

Field Quality Assurance Deptt.

REFERENCE QUALITY PLAN

National Capital Power Station
Vidyutnagar - 201 008.

ITEM:-

CAT:- I

MANUFACTURER'S NAME AND ADDRESS:			ITEM / EQUIPMENT: SINTERCAST GRINDING ROLLS FOR XRP-1003 MILLS		QP NO: REV:00 Date:		Signature of manufacturer:		TO BE FILLED UP BY N.T.P.C.	
			SUB-SYSTEM:		Page 1 OF 2		Valid upto:		WITNESSED BY:	
Sl. #	Components and Operations	Characteristics	Class	Type of check	Quantum of check		Reference Document	Acceptance Norms	Format of records	AGENCY
					M	C/N				M C N
1	2	3	4	5	6		7	8	9	** 10
4	FINAL INSPECTION- FINISHED SINTERCAST INSERTED ROLL									
4.1	Finished rolls	Visual	Major	Visual inspection	Each Roll		approved std.	Inspection report	P	W W
		Dimensions	Major	Measurement	Each Roll	10% Random	approved std.	Inspection report	P	W W
		Hardness test	Major	Hardness	Each roll- One insert/ roll)	10% Random	approved std.	Inspection report	P	W W
		Bore surface contact	Major	Blue match	Each roll	10% Random	Min 85% of area	Inspection report	P	W W
		Identification & Painting	Major	Verification	Each roll		roll sr no to be punched on non wearing surface	Inspection report	P	V
LEGEND : * RECORDS IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION ** MANUFACTURER/ SUBCONTRACTOR, C: MAIN SUPPLIER, N: NTPC P: PERFORM, W: WITHNESS AND V: VERIFICATION- REVIEW, AS APPROPRIATE CHP NTPC SHALL IDENTIFY IN COLUMN "N" Note: #NTPC inspection engineer to check approval date of reference Document viz a viz approval date of RQP at the time of inspection										

- 1) This is only a REFERENCE QUALITY PLAN prepared for Sinter cast Type GRs only. Vender has to submit their own quality plan prepared in line with this format applicable for their particular design and manufacturing standards with their internal reference and must be submitted for NTPC approval before manufacturing.
- 2) All relevant code / document to be arranged by party at the time of PDI.

FQA Signature

[Signature]

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Doc. Z&P. 10000251716

REFERENCE QUALITY PLAN

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1	2	3	4	5	6		7	8	9	*	** 10		11
1	RAW MATERIALS												
1.1	Moulding sand	Physical	Minor	Size distribution	Each batch		approved std.	Lab Rreport		P			
1.2	Ferro alloys	Chemical	Major	Melting recovery	Each batch		supplier's std	Lab Rreport		P			
1.3	Scrap	Chemical	Minor	Melting recovery	Each batch		approved std.	Lab Rreport		P			
2	INPROCESS INSPECTION- INSERTS FOR SINTERCAST GRINDING ROLLS												
2.1	Melting	Temp. control	Critical	Measurement	Each heat		approved std.	log sheet		P			
		Chemical test	Critical	Chemical Analysis	Each melt		approved std.	test report		P	V	V	
		Pouring	Critical	Obervation	Each melt		approved std.	log sheet		P			
2.2	Insert casting	Visual	Critical	Obervation	Each insert		approved std.-note 4	test report		P			
3	INPROCESS INSPECTION- SINTERCAST INSERTED ROLL CASTINGS												
3.1	Melting	Temp. control	Critical	Measurement	Each melt		approved std.	log sheet		P			
		Chemical test	Critical	Analysis	Each melt		approved std.	test report		P	V	V	
		Pouring	Critical	Obervation	Each melt		approved std.	log sheet		P			
3.2	Roll casting	Heat treatment	Critical	Obervation	Each batch		approved std.	h/t chart		P	V	V	
		Visual	Critical	Obervation	Each Roll		approved std.	test report		P			
		Microstructure	Critical	Microstricture	1 sample per heat		approved std.	test report		P	V	V	
		Hardness	Major	Hardness	Each H/T Batch		approved std.	test report		P	V	V	

Reference Quality Plan.

MANUFACTURER'S NAME AND ADDRESS:		ITEM / EQUIPMENT: SINTERCAST BULL RING FOR XRP-1003 MILL		QP :		Signature of manufacturer:	TO BE FILLED UP BY N.T.P.C.					
				REV:00	Date:		QP:	Rev. 00	Date :			
		SUB-SYSTEM:		Page 1 OF 2		Valid upto:	REVIEWED BY:		WITNESSED BY:			
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					M C N				M C N			
1	2	3	4	5	6	7	8	9	*	** 10		11
1 RAW MATERIALS												
1.1	Moulding sand	Physical	Minor	Size distribution	Each batch	Approved Standard	Lab record	P				
1.2	Ferro alloys	Chemical	Major	Melting recovery	Each batch	Supplier Standard	Lab record	P				
1.3	Scrap	Chemical	Minor	Melting recovery	Each batch	Approved Standard	Lab record	P				
2 INPROCESS INSPECTION												
2.1	Melting	Temp. control	Critical	Measurement	Each heat	Approved Standard	Log sheet	P	V			
		Chemical test	Critical	Chemical Analysis	Each melt	Approved Standard	Test report	P	V	V		
		Pouring	Critical	Obervation	Each melt	Approved Standard	Log sheet	P				
2.2	BRS castings	Heat treatment	Critical	Obervation	Each H/T batch	Approved Standard	H/T chart	P	V	V		
		Microstructure	Critical	Microstricture	01 sapmle /H/T batch	Approved Standard	H/T chart	P	V	V		
3 FINAL INSPECTION AND TESTING												
3.1	BRS castings	Visual	Critical	Visual	100%	Approved Standard	TC	P	W	W		
		Dimensional- trial assembly	Critical	Assembly on test bowl	100% 10% random	Drg approved by main supplier	TC	P	W	W		10%random by NTPC
		Hardness test	Critical	Measurement	100% 10% random	Approved Standard	TC	P	W	W		10%random by NTPC
3.2	BRS castings	Identification	Major	Verification	Each set	sr no & set no will be painted on working face of each casting of	Inspection Report	P	V			
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1) This is only a REFERENCE QUALITY PLAN prepared for Sinter cast Type Bull rings only. Vender has to submit their own quality plan prepared in line with this format applicable for their particular design and manufacturing standards with their internal reference and must be submitted for NTPC approval before manufacturing. 2) All relevant code / document to be arranged by party at the time of PDI.												
 FQA Signature						 Indenter Signature (S.C. MISHRA)						

Doc. ZQP:10000252579

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