



	<b>ITEM</b> (MATERIAL, CLASS, GRADE, RATING, RANGE, SIZE ETC.)  <b>CASTABLE REFRACTORY</b>  (FOR BOILER APPLICATIONS)	<b>STANDARD QUALITY PLAN</b>  CONFIRMING TO CODE:	<b>QP NO.:</b> 0000-999-QOM- S -061 <b>REV. NO:</b> 01 <b>DATE :</b> 01/12/2016 <b>PAGE 1 OF 1</b> <b>VALID UPTO :</b> 30/11/2019	<b>REVIEWED BY:</b> D DAS  S S MISHRA  K.K.CHATTOPADHYAY 	<b>APPROVED BY:</b> K K OJHA 

S I N O	COMPONENT & OPERATION	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY			REMARKS
					M	C/N				D*	M	C	N	
1	2	3	4	5	6		7	8	9		** 10			11
<b>1.0</b>	<b>Raw Materials</b>													
1.1	Calcined Material	Chemical Properties	Major	Lab analysis	1/ Batch	1/ Batch	As per supplier/ manufacturer standard	MTC			V	-	-	
1.2	Cements	Chemical Properties	Major	Lab analysis	1/ Batch	1/ Batch	As per supplier/ manufacturer standard	MTC			V	-	-	
<b>2.0</b>	<b>In-process Inspection</b>													
2.1	Aggregate Mixture	Physical properties	Major	Lab analysis	1/ Batch	1/ Batch	As per supplier/ manufacturer standard	MTC			P	V	-	
2.2	Grog size	Physical properties	Major	Lab analysis	1/ Batch	1/ Batch	As per supplier/ manufacturer standard	MTC			P	V	-	
<b>3.0</b>	<b>Final Inspection</b>													
3.1	Chemical composition	Chemical properties	Major	Lab analysis	As per IS:10570	As per IS:10570	IS:1527/IS:10570/NTPC Tech.Spec	IS:1527/IS:10570/ NTPC Tech.Spec./Purchase Specification	MTC		P	V	V	See Note-1
3.2	Bulk Density and Cold Crushing Strength	Physical properties	Major	Lab analysis	As per IS:10570	As per IS:10570	IS:10570/ NTPC Tech.Spec	IS:10570/NTPC Tech.Spec /Purchase Specification	MTC		P	W	W	See Note-1
3.3	Firing Shrinkage, Permanent Liner Change and Pyrometric cone equivalent	Thermal Test	Major	Lab analysis	As per IS:10570	As per IS:10570	IS:10570/ NTPC Tech.Spec	IS:10570/ NTPC Tech.Spec /Purchase Specification	MTC		P	W	W	See Note-1
4.0	Packing & Identification	Protection	Major	Visual	100%	100%	As per Purchase Specification	As per Purchase Specification	-		P	V	-	See Note-2

LEGEND: MTC – Mfg. Test Certificate

Note 1 - The Purchase Specification must include acceptance norms/values in accordance with the recommendations of the Original Boiler Manufacturer/Supplier.

Note 2: The following shall be legibly printed on the Hessian bags for proper identification: Suppliers name, Customer No./Project, Purchase Order Number and Manufacturing Date, Batch Number, Material name and net weight in Kgs with proper instruction for handling.

Note 3: All review documents shall be submitted during witness/final inspection to Main Contractor-QC/Main Contractor Authorized Inspection Agency/NTPC.

Note 4: The grade/type of Castable refractory shall be as per NTPC Purchase Specification.

Note 5: The latest revisions/year of issue of all the IS indicated in the SQP shall be referred.

Note 6: This QP is valid for material procured from NTPC approved vendors.

**LEGEND:** \* RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.  
 \*\* M: MANUFACTURER / SUB-SUPPLIER C: MAIN SUPPLIER, N: NTPC P: PERFORM W: WITNESS AND V: VERIFICATION.  
 AS APPROPRIATE, CHP: NTPC SHALL IDENTIFY IN COLUMN "N" AS 'W'.