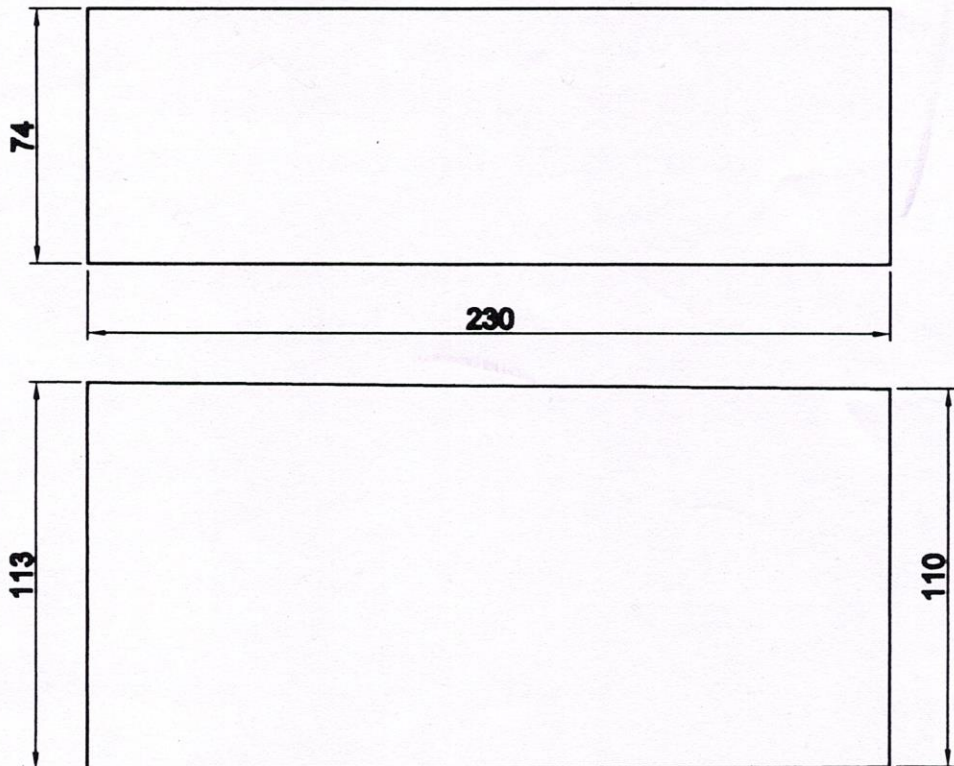


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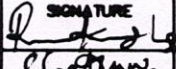
ALL DIMENSIONS ARE IN MM

REV	DATE	ALTERED
01		CHECKED
		APPROVED



NOTES:

