

	<b>MASTER LIST OF OBJECTIVE QUALITY EVIDENCE (OQE) ATTRIBUTES</b>	APPLICABILITY
		<b>SHIPS</b>
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## Introduction

This document lists the Objective Quality Evidence (OQE) attributes which may be assigned to catalogue parts. This information applies to all ASC Shipbuilding Pty Ltd (ASC-S) Personnel and Contractors tasked with manufacturing & supplying components for all ASC-S Projects.

## List of OQE Attributes Applicable to Parts

Attribute Type	Acronym	Brief Definition	Attribute Definition
Eng./Quality	AC	Assembly Check	Is a statement of the build state of the delivered item.
ILS/Quality	BN	Batch Number	<p>The Batch Number is a unique identifier and can be referred to as a batch, heat, charge, cast, and lot number.</p> <p>Each batch of material used in the manufacture of a delivered item, is to be in accordance with the applicable standard and specification.</p> <p>Where required by applicable standards and specifications or Purchase Order requirements, the batch number shall be permanently stamped, stencilled, etched or Engraved on the delivered item(s) in a clearly visible location, except where an engineering determination deems this unacceptable in which case the batch number is to be detailed on the packaging or labelling.</p> <p>The Batch Number shall be recorded in the Manufacturers Data Report and cross referenced to any other applicable documentation.</p>
Eng./Quality	BRS	Braze Certified Statement	<p>A statement certifying that the brazing associated with the manufacture of the delivered item was performed and inspected in accordance with a standard that is approved for use on Hobart Class AWDs.</p> <p>The statement shall include reference to Procedures, Operator's Qualifications, Consumables and Braze Non Destructive Testing. Reports shall be signed by a qualified welding inspector or equivalent. All these references should be available for inspection on request.</p>
Eng./Quality	CAC	Test Equipment Calibration Certificate	<p>Certifies that the test equipment used to provide test results for the delivered item were calibrated in accordance with a NATA, or equivalent, standard.</p> <p>The certified statement shall include test equipment serial number and date of next calibration due.</p> <p>In lieu of a certified statement, copies of calibration certificates may be provided.</p>

Attribute Type	Acronym	Brief Definition	Attribute Definition
Eng./Quality	CTC	Calibration Test Certificate	<p>A calibration test certificate to be provided by a NATA or Equivalent ISO/IEC 17025 accredited testing organisation when requested to calibrate/refurbish items such as Inspection Measuring and Testing Equipment (IMTE), e.g. gauges, relief valves, etc.</p> <p>The Calibration Test Certificate shall contain as a minimum: Customer Purchase Order No and Revision No, Line No and ASC Part No, Item Tested/calibrated and Serial No, testing procedure, specification/standard (e.g. AS 1271) acceptance criteria, and as applicable; Test Pressure, Set/Relief/cracking Test Pressure, Re-seat Test Pressure, etc. result (pass/fail), testing medium, duration, type of IMTE instrument utilised to calibrating the requested item, Serial No. and next due date for calibration. The certificate shall be checked/endorsed by the organisation authorised personnel.</p> <p><b>Note:</b> The certificate must state the condition of the IMTE/Item on receipt and if it was within calibration requirements.</p>
Eng./Quality	CoC	Certificate of Conformance	<p>A certified statement by the supplier that the delivered item(s) meet all requirements specified by the Purchase Order or Contract.</p> <p>Each delivered item is to be identified as follows:</p> <ul style="list-style-type: none"> <li>• Purchase Order Number/Contract Number,</li> <li>• Line Number/Item Number,</li> <li>• Item Description,</li> <li>• ASC Part Number (NATO Stock Number or ASC Catalogue Number),</li> <li>• Quantity,</li> <li>• Manufacturer's Part Number.</li> </ul> <p>If specified as a deliverable OQE attribute, the following additional information can be included in the Certificate Of Conformance:</p> <ul style="list-style-type: none"> <li>• Serial Number,</li> <li>• Batch Number,</li> <li>• Rubber Hardness,</li> <li>• Rubber Cure Date,</li> <li>• Use By/Shelf Life,</li> <li>• Date Of Manufacture,</li> <li>• Expiry Date,</li> <li>• Software Version Number,</li> <li>• Cleanliness Certification Statement,</li> <li>• Weight Certification Statement.</li> </ul>
Eng./Quality	CT	Continuity Test	<p>A report is to be provided which records continuity test details.</p> <p>The report is to record the serial number of the item under test and may be a separate document or form part of the Functional Performance Test Record.</p> <p>Test equipment serial numbers and calibration dates are to be recorded and can be combined with Test Equipment Calibration Certificate (CAC).</p>
Eng./Quality	CTCL	Critical Items	<p>All ASC nominated Critical Items (CTCL) shall only be sourced from Sub-tier Manufacturers/Mills that are listed in the ASC list of Authorised/Approved Manufacturers/Mills.</p> <p>If critical items cannot be sourced from ASC authorised/approved manufacturers/mills, then the direct supplier shall ensure that independent qualification batch testing is carried out iaw criteria defined by ASC.</p> <p>ASC may also consider undertaking a quality audit of the Manufacturer/Mill manufacturing processes on a case by case basis.</p>

