

				MANUFACTURING QUALITY PLAN						PROJECT :.....				
				ITEM : Quality Plan		QP NO: .....		CONTRACT NO :						
						DATE: .....		Rev No: .....		MAIN-SUPPLIER: .....				
SR. NO	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY		REMARKS	Comment	
1	2	3	4	5	6	7	8	9	D*	M	C	N	** 10.	
	<b>SILO</b>	Visual Defects, Dimensions	Major	Visual , Measurement Test	100% 100%	Approved Drawing/ Inspection Report	No Structural damage and As per Approved Drawing	Approved Drawing/ Inspection Report	✓	P	V	V		
		MOC	Major	Material Inspection	100% 100%	Manufacturer's Test Certificate	As per Manufacturer's Test Certificate	Manufacturer's Test Certificate	✓	P	W	V		
		Capacity (m³)	Major	Measurement	100% 100%	Approved Drawing	As per Approved Drawing	Approved Drawing	✓	P	W	V		
		Tank Leakage Test	Major	Leakage & Seepage Test (For 24 hrs)	100% 100%	Inspection Report	No Leakage / Seepage allowed	Inspection Report	✓	P	W	V		
	<b>STRUCTURAL FABRICATION</b>		Visual Defects	Minor	Visual	100% 100%	Inspection Report	No Structural damage	Inspection Report	✓	P	W	V	
		Dimension	Minor	Measurement	100% 100%	Approved Drawing	As per Approved Drawing	Approved Drawing	✓	P	W	V		
		MOC/Physical Properties	Minor	Material Inspection	100% 100%	Approved Drawing / Manufacturer's Test Certificate	As per Approved Drawing and Manufacturer's Test Certificate	Approved Drawing/ Manufacturer's Test Certificate	✓	P	W	V		
		Welding	Minor	Visual	Min 10% Min 10%	Inspection Report	As per IS 822-1970	Inspection Report	✓	P	W	V		
	<b>WEIGHBIN</b>		Visual Defects	Minor	Visual	100% 100%	Inspection Report	No Structural damage	Inspection Report	✓	P	W	V	
		Dimension	Minor	Measurement	100% 100%	Approved Drawing	As per Approved Drawing	Approved Drawing						
		Physical Properties	Minor	Material Inspection	100% 100%	Manufacturer's Test Certificate	As per Manufacturer's Test Certificate	Manufacturer's Test Certificate						
	<b>SUN &amp; PLANETRY MIXER</b>		Visual Defects, Dimension	Major	Visual , Measurement Test	100% 100%	Approved Drawing/ Inspection Report	No Structural damage and As per Approved Drawing	Approved Drawing/ Inspection Report	✓	P	W	V	
		MOC/Physical & Chemical Properties	Major	Material Inspection	100% 100%	Approved Drawing/Manufacturer's Test Certificate	As per Approved Drawing and Manufacturer's Test Certificate	Approved Drawing/Manufacturer's Test Certificate/Inspection Report	✓	P	W	V		
		Capacity	Major	Measurement test	100% 100%	Approved Drawing	As per Approved Drawing	Approved Drawing	✓	P	W	V		
		Tank Leakage Test	Major	Leakage & Seepage Test (For 24 hrs)	100% 100%	Inspection Report	No Leakage / Seepage allowed	Inspection Report	✓	P	W	V		



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					M	C / N			9	D*	M	C	N		
1	2	3	4	5	6	7	8	9	D*	** 10.	M	C	N	11	
	<b>ATTRITION MIXER</b>	Visual Defects, Dimension	Major	Visual , Measurement Test	100%	100%	Approved Drawing/ Inspection Report	No Structural damage and As per Approved Drawing	Approved Drawing/ Inspection Report	✓	P	W	V		
		MOC/Physical & Chemical Properties	Major	Material Inspection	100%	100%	Approved Drawing/Manufacturer's Test Certificate	As per Approved Drawing and Manufacturer's Test Certificate	Approved Drawing/ Manufacturer's Test Certificate/Inspection Report	✓	P	W	V		
		Capacity	Major	Measurement test	100%	100%	Approved Drawing	As per Approved Drawing	Approved Drawing	✓	P	W	V		
		Tank Leakage Test	Major	Leakage & Seepage Test (For 24 hrs)	100%	100%	Inspection Report	No Leakage / Seepage allowed	Inspection Report	✓	P	W	V		
	<b>Electric Overhead Travel (EOT) Crane</b>	Load Test	Major	Load Test verification at 100% load	100%	100%	Inspection Report/Manufacturer's Test Certificate	As per Manufacturer's Test Certificate and Inspection Report	Manufacturer's Test Certificate/Inspection Report	✓	P	W	V		
		Overload test	Major	At 125% load	100%	100%	Manufacturer's Test Certificate/ Inspection Report	As per Manufacturer's Test Certificate and Inspection Report	Manufacturer's Test Certificate/Inspection Report	✓	P	W	V		
	<b>MCC Panel</b>	Visual , Overall Dimension	Major	Verification	100%	100%	Approved Drawing/Data Sheets/Inspection Report	No Sturctural damage and As per Approved Drawing and Inspection Report	Inspection Report	✓	P	W	V		
		Continuity and Functional Testing or Type Testing	Major	Panel Testing (Panel and Interlock testing - with forced signal where ever possible )	100%	100%	Inspection Report	As per Inspection Report	Inspection Report	✓	P	W	V		
	<b>PLC Panel</b>	Visual , Overall Dimension	Major	Verification	100%	100%	Approved Drawing/Data Sheets/Inspection Report	No Sturctural damage and As per Approved Drawing and Inspection Report	Inspection Report	✓	P	W	V		
		Continuity and Functional Testing or Type Testing	Major	Panel Testing (Panel and Interlock testing - with forced signal where ever possible )	100%	100%	Inspection Report	As per Inspection Report	Inspection Report	✓	P	W	V		
		Type Testing	Major	Verification	100%	100%	Inspection Report	As per Inspection Report	Inspection Report	✓	P	W	V		
	<b>Raw Material: Plate ,Pipes, Flanges,Fittings</b>	Physical Properties	Minor	Material Inspection	100%	100%	Manufacturer's Test Certificate/ Inspection Report	As per Manufacturer Test Certificate and Inspection Report	Manufacturer's Test Certificate/Inspection Report	✓	P	V	V		