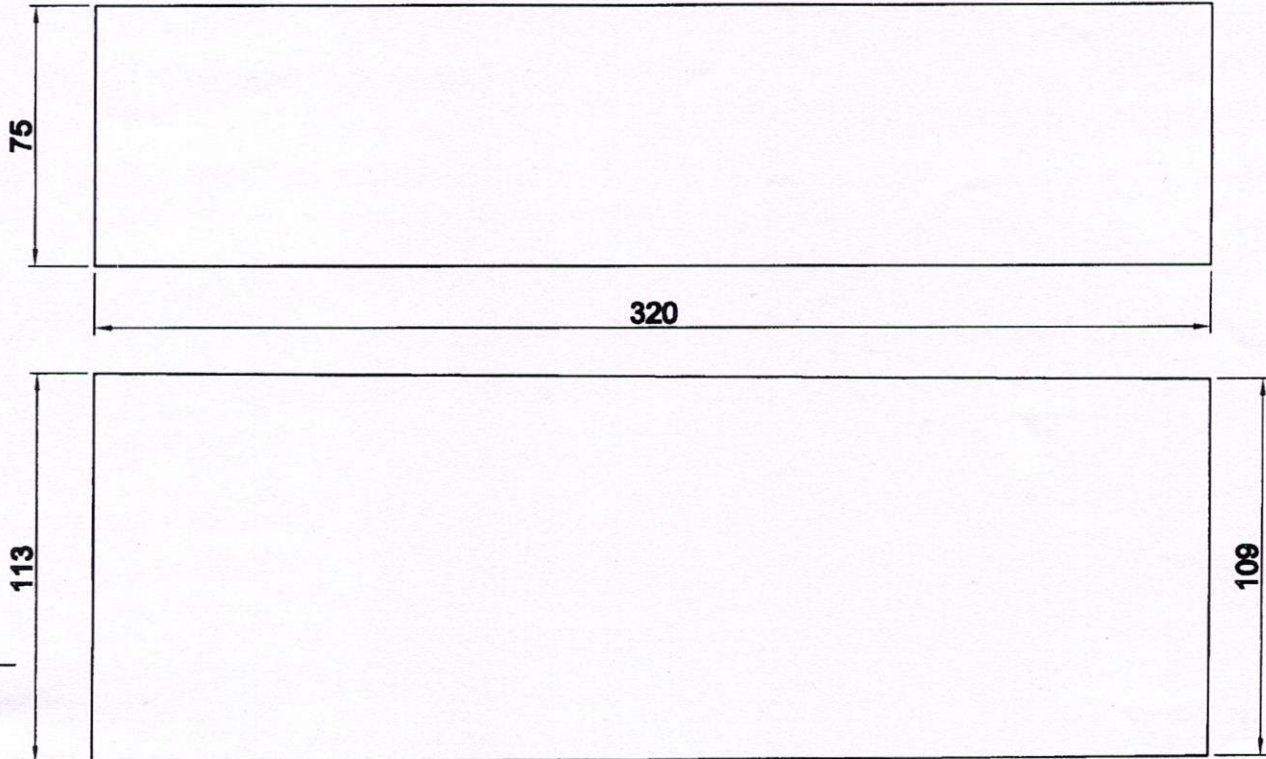
- 1) THE REFRACTORIES SHALL BE COMPACT, OF HOMOGENEOUS TEXTURE AND FREE FROM CRACKS, VOIDS AND OTHER FLAWS. THEY SHALL BE BURNT EVENLY THROUGHOUT AND SHALL HAVE SUFFICIENT MECHANICAL STRENGTH AND NO SOFT CORNERS.
- 2) ALL CORNERS TO BE MIN. 5mmRADII.

				55%-60% Al_2O_3		6060	
ITEM NO	DESCRIPTION	DRAWING NO		MATL CODE		UNIT WT	
				MATL SPEC		QTY	
EQPT: ROTARY HEARTH FURNACE							
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN	NAME P. RAMAKRISHNAN	SIGNATURE 	DATE 28.12.04
				CHD	SANKUMAR		1/1/05
				APPD	S. SHANMUGASUNDARAM		01/01/05
DEPT MPG	GRADE OF UNTOL DIM C/M/F		SCALE 1:2	WEIGHT (Kg) 4.8	REF TO ASSY DRG		ITEM NO
CODE					REF TO OLD DRG 358165 1/2-1		
TITLE OUTER WALL SUPPORTING BRICK-I				CARD CODE U 01	DRAWING NO : 4-7-1101-01-06301		REV 00

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ALL DIMENSIONS ARE IN MM

REV	DATE	ALTERED
01		CHECKED
		APPROVED



NOTES:

- 1) THE REFRACTORIES SHALL BE COMPACT, OF HOMOGENEOUS TEXTURE AND FREE FROM CRACKS, VOIDS AND OTHER FLAWS. THEY SHALL BE BURNT EVENLY THROUGHOUT AND SHALL HAVE SUFFICIENT MECHANICAL STRENGTH AND NO SOFT CORNERS.
- 2) ALL CORNERS TO BE MIN. 5mmRADII.

