







Plant MRPL Mangalore		Client MRPL	Contract Code WSS for PFCC Flue Gas	Document ID 6723-LEX-G00-EC-0001-A208	Contract No. 66-6723					
<div></div>		Indicative Inspection and Test Plan(IITP) for PFA Lined Ball & Plug Valves			<div></div>					
Sr. No.	Component / Operation	Stage Description	Characteristics	Reference Std.	Acceptance Std.	Format of Record	Inspection			PMC / Owner
							Vendor	LSTK Contractor	TPIA	

The tests indicated are general minimum requirements of tkIS India. All Tests, as applicable, have to be performed as specified in the Order, Order Attachments, Codes, tkIS India Specifications, Licensor's Specifications and Standards. In case of discrepancies between the Indicative Inspection Test Plan and the workshop documents Approved / Reviewed by LSTK Contractor, the latter shall apply. The Manufacturer shall be responsible for the required Tests to be performed and for the Inspector to be invited in due time to witness the Tests. The Manufacturer shall try to perform as many individual Tests as possible on same day, provided that the fabrication process permits such a procedure

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A	QAP Approval					Endorse	Prepare	A	A
1	Raw material	Forgings, Castings for Body, End Piece, Cover Ball/Plug	Visual	MSS-SP-55, ASME B16.34, Material Specification	MSS-SP-55, ASME B16.34, Material Specification	Inspection report	H	H	--
			Dimensions	Drawing	Drawing	Inspection report	H	--	--
			Steel making process, heat treatment, Chemical, mechanical properties, NDE (RT, DP, MT, Hardness as applicable) etc. IGC for SS material	Order Specification, Relevant ASTM Std. & Approved drawing	Order Specification, Relevant ASTM Std. &Approved drawing	Foundry test certificate RT – Film review by LSTK, TPIA	R	R	--
		Lining Material (PFA, ETFE, FEP ,Rubber)	Chemical, mechanical properties, etc.	Order Specification, Relevant ASTM Std. &Approved drawing	Manufacture r's test certificate	R	R	--	
		Fasteners	Chemical, mechanical properties, heat treatment etc.	Order Specification, Relevant ASTM Std. &Approved drawing	Manufacture r's test certificate	R	R	--	

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2	In process	Machined Components	Visual & dimension	Drawing	Drawing	Inspection report	H	--	--	--
3	Final inspection	Strip test (1% of offered qty.)	Visual	Drawing, order specification	Drawing, order specification	Inspection report	H	H	H	--
		Visual	Workmanship / Finish	MSS-SP-55, ASME B16.34, Specification	MSS-SP-55, ASME B16.34, Specification	Inspection report	H	100% H	100% H	--
		Dimensions	Measurement & check	Approved drawing, Order spec	Approved drawing, Order spec	Inspection report	H	H*	H*	--
		Pressure test (shell, high pressure closure & low pressure closure tests) & Functional Test	Leak Tightness	Applicable testing std./approved drawing.	Applicable testing std./approved drawing.	Inspection report	H	H*	H*	--
		Helium and cryogenic test as applicable	Conformance to requirements	Drawing, order specification	Drawing, order specification	Test report	H	H-100%	H-100%	--
		Spark test	Visual	Applicable testing std./approved drawing.	Applicable testing std./approved drawing.	Inspection report	H	H*	H*	--

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		Marking details	Visual	Approved drawing.	Approved drawing	Inspection report	H	100% H	100% H	--
4	Inspection before despatch	Surface preparation & painting, pickling and passivation, colour coding.	Paint DFT, shade etc	Applicable std., specification	Applicable std., Order specification	Inspection report	H	H	R	--
		100% Stamping by LSTK Contractor & TPIA and issue of Inspection Release Note.	Review of Documents	Drawings & order specification	Drawings & order specification	Inspection report	H	H	H	--
		Packing	Visual	Order specification, manufacturer's std.	specification, manufacturer's std.	Internal records, packing slip	H	R	R	--
5	Inspection documentation & Issue of Inspection of Release Note	Valve Test reports, Material Test Certificate	Review of Documents	100%	As per Applicable Material & Order Specifications	Conformance to Codes & Order Specification	IRN, MTC With back up reports	P	H	R
6	Final documentation on Despatch Clearance.	Compilation of final documents	Verification for completeness	Purchase Order	Purchase Order, Order specification	Dossier	R	H	--	H