Attribute Type	Acronym	Brief Definition	Attribute Definition
Eng./Quality	DIR	Dimensional Inspection Record	Records are to be provided which certify that a Dimensional Inspection of the delivered item has been performed and that it complies with standards, specifications or drawings approved for use on Hobart Class AWDs.  This record will include the equipment identification number and calibration information for the equipment used.
Eng./Quality	DNOT	Despatch Note	Only applies to paint. Provides the following information: <ul style="list-style-type: none"> <li>• ASC Catalogue number.</li> <li>• Manufacturer part number.</li> <li>• Batch number.</li> <li>• Quantity.</li> </ul>
ILS/Supply	DOM	Date of Manufacture	States the date on which the delivered item was manufactured. The date is to be stated on the packaging. The date may be stated on a separate document or stated on the Certificate of Conformance.  NOTE: When the Use by Date/Shelf Life is also an attribute, and Use By Date is provided, the Date of Manufacture is not required.
Eng./Supply	EXP	Certification Expiry Date	Certifies the date on which the pressure vessel must be re-tested / re-certified in accordance with a pressure vessel standard. The certificate is to include the standard to which it was tested.
Eng./Quality	FPT	Functional / Performance Test Record	Reports are to be provided which certify the results of manufacturer's tests and inspection, e.g.; calibration, performance/operational/functional tests carried out on the delivered item.  The report shall contain details of: <ul style="list-style-type: none"> <li>• The specifications/standards and references the testing is to be performed to,</li> <li>• The procedure carried out,</li> <li>• The pass/fail criteria,</li> <li>• A list of support and test equipment used (refer CAC),</li> <li>• The results achieved from each test and inspection,</li> </ul> This report may also include electrical, pressure and leak tests.
Eng./Quality	HTR	Heat Treatment Record	Is a report 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 Hobart Class AWDs.  The report may be on a separate document or the Chemical Analysis Report or Mechanical Properties Test Report and is to include furnace ID and calibration details.  The report shall state the Batch (heat, charge, cast, lot) Number of the material and shall be signed by a suitable signatory.
Eng./Quality	HVT	High Voltage Test	A report is to be provided which records high voltage test details. The report is to record the serial number of the item under test and may be a separate document or form part of the Functional Performance Test Record.  Test equipment serial numbers and calibration dates are to be recorded and can be combined with Test Equipment Calibration Certificate (CAC).

Attribute Type	Acronym	Brief Definition	Attribute Definition
Eng./Quality	IT	Insulation Test	A report is to be provided which records insulation test details. The report is to record the serial number of the item under test and may be a separate document or form part of the Functional Performance Test Record. Test equipment serial numbers and calibration dates are to be recorded and can be combined with Test Equipment Calibration Certificate (CAC).
Eng./Quality	ITP	Inspection and Test Plan	Inspection & Test Plan - A construction plan that details the sequence of steps proposed to fulfil a work requirement, the tests to be performed and identification of hold and witness points proposed and offered to the customer to verify. <b>Note:</b> Refer to the Shipbuilder Supplier Quality Assurance Manual (SQAM) for a generic ITP form/example.
Eng./Quality	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. A tally plate providing load test details is to be attached to each individual item supplied.
Eng./Quality	MDR	Manufacturers Data Report	Manufacturers Data Report - A folder (or similar) which contains all compiled documentation required as Objective Quality Evidence (OQE), the extent of this OQE being specified in the Purchase Order, Contract or PTS.
Eng./Quality	MLT	Magnetic Leakage Test	A report is to be provided which records magnetic leakage test details. The report is to record the serial number of the item under test and may be a separate document or form part of the Functional Performance Test Record. Test equipment serial numbers and calibration dates are to be recorded and can be combined with Test Equipment Calibration Certificate (CAC).
Eng./Quality	MPT	See MTC	See MTC
Eng./Quality	MTC (previously MPT)	Mechanical Properties Test Report	Mechanical Properties: Chemical Composition and Mechanical Characteristics Certificates. As a minimum certifies the results of Chemical Analysis, Mechanical and Physical tests performed (i.e. Chemical Composition, Tensile Test) on the back of material used in the delivered item, in accordance with the relevant code/specification that is approved for use on the Hobart Class AWDs. The report shall state the batch (heat, charge, cast, lot) number and identify to the standard. The Material Certificates shall be in accordance with the requirements of BS EN 10204: 2004.
General	NA	Not Applicable	To be applied when OQE is not applicable to an item.