ITEM NO	DESCRIPTION	DRAWING NO	55%-60% Al_2O_3	1290
			MATL CODE	UNIT WT
			MATL SPEC	QTY

EQPT: **ROTARY HEARTH FURNACE**



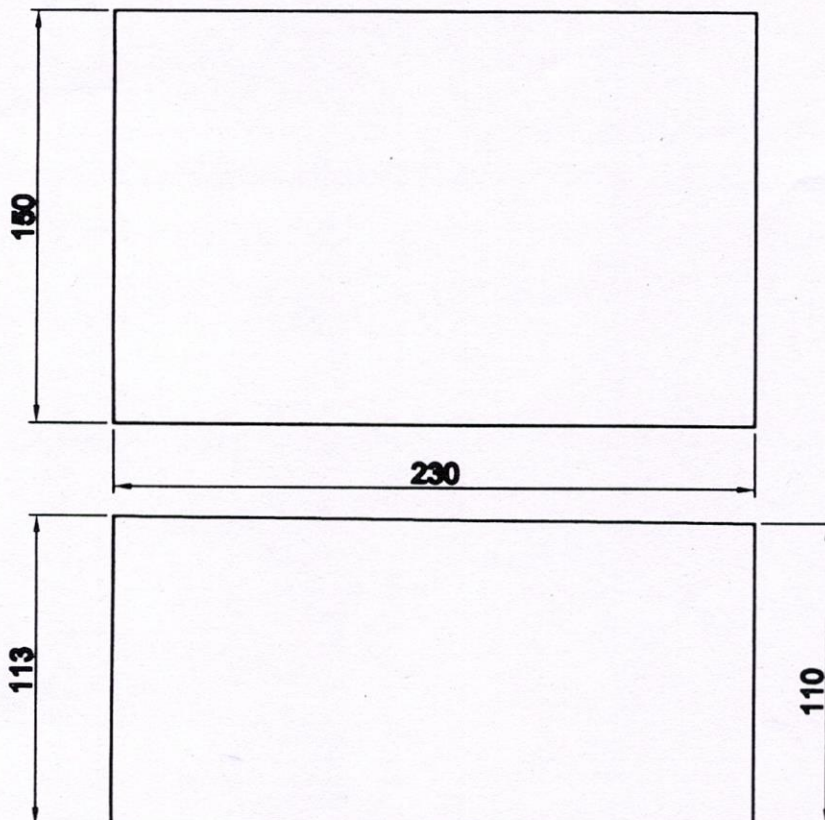
Bharat Heavy Electricals Ltd
SEAMLESS STEEL TUBE PLANT
TIRUCHIRAPALLI - 620014

DRN	NAME	SIGNATURE	DATE
	P. RAMAKRISHNAN	<i>[Signature]</i>	29.12.04
CHD	SSN.KUMAR	<i>[Signature]</i>	1/1/07
APPD	S.SHANMUGASUNDARAM	<i>[Signature]</i>	01/01/05

DEPT	GRADE OF	SCALE	WEIGHT (Kg)	REF TO ASSY DRG	ITEM NO
MPG	UNTOL DIM	1:2	6.7	REF TO OLD DRG	
CODE	C/M/F			358105 1/2-2	
TITLE OUTER WALL SUPPORTING BRICK-II				DRAWING NO : 4-7-1101-01-06302	REV 00
				CARD CODE U 01	

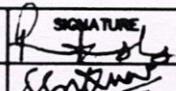
ALL DIMENSIONS ARE IN MM

REV	DATE	ALTERED
01		CHECKED
		APPROVED



NOTES:

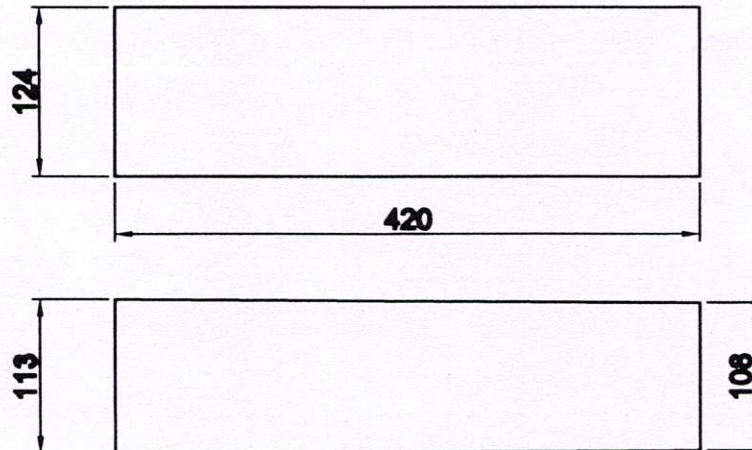
- 1) THE REFRACTORIES SHALL BE COMPACT, OF HOMOGENEOUS TEXTURE AND FREE FROM CRACKS, VOIDS AND OTHER FLAWS. THEY SHALL BE BURNT EVENLY THROUGHOUT AND SHALL HAVE SUFFICIENT MECHANICAL STRENGTH AND NO SOFT CORNERS.
- 2) ALL CORNERS TO BE MIN. 5mmRADIUS.

