**Approved By:**

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|  |  |  |  |  |
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For any feedback to the process, or the document, please contact the process owner - Senior General Operations Support Staff Manager or ARMO Assistant Supervisor – Jandakot.

|  |  |  |
| --- | --- | --- |
| APPLICABLE PRODUCT LINES | | |
| Subsea Drilling Systems | Subsea Production Systems (SPS) & Subsea Services (SRV) | |
| Surface Pressure Control & Offshore | Well Systems | Controls |
| Flexible Pipe Systems (FPS) & Wellstream Construction Services (WCS) | Subsea Services | Projects |
| Subsea Production Systems (SPS) & Subsea Services (SRV) | Global Fabrication Distribution Systems | |

**Document Revision Chart:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rev | Section modified and revision description | Issue date | Expiry date | Author(s) |
| 1.0 | Initial Issue | 13-01-2015 | 13-01-2018 | Nava Selvaraj |
| 2.0 | 1. Revised from a Work Instruction to a Training & Awareness document.  2. Included reference to governing global requirements:  QW-SS-GLO-ENG-701  Design of Pressure Testing Bunkers  QW-SS-GLO-ENG-702  Design of Pressure Testing Pits  QW-SS-GLO-ENG-703  Design Requirements & Inspection Criteria of Hydraulic Power Units  QW-SS-GLO-ENG-704  Design Requirements & Inspection Criteria for Pressure Hoses  QW-SS-GLO-ENG-705  Design Requirements & Inspection Criteria for Pressure Test Equipment  3. Maintained supporting controls from original work instruction  4. Showed legacy GE Libraries and new GE Box location for Quality Records | 02.02.2018 | 01.02.2021 | T Sims |

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# Purpose / outcome

This training & awareness document describes methods to support maintaining Workshop Test Equipment (WTE) which are to be managed in accordance with global process controls.

Refer to Section 6.1 for a listing of global process controls.

# Scope & applicability

This training & awareness document is applicable to OFE-SS Jandakot and those locations where Jandakot controlled WTE is deployed.

Note –

*The release of global process controls is progressive. Refer to Documentum to ascertain release status of global process controls and implement requirements accordingly.*

*Legacy controls detailed here-in can be utilised as a management process in isolation, pending release of the applicable global process controls. Thereafter they would be considered as supporting the global process controls per Section 1 – Purpose / outcome.*

# Process overview / instruction

Follow instruction as per applicable section mentioned in the table below. The details here-in shall be complimentary to the global process controls referenced in Section 6.1.

|  |  |
| --- | --- |
| Activity Description | Applicable Section |
| Selecting existing WTE | Section 3.1 |
| Purchasing new WTE | Section 3.2 |
| Using stored WTE | Section 3.3 |
| Storage and periodic inspection requirements | Section 3.4 |
| WTE not meeting inspection acceptance criteria | Section 3.5 |

## Selecting existing WTE

|  |  |  |  |
| --- | --- | --- | --- |
| INPUT | PROCESS ACTION | RESPONSIBILITY | OUTPUT |
| Requirement of Testing | * Determine the equipment to be used for testing based on ITP information in ePIMS. | Manufacturing Engineer/Planner | Required WTE identified |
| Required WTE identified | * Check the WTE Register * If available – Issue picking slip for warehouse to retrieve from storage | Manufacturing Engineer, Planner | WTE requested |
| - If not available:Raise “PO” as per Sect 3.2 through Sourcing specialist. |

## Purchasing new WTE

|  |  |  |  |
| --- | --- | --- | --- |
| **INPUT** | **PROCESS ACTION** | **RESPONSIBILITY** | **OUTPUT** |
| New WTE requested | * Raise POR with Sourcing | Manufacturing Engineer/ Planner/ Sourcing | New WTE received |
| New WTE received | * Receive equipment at Inward Goods in accordance with Inward Goods WI   QW-FAC-PER-001   * Visual + document review (testing certs/ user manual/warranty) from manufacturers. | QC/QE | Inspected WTE |
| * Criteria met | QC/QE | Compliant WTE |
| * Criteria not met – see Sect 3.5 Non-compliant WTE | QC/QE | Non-compliant WTE |
| Compliant WTE | * Allocate WTE asset ID * Update WTE register with new details * Permanently mark WTE - Appendix 7 * Upload records (refer Section 5) | QC/QE | WTE ready for NDE |
| Equipment ready for NDE | * Warehouse to store equipment in WIP location or tag accordingly | Warehouse Personnel | WTE stored |

## Using stored WTE

|  |  |  |  |
| --- | --- | --- | --- |
| **INPUT** | **PROCESS ACTION** | **RESPONSIBILITY** | **OUTPUT** |
| WTE requested | * Collect WTE from store | Warehouse | Appropriate WTE are picked |
| WTE picked | * Ensure users are competent to use selected WTE * Attach test sticker | Lead Technical Specialist/ Shop supervisor | Tech ready to use |
| NDE & Inspection Acceptance criteria | * Check Inspection Acceptance Criteria in WTE Register * Complete inspection requirements * Complete fields on test sticker & WTE inspection form | NDE tester | WTE ready to use |
| * Complete visual inspection * Complete fields on WTE inspection form | Workshop Technician |
| WTE ready to use | * Inspection form reviewed and stored by Quality | Quality | Records stored |
| Test completed | * Clean equipment for storage | Shop Technician | WTE ready to be stored |

