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| 1. ***All ITR documents to be completed & witnessed by competent person/s*** 2. ***Compliance to be achieved to contract requirements and all latest versions of applicable standards*** | |
| **1. REFERENCE INFORMATION** | |
| **INSPECTION DATA** | **ASSET DATA** |
| PROJECT NAME: | MANUFACTURER: |
| LOCATION: | MF SERIAL NO: |
| INSPECTION DATE: | WC FLER / TAG NO: |
| INSPECTOR NAME: | TYPE / MODEL NO / SIZE: |
| PROJECT / CONTRACT NO: | DESIGN CRITERIA: |
| ATTENDEES: | |

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| **2. INSPECTION PREPARATION** | | |
|  | OSH compliance requirements. |
|  | Obtain QA / QC documentation (review outstanding items). |
|  | Relevant Water Corporation standards. |
|  | Relevant Australian Standards. |
|  | Supporting contract documentation / approved drawings. |
|  | Provision of required test equipment. |
|  | Provision of required test reports and certificates; i.e. hydrostatic test, material certificates, etc. |

***\*Contents of Section 3 (Inspection) and Section 4 (Test) are Asset Specific and shall reflect relevant SPS / Australian Standard(s) where practicable. Entries shall also be worded to reflect the procedures involved in a step-by-step manner; i.e. “Conduct visual inspection and ensure pre-start photographs are taken”, “Extract bearing housing covers to expose bearings and full shaft length”.***

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| **3. INSPECTION** | | | **YES** | | | **NO** | | | **N/A** | | | **COMMENTS/DETAILS** |
| ***GENERAL*** | | | | | | | | | | | | |
| 1 | Locate and verify that name plate/label details match specification and contract requirements | |  | |  | | |  | | | Check:  Make/Model/Connection size/Serial number/Duty Flow/Duty Head/Speed/Impeller Diam/Seal model/NPSH3@duty/Duty Power/Year of Manufacture | |
| 2 | Casting and machined faces free of sharp edges, burrs and defects? | |  | |  | | |  | | |  | |
| 3 | Mating faces match marked and dowelled? | |  | |  | | |  | | |  | |
| 4 | Confirm if O&M Manuals have been provided (hardcopy / softcopy) | |  | |  | | |  | | | Hardcopy / softcopy? (please circle) | |
| ***MATERIALS AND ARRANGEMENT*** | | | | | | | | | | | | |
| 5 | Verify construction materials with material certs, specification and relevant drawings | |  | |  | | |  | | | |  |
| 6 | Confirm Major dimensions correct per drawing (eg. baseframe dimensions, hold down bolt spacing, shaft centreline and nozzle face positions)? | |  | |  | | |  | | | | Attach a copy of the pumpset drawing to this record sheet highlighting on the drawing which dimensions were checked. |
|  | ***Suction (Inlet) Nozzles*** | |  | |  | | |  | | | |  |
| 7 | - Flange standard correct? | |  | |  | | |  | | | | Flange face: FF / RF |
| 8 | - Diameter correct? | |  | |  | | |  | | | | Class: |
| 9 | - Pitch circle diameter correct? | |  | |  | | |  | | | | PCD: \_\_\_\_\_\_\_\_\_\_\_\_\_ mm |
| 10 | - Number and diameter of bolt holes correct? | |  | |  | | |  | | | | No.:\_\_\_\_\_\_\_\_\_\_ Dia.:\_\_\_\_\_\_\_\_\_\_ mm |
|  | ***Discharge (Outlet) Nozzles*** | |  | |  | | |  | | | |  |
| 11 | - Flange standard correct? | |  | |  | | |  | | | | Flange face: FF / RF |
| 12 | - Diameter correct? | |  | |  | | |  | | | | Class: |
| 13 | - Pitch circle diameter correct? | |  | |  | | |  | | | | PCD: \_\_\_\_\_\_\_\_\_\_\_\_\_ mm |
| 14 | - Number and diameter of bolt holes correct? | |  | |  | | |  | | | | No.:\_\_\_\_\_\_\_\_\_\_ Dia.:\_\_\_\_\_\_\_\_\_\_ mm |
|  | ***Baseframe and coupling guard*** | |  | |  | | |  | | | |  |
| 15 | Baseframe fully welded throughout? | |  | |  | | |  | | | |  |
| 16 | Holes in baseframe for grout distribution adequate? | |  | |  | | |  | | | |  |
| 17 | Coupling guard adequately covers rotating components? | |  | |  | | |  | | | |  |
| 18 | Alignment jacking screws fitted? | |  | |  | | |  | | | |  |
| 19 | Pump and motor half couplings machined and balanced? | |  | |  | | |  | | | |  |
|  | ***Appurtenances*** | |  | |  | | |  | | | |  |
| 20 | Pump casing, motor and baseframe lifting eyes suitably rated and fitted? | |  | |  | | |  | | | |  |
| 21 | Seal water piping, valves and cyclone separator (if applicable) fitted? | |  | |  | | |  | | | |  |
| 22 | Drain and vent piping, valves and tundish fitted? | |  | |  | | |  | | | |  |
| 23 | Pressure gauge tapping on inlet and outlet flanges fitted? | |  | |  | | |  | | | |  |
| 24 | Confirm bosses are provided for all tapping points in the pump casing | |  | |  | | |  | | | |  |
| 25 | Bearing grease nipples installed and accessible? | |  | |  | | |  | | | |  |
| 26 | Bearing housing temperature and vibration sensor mounting holes drilled and tapped? | |  | |  | | |  | | | |  |
|  | ***Alignment*** | |  | |  | | |  | | | |  |
| 27 | Manufacturer’s shop alignment acceptable? | |  | |  | | |  | | | | Attach record of alignment to this sheet. |
| **4. TEST** | | **PASS** | | **FAIL** | | | **N/A** | | | **COMMENTS/DETAILS** | | |
| 1 | Confirm Material certificates are acceptable |  | |  | | |  | | |  | | |
| 2 | Confirm Rotating element balance certificate meets required grade |  | |  | | |  | | |  | | |
| 3 | Confirm Hydrostatic test certificates are acceptable against contract and specification requirements |  | |  | | |  | | |  | | |
| 4 | Confirm Performance test results verify duty guarantees and testing undertaken to relevant AS/ISO standards |  | |  | | |  | | |  | | |
| 5 | Confirm Vibration test results meet contract and specification requirements |  | |  | | |  | | |  | | |
| 6 | Confirm Noise level test results meet contract and specification requirements |  | |  | | |  | | |  | | |