				55%-60% Al_2O_3		455
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE		UNIT WT	
			MATL SPEC		QTY	
EQPT: ROTARY HEARTH FURNACE						
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN	NAME P. RAMAKRISHNAN	SIGNATURE 
				CHD	SENKUMAR	DATE 28.12.04
				APPD	S. SHANMUGASUNDARAM	DATE 01/01/05
DEPT MPG	GRADE OF UNTOL DIM C/M/F	SCALE 1:2.5	WEIGHT (Kg) 9.6	REF TO ASSY DRG		ITEM NO
CODE				REF TO OLD DRG 388105 1/2-3		
TITLE OUTER WALL SUPPORTING BRICK-III			CARD CODE U 01	DRAWING NO : 4-7-1101-01-06303		REV 00

ALL DIMENSIONS ARE IN MM

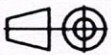
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NOTES:

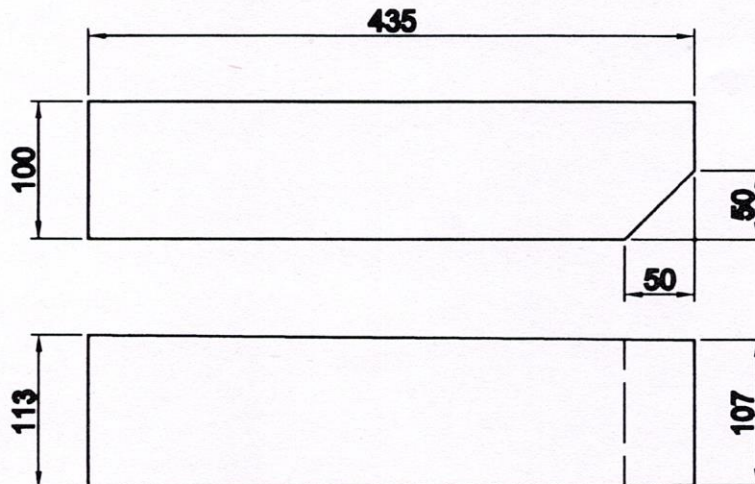
- 1) THE REFRACTORIES SHALL BE COMPACT, OF HOMOGENEOUS TEXTURE AND FREE FROM CRACKS, VOIDS AND OTHER FLAWS. THEY SHALL BE BURNT EVENLY THROUGHOUT AND SHALL HAVE SUFFICIENT MECHANICAL STRENGTH AND NO SOFT CORNERS.
- 2) ALL CORNERS TO BE MIN. 5mmRADI.

				55%-60% AL ₂ O ₃		730
ITEM NO	DESCRIPTION	DRAWING NO		MATL CODE		UNIT WT
				MATL SPEC		QTY
EQPT: ROTARY HEARTH FURNACE						
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN	NAME P. RAMAKRISHNAN	SIGNATURE <i>P. Ramakrishnan</i>
				CHD	SUNILKUMAR	DATE 1/1/05
				APPD	S. SHANMUGASUNDARAM	DATE 01/01/05
DEPT MPG	GRADE OF UNTOL DIM C/M/F		SCALE 1:5	WEIGHT (Kg) 14.5	REF TO ASSY DRG	
CODE					REF TO OLD DRG 388108 1/2-4	
TITLE OUTER WALL SUPPORTING BRICK-IV				CARD CODE U 01	DRAWING NO : 4-7-1101-01-06304	
					REV 00	