## Fixed WTE:

|  |  |  |  |
| --- | --- | --- | --- |
| WTE requires testing | * Test fixed WTE in accordance with criteria requirements set out in WTE Register * Where required raise POR for testing * Quality to review test records & store | Lead Technical Supervisor / QE | WTE compliant for use |

## Storage and periodic inspection requirements

|  |  |  |  |
| --- | --- | --- | --- |
| **INPUT** | **PROCESS ACTION** | **RESPONSIBILITY** | **OUTPUT** |
| New receipted WTE | * Identify & store as per User Manual/ePIMS * Visually check for obvious damage   (eg. impact, wear etc.) | QE | WTE ready for storage |
| Equipment after use | * Communicate any abnormal occurrences during test to Quality (over pressure, fluctuating pressure etc.) * Visually inspect for obvious damage   (e.g. wear, impact etc.) | Technician | WTE ready for storage |
| * Initiate NC process were abnormality exists | Quality |
| WTE ready for storage | * Store in racks appropriatelly | Warehouse | WTE Stored |

## WTE not meeting inspection acceptance criteria

|  |  |  |  |
| --- | --- | --- | --- |
| **INPUT** | **PROCESS ACTION** | **RESPONSIBILITY** | **OUTPUT** |
| NC identified WTE | * Complete Discrepant Equipment Report QF-PER-032 * If rework is identified initiate Non-conformance process. * Remove WTE from storage and process as NC product | QE | Non-conformance addressed |

# Roles & responsibilities

| Key Role | Responsibility |
| --- | --- |
|  | Refer to column RESPONSIBILITY in Section 3.1 to Section 3.5 |

# Quality records

The following is a summary of records produced to be maintained and controlled according to the requirements of [OGQ-0102 - Record Control](http://edms.pw.ge.com/dctmquality/home/components/drl/drl.jsp?objectId=0900f5ea80796e2d&showRendition=true). All records shall be in line with records location map relevant for the site/organization.

| Record | Owner | Storage location |
| --- | --- | --- |
| WTE inspection forms | Quality | Legacy location:  [GE Libraries](http://libraries.ge.com/foldersIndex.do?entity_id=25910631101&sid=101&SF=1#47845868101) Top level folder  [GE Libraries](http://libraries.ge.com/foldersIndex.do?entity_id=25910631101&sid=101&SF=1#47845868101) Sub level folder  New location:  GE Box  [WTE RECORDS FROM 01.01.2018](https://ge.box.com/folder/45958884064?utm_source=trans&utm_medium=email&utm_campaign=collab%2Bauto%20accept%20user) |
| New equipment records (warranty, inspection records, material records etc.) | Quality |

# References, terms, definitions & acronyms

## References

| Number | Name | Training material & quiz |
| --- | --- | --- |
| [OGQ-0102](http://edms.pw.ge.com/dctmquality/home/components/drl/drl.jsp?objectId=0900f5ea8063d167&showRendition=true) | [O&G Record Control Procedure](http://edms.pw.ge.com/dctmquality/home/components/drl/drl.jsp?objectId=0900f5ea8063d167&showRendition=true) | [OGQ-0102TM](http://edms.pw.ge.com/dctmquality/home/components/drl/drl.jsp?objectId=0900f5ea8063d169&showRendition=true) |
| [OGQ-0116](http://edms.pw.ge.com/dctmquality/home/components/drl/drl.jsp?objectId=0900f5ea8063e586&showRendition=true) | [O&G Design & Development Procedure](http://edms.pw.ge.com/dctmquality/home/components/drl/drl.jsp?objectId=0900f5ea8063e586&showRendition=true) | [OGQ-0116TM](http://edms.pw.ge.com/dctmquality/home/components/drl/drl.jsp?objectId=0900f5ea8063e58a&showRendition=true) |
| QF-PER-032 | Discrepant Equipment Report |  |
| QF-PER-068 | WTE Inspection Form |  |
| QF-PER-070 | WTE Register |  |
| QW-FAC-PER-001 | Inwards Goods |  |
| **Global process controls for the management of WTE** | | |
| QW-SS-GLO-ENG-701 | Design of Pressure Testing Bunkers |  |
| QW-SS-GLO-ENG-702 | Design of Pressure Testing Pits |  |
| QW-SS-GLO-ENG-703 | Design Requirements & Inspection Criteria of Hydraulic Power Units |  |
| QW-SS-GLO-ENG-704 | Design Requirements & Inspection Criteria for Pressure Hoses |  |
| QW-SS-GLO-ENG-705 | Design Requirements & Inspection Criteria for Pressure Test Equipment |  |

## Terms, definitions & acronyms

Italicized terms have been defined in [BHGE QMS Lexicon](http://supportcentral.ge.com/@lexicon) for Terms, Definitions and Acronyms. In case of conflict the below table will take precedence.

| Acronym | Term | Definition |
| --- | --- | --- |
|  | Documentum | On-line data base for the control of QMS documents. |
| ePIMS |  | Part Information Management System |
| ID |  | Identification |
| ITP |  | Inspection and Test Plan |
| NC |  | Non-conformance |
| NDE |  | Non Destructive Examination |
| OFE |  | Oilfield Equipment |
| PO |  | Purchase Order |
| POR |  | Purchase Order Request |
| QC |  | Quality Control |
| QE |  | Quality Engineer |
| QMS |  | Quality Management System |
| SS |  | Subsea Services |
| WI |  | Work Instruction |
| WIP |  | Work in Progress |
| WTE |  | Workshop Test Equipment |

# Appendix

**Testing approved sticker to be applied on WTE**



ID No. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tested By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vendor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Test Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_