Attribute Type	Acronym	Brief Definition	Attribute Definition
ILS/Supply	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"> <li>• Purchase Order / Contract Number,</li> <li>• Line or Item Number,</li> <li>• Item Description,</li> <li>• NATO Stock Number or ASC Catalogue Number.</li> </ul> <p>For elastomeric products i.e. O-rings, seals etc. - goods are to be packaged individually and in light excluding bags. Batch number, cure date and shelf life details are also to be provided on packaging.</p> <p>For paints, adhesives, oils, greases, and lubricants - batch number, date of manufacture and expiry date details are also to be provided on packaging or container.</p> <p>Additional packaging identification information may be stipulated by other attributes.</p>
Eng./Quality	PRC	Paint Record Certified Statement	<p>Paint reports are to be provided which certify that the delivered item is painted in accordance with a paint scheme approved for Hobart Class AWDs.</p> <p>The batch number and expiry date of the paint shall be stated.</p> <p>The coating dry film thicknesses, times/dates and atmospheric conditions during application must be stated.</p> <p>Blasting details, records and profiles, if required, are to be included.</p>
Eng./Quality	PTC	Pressure Test Certificate	<p>Certifies that Pressure Testing and or Leak Testing has been performed and records the requirements, test results and test equipment/gauges.</p> <p>The test report shall be provided and state the Serial or Batch (heat, charge, cast, lot) Number of items under test.</p> <p>Test Station ID, and pressure gauge serial number and calibration dates are to be provided and can be combined with Test Equipment Calibration Certificate (CAC).</p> <p>The test results can be included with the Functional/Performance Test results.</p>
ILS/Eng.	PTSSP	Procurement Technical Specification Spares	<p>Spare parts sourced from Original Equipment Manufacturers (OEM) Suppliers.</p>
ILS/Supply	RCD	Rubber Cure Date	<p>States the date on which the delivered rubber item was manufactured.</p> <p>The cure date is to be stated on the packaging.</p> <p>The cure date may be a separate document or stated on the Certificate of Conformance.</p>
Eng.	RHC	Rubber Hardness Certified Statement	<p>Certifies the shore hardness value of the delivered item.</p> <p>The shore hardness may be a separate document or stated on the Certificate of Conformance.</p>
Eng.	RIR	Radiographic Inspection Report	<p>Provides the results of 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 Hobart Class AWDs.</p> <p>The report shall state the Batch (heat, charge, cast, lot) Number or Serial Number and shall be signed by a suitable signatory.</p>