ALL DIMENSIONS ARE IN MM

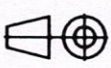
IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANYWAY DETERMINANT TO INTEREST OF THE COMPANY

REV	DATE	ALTERED
01		CHECKED
		APPROVED



NOTES:

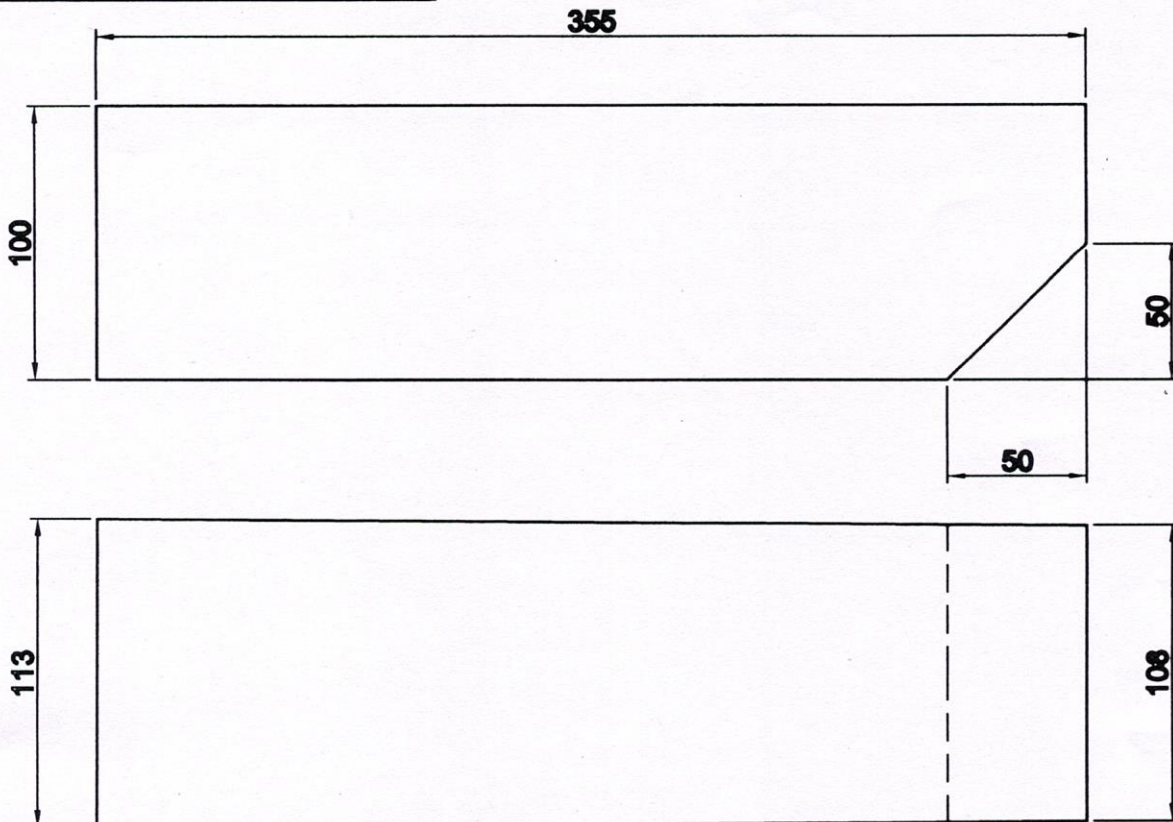
- 1) THE REFRACTORIES SHALL BE COMPACT, OF HOMOGENEOUS TEXTURE AND FREE FROM CRACKS, VOIDS AND OTHER FLAWS. THEY SHALL BE BURNT EVENLY THROUGHOUT AND SHALL HAVE SUFFICIENT MECHANICAL STRENGTH AND NO SOFT CORNERS.
- 2) ALL CORNERS TO BE MIN. 5mm RADII.

