

TUBE BUNDLES BIDDERS QUESTIONS

NO.	QUESTION	RESPONSE
1.	a) With regards to the Hydro Testing, there are 3x Hydro Tests required per bundle. Test no.1: initial shell side test performed with custom made Test Gland (identify tube leaks and integrity of tube to tube sheet welding). Test no.2: perform Tube Side test. Test no.3: final shell side test (with existing Bonnet/Channels).	Yes all hydro tests must be completed.
2.	b) These units are 'piggy-back' exchangers. We advise to Hydro Test these units individually. Existing Shells and attachments are being used hence there will not be an issue with the tie-in nozzles upon piggy backing the exchangers. Please advise if we can hydro test the exchangers/tube bundles individually.	Yes the units must be hydro test individually.
3.	c) A.I.A.: Transnet confirms that they will provide A.I.A. for the Hydro Test. Will Transnet provide A.I.A. during the manufacturing stages or will this be for the contractors scope.	Transnet AIA will perform the following activities: 1. Signed off Quality Control Plan. 2. Verify Material Identification 3. Fit up and dimensions verification. 4. Visual inspection of welds and witness NDT 5. Witness pressure testing