Attribute Type	Acronym	Brief Definition	Attribute Definition																		
Eng./Quality	SDR	Surface Defect Report (Non Destructive Testing)	<p>Provides the results of inspection and non-destructive testing carried out on the surface integrity of delivered items in accordance with a standard that is approved for use on Hobart Class AWDs.</p> <p>The report shall state the Batch (heat, charge, cast, lot) Number or Serial Number.</p> <p>The report, depending on the material, can be a visual/optical inspection, dye/liquid penetrant examination, magnetic particle examination and shall be signed by suitable signatories.</p>																		
Eng.	SHCK	Shock Certificates	<p>Is a statement that the delivered item has been tested and certified in accordance with the required shock standard.</p> <p>The statement will include a description of how the delivered item has been certified, by Test, Analysis or Extension.</p>																		
Eng.	SHRD	Ships Hose Register Data	<p>Hose data is to be provided by the supplier or hose manufacturer. The data required is as follows:</p> <table border="1"> <tr> <td>Manufactured Date</td> <td>Manufacturer Name</td> </tr> <tr> <td>Hose Length</td> <td>Shelf Life</td> </tr> <tr> <td>Hose Diameter</td> <td>Working Pressure</td> </tr> <tr> <td>Proof Test pressure</td> <td>In-Service Fluid</td> </tr> <tr> <td>Maximum Working Pressure of Hose</td> <td>COPIC Number</td> </tr> <tr> <td>Date Last Tested</td> <td>Hose Material</td> </tr> <tr> <td>Manufacturers Part Number</td> <td>Functional Description</td> </tr> <tr> <td>NSN (if applicable)</td> <td>Serial Number</td> </tr> <tr> <td>Batch Number</td> <td></td> </tr> </table> <p>The hose data requirements are to be provided to the supplier or hose manufacturer in an appropriate template.</p> <p>This data is required for the AWD hose register to support ship certification.</p>	Manufactured Date	Manufacturer Name	Hose Length	Shelf Life	Hose Diameter	Working Pressure	Proof Test pressure	In-Service Fluid	Maximum Working Pressure of Hose	COPIC Number	Date Last Tested	Hose Material	Manufacturers Part Number	Functional Description	NSN (if applicable)	Serial Number	Batch Number	
Manufactured Date	Manufacturer Name																				
Hose Length	Shelf Life																				
Hose Diameter	Working Pressure																				
Proof Test pressure	In-Service Fluid																				
Maximum Working Pressure of Hose	COPIC Number																				
Date Last Tested	Hose Material																				
Manufacturers Part Number	Functional Description																				
NSN (if applicable)	Serial Number																				
Batch Number																					
ILS	SN	Serial Number	<p>A Serial Number is a unique identification number for each individual delivered item. This Serial Number is nominated and maintained in a register by the supplier.</p> <p>The serial number shall be permanently stamped, stencilled, etched or Engraved on the delivered item in a clearly visible location and the number shall be recorded on the Manufacturers Data Report and identified on the packaging.</p>																		
ILS/Supply	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 Use by Date / Shelf Life is to be stated on the packaging.</p> <p>Whenever a Certificate of Conformance is provided, the Use by Date / Shelf Life is to be stated on this Certificate of Conformance.</p>																		
Eng.	UIR	Ultrasonic Inspection Report	<p>Provides 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 Hobart Class AWDs.</p> <p>The report shall state the Batch (heat, charge, cast, lot) Number or Serial Number and shall be signed by a suitable signatory.</p>																		
Eng./Supply	VER	Version Number	<p>States the Version Number of the software program that is loaded on the delivered item.</p> <p>The Version Number is to be stated on the packaging.</p> <p>The Version Number may be stated on a separate document or the Certificate of Conformance.</p>																		
Eng./Quality	VIB	Vibration Certificate	<p>Is a statement that the delivered item has been tested and certified in accordance with the required vibration standard.</p> <p>The statement will include a description of how the delivered item has been certified, by Test, Analysis or Extension.</p>																		

Attribute Type	Acronym	Brief Definition	Attribute Definition
Eng./ Quality	WCCS	Weight Control Certified Statement	A report is to be provided which certifies the actual weight of the delivered item. The statement can be included on the Certificate Of Conformance.
Eng.	WCS	Weld Certified Statement	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 Hobart Class AWDs. The statement shall include reference to Welding Procedures, Welders Qualifications, Welding Consumables, Weld Maps and Weld Non Destructive Testing. Reports shall be signed by a qualified welding inspector or equivalent. All these documents should be available for inspection on request.

## Procurement Technical Specification (PTS) Related Attributes

Procurement Technical Specifications and their related Annexes and Appendixes define which documents are required to support the item. This document only addresses the subset of Supplier Data Requirement List (SDRL) considered to be 'OQE', as documented below. The OQE items include those required for AWD certification purposes.

Among the whole set of SDRLs there is a subset that has been defined to ensure that an item can be receipted into the store on arrival at ASC-S and be put to Stock in the ASC ERP System Control. The criteria for selection are:

- Certification data as specified
- Documents generally accepted as OQE: Quality documents and certificates
- Information relevant to the safe handling and in-store maintenance of the items
- Information relevant to the installation of the equipment

Based on this the current list of SDRLs that are considered to be OQE is the following:

- ECOI: Certificate of identity.
- EHML: Hazardous materials log.
- ESCL: Shipping configuration list.
- LLAY: In-Store and Lay-Up Maintenance Data.
- TATP: Acceptance Test Procedure and Test Report(s). Specifically the Test Report.
- TFAR: Details of any FAT defects.
- ETDP (Only the following documents):
- ETDP\_PR: Preservation.
- ETDP\_GI: General & Installation drawing set.
- ETDP\_CF: Conformity: Declaration of Conformity
- ETDP\_DG: Dangerous: Identification and quantification of Dangerous Materials
- ETDP\_DC: Dangerous: Confirmation of exclusion of forbidden materials.
- ETDP\_ET: EME Test reports and certificates
- ETDP\_GR: EMI/EMC - Grounding certificate.
- ETDP\_EV: Environmental compliance certificates.
- ETDP\_EV: IP grade certificates.

- ETDP\_MC: Quality: Material certificates.
- ETDP\_OR: Quality: Certificate of outdoor resistant material.
- ETDP\_SH: Shock certificates.
- ETDP\_VI: Vibration certificates.
- ETDP\_LH: Lifting and hoisting.