				55%-60% Al_2O_3		480	
ITEM NO	DESCRIPTION	DRAWING NO		MATL CODE		UNIT WT	
				MATL SPEC		QTY	
EQPT: ROTARY HEARTH FURNACE							
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN	NAME P. RAMAKRISHNAN	SIGNATURE <i>[Signature]</i>	DATE 28.12.04
				CHD	SENKUMAR	<i>[Signature]</i>	1/1/05
				APPD	S. SHANMUGASUNDARAM	<i>[Signature]</i>	9/10/05
DEPT MPG	GRADE OF UNTOL DIM C/M/F		SCALE 1:5	WEIGHT (Kg) 12.88	REF TO ASSY DRG		ITEM NO
CODE					REF TO OLD DRG 308105 1/2-8		
TITLE OUTER WALL BASE BRICK-I				CARD CODE U 01	DRAWING NO : 4-7-1101-01-06306		REV 00

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REV	DATE	ALTERED
01		CHECKED
		APPROVED

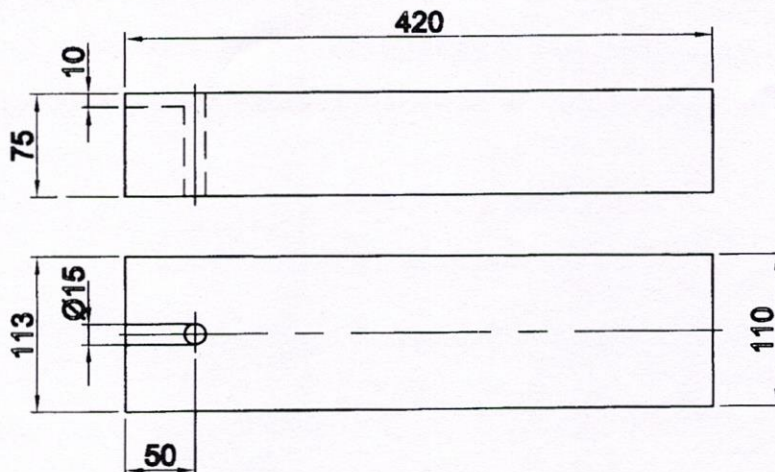


NOTES:

- 1) THE REFRACTORIES SHALL BE COMPACT, OF HOMOGENEOUS TEXTURE AND FREE FROM CRACKS, VOIDS AND OTHER FLAWS. THEY SHALL BE BURNT EVENLY THROUGHOUT AND SHALL HAVE SUFFICIENT MECHANICAL STRENGTH AND NO SOFT CORNERS.
- 2) ALL CORNERS TO BE MIN. 5mm RADII.

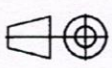
		55%-60% AL ₂ O ₃		460
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT
			MATL SPEC	QTY
EQPT: ROTARY HEARTH FURNACE				
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		
DEPT	GRADE OF UNTOOL DIM	SCALE	WEIGHT (Kg)	REF TO ASSY DRG
MPG	C/M/F	1:2.5	10.3	REF TO OLD DRG
CODE				388105 1/2-7
TITLE		CARD CODE	DRAWING NO :	REV
OUTER WALL BASE BRICK-II		U 01	4-7-1101-01-06307	00

