

MANUFACTURER'S NAME AND ADDRESS:		MANUFACTURING QUALITY PLAN						PROJECT : Vishnugad Pipalkoti HEP						
		ITEM: PTFE Thrust bearing pads		QP NO. : QA/HG/PTFE/VPHEP REV NO. : 00		DATE 10.09.2019 PAGE : 01 of 01		PACKAGE : Electro mechanical CONTRACT NO. : MS1140502 PO NO. :		MAIN SUPPLIER : BHEL, Bhopal				
SL.NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK** M B		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD*		AGENCY** M B N			REMARKS
1	2	3	4	5	6		7	8	9	10	11			12
1.1) RAW MATERIAL														
a)	Steel- based	Chemical & Mechanical analysis including carbon equivalent	MAJ	Chem./Mech.	Sample	Sample	As per drawing.	As per drawing.	TC	-	V	V	-	
b)	PTFE	Chemical/Mechanical analysis	MAJ	Chem./Mech.	sample	sample	Manufacturer document	Manufacturer document	TC	-	V	V	-	
1.2) MACHINED COMPONENTS IN PROCESS														
a)	Steel-based	Dimensional	MAJ	MEAS	100%	100%	As per drawing.	As per drawing.	RR	√	P	V	-	
		Ultrasonic test	MAJ	Mechanical	100%	100%	As per drawing.	AA0850118 (BHEL)	RR	√	P	V	V	
b)	PTFE	Dimensional, preparation and its Coating on Steel Base	MAJ	MEAS	100%	100%	Manufacturer document	Manufacturer document	RR	-	P	V	-	
c)	PTFE thrust bearing pads	Dimensional & Flatness of the pad surface	MAJ	MEAS	100%	100%	As per drawing.	As per drawing.	RR	√	P	V	-	
		Bonding of PTFE with steel base	MAJ	Mechanical	100%	100%	Manufacturer document	Manufacturer document	TC	√	P	W	V	by UT/ DPT/ Shear test
1.3) FINAL INSPECTION														
a)	Over all dimensions	Dimensional	MAJ	MEAS	100%	100%	As per drawing.	As per drawing.	RR	√	P	W	V	
b)	Visual checks (Measurement)	Mfg. defects i.e blow holes, cracks, adhesion and thickness	MAJ	VISUAL	100%	100%	Manufacturer document	Manufacturer document	RR	-	P	W	V	
		Flatness, Surface finish check (PTFE Face & base metal)	MAJ	MEAS	100%	100%	As per drawing.	As per drawing.	RR	√	P	W	V	
1.4) FINAL INSPECTION AT BHEL BHOPAL (REPEAT TEST)														
a)	Over all dimensions	Dimensional	MAJ	MEAS	100%	100%	As per drawing.	As per drawing.	RR	√	-	W	W	
b)	UT	UT of base metal	MAJ	UT	100%	100%	As per specification	As per specification	TC	√	-	W	W	
c)	DPT	DPT of top surface of PTFE pad	MAJ	VISUAL	100%	100%	As per specification	As per specification	RR	√	-	W	W	
d)	Surface finish	Surface finish check (PTFE Face & base metal)	MAJ	MEAS	100%	100%	As per drawing.	As per drawing.	RR	√	-	W	W	
		LEGEND: * Records, indentified with "Tick" (√) shall be essentially submitted by supplier in QA documentation. ** M: Manufacturer/Sub-supplier, B: BHEL/BHEL nominated inspection agency and N: THDC. P: Perform, W: Witness and V: Verification as appropriate. RR: Review of record. CHP: THDC shall identify in column "N" as "W".								CATEGORY:				
MANUFACTURER / SUB-SUPPLIER SIGN.		MAIN SUPPLIER SIGN.				FOR THDC USE				REVIEWED BY SIGN.		APPROVED BY SIGN.		