

BHARAT HEAVY ELECTRICALS LIMITED BHOPAL
INSPECTION QUALITY PLAN FOR TRANSFORMER OIL PUMP.

QA PLAN NO:QC/TCB/QAP-BO/01

REV.02

DATE:23/01/2017

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SL NO.	STAGE	CHARACTERISTICS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	FORMAT OF RECORD	AGENCY	REMARKS
1	Visual Inspection	<u>Check</u> All fittings, Paint, Flange Drilling, Name plate details, Blanking, Terminal marking, dimensions, orientation of delivery, Mounting, Direction marking for oil flow / rotation, ZPP of hardware	V/M	100%	TR10023P Clause 2, 4, 5, 6 and 9 / Approved data sheet	TR	BHEL/ TPIA	CHP (Visual and dimensional check)
2	Material T.C.Review	TC for raw material: i)Casting ii) Impellor iii) Shaft	V	100%	TR10023P/Approved data sheet	TC	BHEL/ TPIA	Foundry reports and lab reports to be submitted for review. Proper correlation of TC with material.
3	Final Tests	Starting voltage and current test	T	One machine each type per P.O.	TR10023P Cl.8./Approved data sheet	TC	BHEL/ TPIA	CHP (witnessing)
		<u>Routine Tests</u> a) Oil Pr. Test b) IR Test c) HV test d) No Load Running e) Locked Rotor Tests f) Performance Test curve for i) Q Vs Head ii) Q Vs Power	T	20%	TR10023P Cl.7.1/Approved data sheet	TC	BHEL/ TPIA	CHP(witnessing) Internal inspection reports for all pumps to be reviewed.
4	Type Test	<u>Type Test</u> a) Vacuum Test b) Oil Pr. Test c) Temp. Rise Test d) IP-55 Test for terminal box (Not more than 5 years)		1 out of 20 or more pumps.	TR10023P ✓ Cl.8.0/Approved data sheet	TC	BHEL/ TPIA	Type Test to be conducted and witnessed for Lot size more than 20 Pumps. If Lot size less than 20 pumps report of type test conducted not more than 5 years ago on similar design pumps shall be reviewed.
5	Packing and Dispatch	Packing	V	100%	-	-	Supplier	

V – visual, M– measurement, T–test, TPIA- third party inspection agency appointed by BHEL., CHP-customer hold point (vendor can not proceed without getting clearance from BHEL/TPIA.), Latest Revision of BHEL product standard TR 10023 P shall be applicable.

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