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| **5. REMARKS / REMEDIAL / FOLLOW UP ACTIONS** | **ACTION BY** | **TARGET DATE** | **STATUS** |
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| **6. MECHANICAL SIGNOFFS** | | | |
| NAME (PRINT) | COMPANY / ROLE | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | SIGNATURE | DATE |

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| **7. COATINGS INSPECTION** | | **YES** | **NO** | **N/A** | **COMMENTS/DETAILS** |
| 1 | Verify coating system and specification ensuring that product is approved for purpose.  Confirm internal coating is potable water approved. |  |  |  |  |
| 2 | Consider if ambient conditions are acceptable for holiday testing[[1]](#footnote-1). Surface temperature should be least 3ºC above dew point and relative humidity less than 85 % before testing. Surface dry and clean for holiday testing. |  |  |  |  |
| 3 | Check internal coating type and verify in accordance with relevant specification (circle D1: Epoxy Coating on Steel/Cast Iron or state, A1: Surface Preparation. |  |  |  | A1/ D1 / OTHER \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 4 | Conduct ²dry film thickness (DFT) measurements in at least 10 locations and record values in tables below. |  |  |  |  |
| 5 | Visually inspect condition of **internal and external coating appearance** including uniformity, colour and free from runs, sags, and inclusions. |  |  |  |  |
| 6 | Carry out spark test on **internal coating** in accordance to AS/NZS 3894.1 Continuity testing of non-conductive coating – High Voltage (brush) method. Specify voltage at which test is carried out. |  |  |  | Test Voltage: V  Pass  Fail |
| 7 | Carry out spark test on **external coating** accordance to AS/NZS 3894.1 Continuity testing of non-conductive coating – High Voltage (brush) method. Specify voltage at which test is carried out. |  |  |  | Test Voltage: V  Pass  Fail |
| 8 | Valve passes coating condition assessment in accordance with a forementioned tests and inspection. |  |  |  |  |

*Refer to AS/NZS 1627 series for Metal Finishing – Preparation and Pre-treatment of Surfaces*

*2 Refer to AS/NZS 3894.3 methods for Determination of Dry Film Thickness*

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| **7a. INTERNAL INSPECTION** (Microns - DFT) | | | |
| NUMBER OF READS (10) | HIGH | LOW | AVERAGE |
|  |  |  |  |
|  |  |  |  |
| Comments |  | | |

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| **7b. EXTERNAL INSPECTION** (Microns - DFT) | | | |
| NUMBER OF READS (10) | HIGH | LOW | AVERAGE |
|  |  |  |  |
|  |  |  |  |
| Comments |  | | |

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| **7c. FLANGE INSPECTION** (Microns - DFT) | | | |
| NUMBER OF READS (10) | HIGH | LOW | AVERAGE |
|  |  |  |  |
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| Comments |  | | |

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| **7d. REMARKS / REMEDIAL / FOLLOW UP ACTIONS** | **ACTION BY** | **TARGET DATE** | **STATUS** |
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| **7e. COATING SIGNOFFS** | | | |
| SUPPLIER NAME (PRINT) | COMPANY / ROLE | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | SIGNATURE | DATE |

**POST TRANSPORTATION INSPECTION**

* **Inspection to be completed at point of delivery**
* **If a supply verification was not completed at the manufacturer, both supply verification and post transportation inspection should be completed at point of delivery.**

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| **8. POST TRANSPORTATION REMARKS / REMEDIAL / FOLLOW UP ACTIONS** | **ACTION BY** | **TARGET DATE** |
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| **9. SIGNOFFS** | | | |
| NAME (PRINT) | COMPANY / ROLE | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | SIGNATURE | DATE |

1. [↑](#footnote-ref-1)