REV	DATE	ALTERED
01		CHECKED
		APPROVED

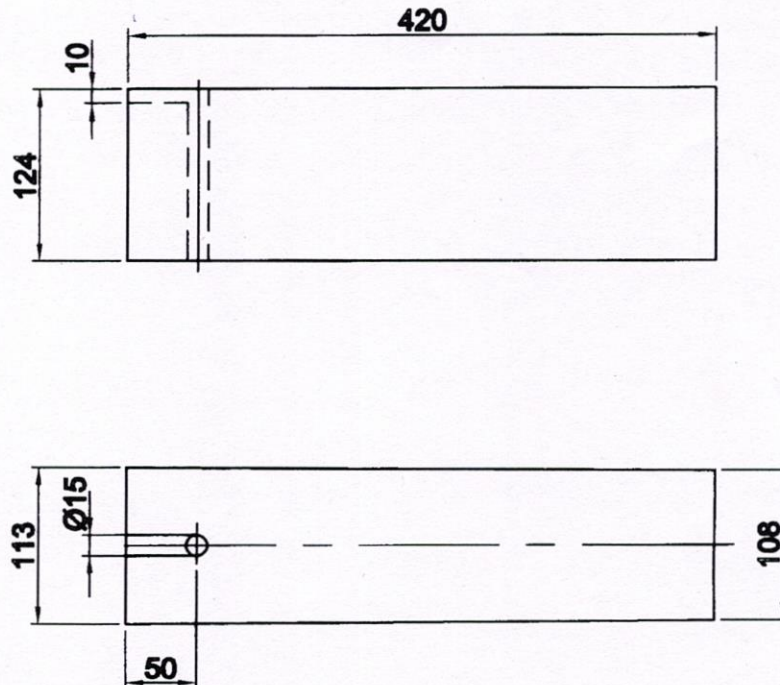


NOTES:

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- 2) ALL CORNERS TO BE MIN. 5mmRADII.

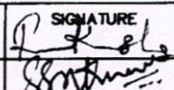
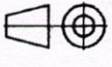
				55%-60% AL ₂ O ₃		94	
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE		UNIT WT		
			MATL SPEC		QTY		
EQPT: ROTARY HEARTH FURNACE							
 Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN	NAME	SIGNATURE	DATE		
		CHD	P. RAMAKRISHNAN	<i>[Signature]</i>	29.12.04		
		APPD	SSN.KUMAR	<i>[Signature]</i>	11/1/05		
			S.SHANMUGASUNDARAM		01/01/05		
DEPT	GRADE OF	 SCALE 1:2.5	WEIGHT (Kg)		REF TO ASSY DRG		ITEM NO
MPG	UNTOL. DIM		8.78		REF TO OLD DRG		
CODE	C/M/F				358105 1/2-8		
TITLE			CARD CODE	DRAWING NO :			REV
OUTER WALL ANCHOR BRICK-I			U 01	4-7-1101-01-06308			00

REV	DATE	ALTERED
01		CHECKED
		APPROVED

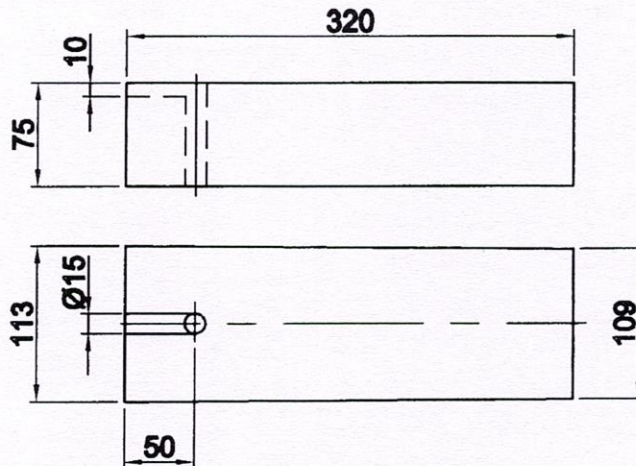


NOTES:

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- 2) **ALL CORNERS TO BE MIN. 5mm RADII.**

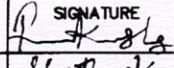
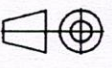
				55%-60% AL ₂ O ₃		190	
ITEM NO	DESCRIPTION	DRAWING NO		MATL CODE		UNIT WT	
				MATL SPEC		QTY	
EQPT: ROTARY HEARTH FURNACE							
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN	NAME P. RAMAKRISHNAN	SIGNATURE 	DATE 29.12.04
				CHD	SSN.KUMAR		1/1/05
				APPD	S.SHANMUGASUNDARAM		01/01/05
DEPT MPG	GRADE OF UNTOL DIM C/M/F		SCALE 1:2.5	WEIGHT (Kg) 14.5	REF TO ASSY DRG		ITEM NO
CODE					REF TO OLD DRG 358105 1/2-9		
TITLE OUTER WALL ANCHOR BRICK-II				CARD CODE U 01	DRAWING NO : 4-7-1101-01-06309		REV 00

