photos that clearly capture the condition of plant and equipment as received, a clear list of parts required to refurbish the plant and equipment, and photos of the refurbished item prior to dispatch to ASC. The opening report shall include a section for non-standard repair or replacement items that ASC Engineering is to be made aware of.
PKG	Packaging Requirements	<p>For each delivered item, the following identification information shall be provided on the packaging of the delivered item(s):</p> <ul style="list-style-type: none"> - purchase order/contract number; - line or item number; - item description; and - NATO stock number (or ASC catalogue number if ordered that way). <p>Additional packaging identification information may be stipulated by other attributes.</p>

Abbreviation	Attribute	Description
PRC	Paint Record Certified Statement	<p>Certifies that the delivered item is painted in accordance with a paint scheme approved for CCSMs.</p> <p>The dry film thickness (including min, max and ave values), shelf life and atmospheric conditions during application must be stated.</p>
PTC	Pressure Test Certificate	<p>Certifies that pressure testing has been performed and records the requirements and test results.</p> <p>The certificate shall include: item SN; max test pressure; test medium; duration; and result.</p> <p>NOTE: If assembly OQE does not require a SN, then the PTC does not require reference to a SN.</p>
RCD	Rubber Cure Date	<p>States the date on which the delivered rubber item was manufactured. The cure date is to be stated on the packaging.</p> <p>The cure date may be a separate document or stated on the COC.</p>
RHC	Rubber Hardness Certified Statement	<p>Certifies the International Rubber Hardness Degree (IRHD) hardness value of the delivered item.</p> <p>The IRHD hardness may be a separate document or stated on the COC.</p>
RIR	Radiographic Inspection Report	<p>Certifies the results of radiographic testing performed, by an ISO 17025-certified laboratory by technicians qualified to ISO 9712 Level II, on the batch of material used in the delivered item in accordance with a material standard that is approved for use on CCSMs.</p> <p>The report shall state the BN or SN.</p>
RPS	Raytheon Preferred Supplier	<p>Indicates that the item is to be purchased through Raytheon Corporation as the preferred supplier.</p> <p>The OQE has been designated by Raytheon, which will retain any background OQE over and above that supplied to the CoA.</p>
SDR	Surface Defect Report	<p>Certifies the results of inspection carried out on the surface integrity of delivered items in accordance with a standard that is approved for use on CCSMs. The inspection is to be undertaken by an ISO 1702-certified laboratory using technicians qualified to ISO 9712 Level II.</p> <p>The report shall state the BN or SN.</p>
SDS	Safety Data Sheet	<p>SDSs are documents that provide critical information about hazardous chemicals. For example, they include information on:</p> <ul style="list-style-type: none"> • the chemical's identity and ingredients; • health and physical hazards; • safe handling and storage procedures; • emergency procedures; and • disposal considerations. <p>In Australia, manufacturers and importers of hazardous chemicals must adhere to the model Code of Practice for the preparation of safety data sheets for hazardous chemicals. Failure to create SDSs correctly is a breach of Work Health and Safety legislation.</p>

Abbreviation	Attribute	Description
SN	Serial Number	<p>A SN is a unique identification number for each individual delivered item. This SN is nominated and maintained in a register by the supplier.</p> <p>The SN shall be permanently stamped, stenciled, etched or engraved on the delivered item in a clearly visible location and the number shall be recorded on the supporting documentation.</p> <p>The SN shall be recorded exactly as it appears on the physical part (numbers, letters, characters, spaces) on all associated OQE.</p>
SPS	Babcock Preferred Supplier	<p>Indicates that the item is to be purchased through Babcock as the preferred supplier.</p> <p>The OQE has been designated by Strachan and Henshaw, which will retain any background OQE over and above that supplied to the CoA.</p>
UBSL	Use by Date/Shelf Life	<p>States the maximum period the delivered item may be held in storage before use for its intended purpose.</p> <p>The UBSL is to be stated on the packaging.</p> <p>Whenever a COC is provided, the UBSL and BN has to be stated on the COC.</p>
UIR	Ultrasonic Inspection Report	<p>Certifies the results of ultrasonic testing performed on the batch of material used in the delivered item, in accordance with a material standard that is approved for use on CCSMs. The testing is to be undertaken by an ISO 17025-certified laboratory using technicians qualified to ISO 9712 Level II.</p> <p>The report shall state the BN or SN.</p>
UIR/RIR	Ultrasonic or Radiographic Inspection Report	<p>Certifies the results of ultrasonic or radiographic testing performed on the batch of material used in the delivered item, in accordance with a material standard that is approved for use on CCSMs. The testing is to be undertaken by an ISO 17025-certified laboratory using technicians qualified to ISO 9712 Level II.</p> <p>This attribute indicates that the standard allows the manufacturer the option to choose between ultrasonic or radiographic inspection.</p> <p>The report shall state the BN or SN.</p>
VER	Version Number	<p>States the VER of the program that is loaded on the delivered item.</p> <p>The VER is to be stated on the packaging.</p> <p>The VER may be stated on a separate document or the COC.</p>
VIR	Visual Inspection Record	<p>Certifies that the material has been visually inspected, assisted where necessary by the use of X5 magnification optics, in accordance with a material standard that is approved for use on CCSMs.</p> <p>The statement may be reported on the DIR or COC.</p>
WCCS	Weight Control Certified Statement	<p>Certifies the actual weight of the delivered item.</p>
WCS	Weld Certified Statement	<p>A statement certifying that the welding associated with the manufacture of the delivered item was performed and inspected in accordance with a standard that is approved for use on CCSMs.</p> <p>NOTE: In accordance with DEF-STAN-02-747 (NES 747) Part 2 Nickel Aluminium Bronze Naval Alloy Ingots and Sand Castings with welding permitted to the wetted surface, a WCS is required if repairs are performed by welding.</p>