Revised

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					M	C / N					M	C	N		
1	2	3	4	5	6		7	8	9	D*	** 10.			11	
	Instruments (pH, turbidity, level transmitter, pressure gauge, electromagnetic flow meter, energy meter)	Routine Test/Visual	Minor	Verification	100%	100%	Manufacturer's Test Certificate/Calibration Certificate	As per Manufacturer's Test Certificate and Calibration Certificate	Manufacturer's Test Certificate/Calibration Certificate	✓	P	V	V		
	Pump- Motor Assembly														
	Pump- Motor Assembly	Alignment	Minor	Balancing of assembly	100%	100%	Approved Drawing/ Manufacturer's Test Certificate/ Inspection Report	As Per Approved Drawing and Manufacturer's Test Certificate	Manufacturer's Test Certificate/Inspection Report	✓	P	V	V		
	Dry Run Test	Abnormal Noise and Vibration	Minor	Abnormal Noise and Vibration Test	100%	100%	Inspection Report	As per Inspection Report	Inspection Report	✓	P	V	V		
	Motors	General visual checks for assembled motor ( Name plate data, Terminal box location, gasketing, mounting and critical dimensions), make	Minor	Visual and Overall Dimension	100%	100%	Approved Drawing/Data Sheets/Manufacturer's Test Certificate/ IS 12615 / IS 15999	Approved Drawing/Data Sheets/Manufacturer's Test Certificate/ IS 12615 / IS 15999	Manufacturer's Test Certificate/Inspection Report	✓	P	V	V	Suggested list of motors manufacturer: 1. Laxmi hydraulics. 2. Marathon. 3. CGL. 4. ABB. 5. Siemens. 6. BHEL. 7. Bharat Bijlee	
		Motor type test	Minor	Verification	100%	100%	Manufacturer's Test Certificate/ IS 12615 / IS 16000	Manufacturer's Test Certificate/ COC/IS 12615 /IS 16000	Manufacturer's Test Certificate	✓	P	V	V		
	Pumps														
		Make, Model	Minor	Verification	100%	100%	Data Sheet	As per Data Sheet	Data Sheet	✓	P	V	V	All the sets should have test certificate.	
		Pump type test	Minor	Verification	100%	100%	Manufacturer's Test Certificate	As per Manufacturer's Test Certificate	Manufacturer's Test Certificate	✓	P	V	V		
	Electrical and Instrument Cable	Visual Defects	Minor	Visual	100%	100%	Inspection Report	As per Inspection Report	Inspection Report	✓	P	V	V		
	Air Blower	Make, Model,	Minor	Verification	100%	100%	Data Sheet	As per Data Sheet	Data Sheet	✓	P	V	V		



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					M	C/N				M	C	N		
1	2	3	4	5	6		7	8	9	D*	** 10.		11	
		Blower type test	Minor	Verification	100%	100%	Manufacturer's Test Certificate	As per Manufacturer's Test Certificate	Manufacturer's Test Certificate	✓	P	V	V	
	Documentation	Verification of completion of inspection and test records	Major	Verification of completion of inspection and test records	100%	100%	Dossier	As per approved MQP stages	Dossier	✓	---	P	V	

Legends :- Records identified with "tick" (✓) shall be essentially included by supplier in QA documentation. D:DOCUMENTATION  
M\*\*:MANUFACTURER/SUB-SUPPLIER  
C:MAIN SUPPLIER  
N: NTPC Ltd.  
P:PERFORM  
W: WITNESS  
V:VERIFICATION.  
IR: Inspection report,  
MTC: Material testing certificate  
TC: Test certificate