REV	DATE	ALTERED
01		CHECKED
		APPROVED



NOTES:

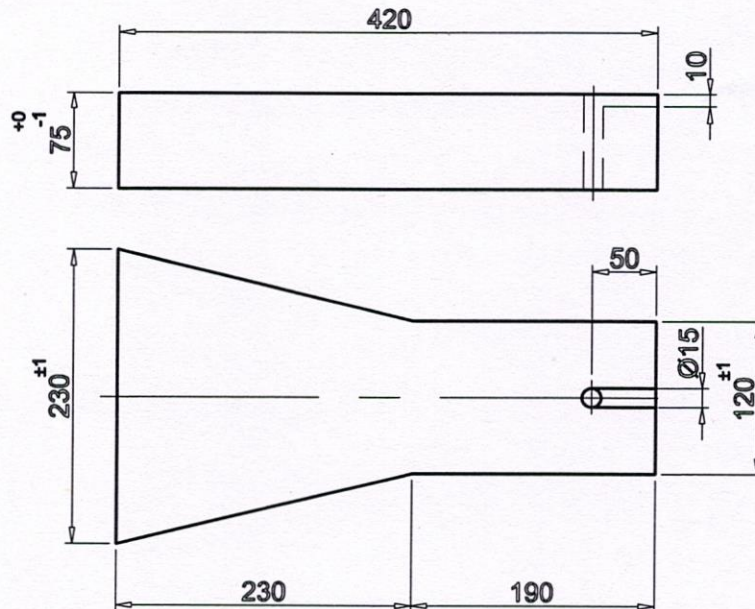
- 1) THE REFRACTORIES SHALL BE COMPACT, OF HOMOGENEOUS TEXTURE AND FREE FROM CRACKS, VOIDS AND OTHER FLAWS. THEY SHALL BE BURNT EVENLY THROUGHOUT AND SHALL HAVE SUFFICIENT MECHANICAL STRENGTH AND NO SOFT CORNERS.
- 2) ALL CORNERS TO BE MIN. 5mmRADII.

				55%-60% AL ₂ O ₃		94		
ITEM NO	DESCRIPTION	DRAWING NO		MATL CODE		UNIT WT		
				MATL SPEC		QTY		
EQPT: ROTARY HEARTH FURNACE								
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN	NAME P. RAMAKRISHNAN	SIGNATURE 	DATE 29.12.04	
				CHD	SSN.KUMAR		11/1/05	
				APPD	S.SHANMUGASUNDARAM		01/01/05	
DEPT MPG	GRADE OF UNTOL DIM C/M/F		SCALE 1:5	WEIGHT (Kg) 6.6	REF TO ASSY DRG			ITEM NO
CODE					REF TO OLD DRG 358105 1/2-10			
TITLE OUTER WALL ANCHOR BRICK-III				CARD CODE U 01	DRAWING NO : 4-7-1101-01-06310			REV 00

ALL DIMENSIONS ARE IN MM

REV	DATE	ALTERED	<i>M. Ganesan</i>
01	01.09.14	CHECKED	<i>R.K. Singh</i>
		APPROVED	<i>S. Loganathan</i>

New border inserted



NOTES:

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- 2) ALL CORNERS TO BE MIN. 5mm RADII.**

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ITEM NO	DESCRIPTION	DRAWING NO	55%-60% AL_2O_3		400
			MATL CODE		UNIT WT
			MATL SPEC		QTY
EQPT: ROTARY HEARTH FURNACE					
		Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN	NAME
				CHD	SSN.KUMAR
				APPD	S.S.SUNDARAM
DEPT	GRADE OF UNTOL. DIM	SCALE	WEIGHT (Kg)	REF TO ASSY DWG NO	ITEM
SSTP	$\phi/M/f$	1:5	11.8	-	-
CODE	IS: 2102			REF TO OLD DWG NO	
456				358105 1/2-11	
TITLE			CARD CODE	DRAWING NO :	REV
RHF - ANCHOR BRICK			U 01	4-7-1101-01-06311	01

A4-SIZE