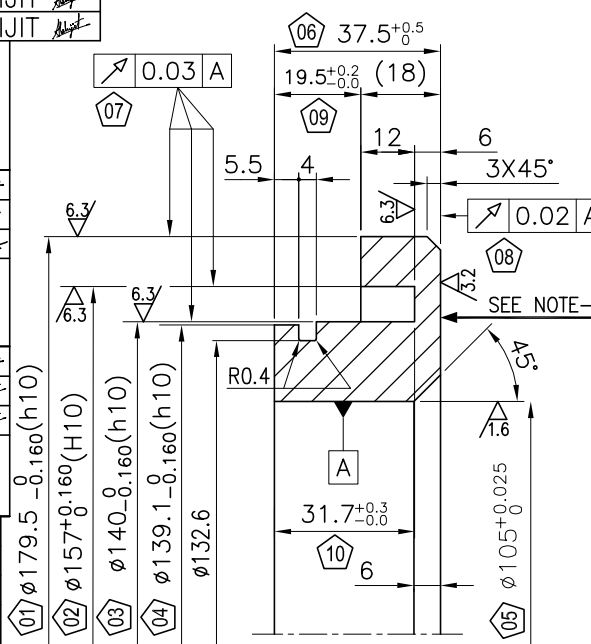


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FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

REV.	DATE	ALTERED SDB <i>abent</i>	REV.	DATE	ALTERED SDB <i>abent</i>	ADDITIONAL INFORMATION 4TWD.096.042(ALT.-04)
14	24.07.19	CHECKED ABHIJIT <i>Abjt</i>	05	08.07.13	CHECKED <i>Abjt</i>	
		APPROVED ABHIJIT <i>Abjt</i>			APPROVED <i>Abjt</i>	
ZONE	DIMS. Ø157 & 6 WERE Ø157.5 & 5.8. DIMS. Ø140 & 12 ADDED. (CLW LETTER REF. CLW/TM/18059/ PART-1/1 DATED 12/07/19). NOTE 7 DELETED & NOTE 8 ADDED.		ZONE	CRITICAL TO QUALITY DIMENSIONS ARE "◻" MARKED & NUMBERED. NOTE-3, 4, 5 & 6 ADDED.		STATUS OF DRAWING
						DISTRIBUTION OF PRINTS TME-1, TXM-3 TNX-1
REV.	DATE	ALTERED <i>Abjt</i>	REV.	DATE	ALT. SDB <i>abent</i>	
06	23.08.16	CHECKED <i>Abjt</i>	07	09.08.17	CHK. ABHIJIT <i>Abjt</i>	
		APPROVED <i>Abjt</i>			APPD. ABHIJIT <i>Abjt</i>	
DRAWING DESCRIPTION CHANGED FROM INNER LABYRINTH (NDE) TO INNER LABYRINTH NDE (STOPPER)			DIM. 45° WAS 15°. NOTE-7 ADDED.			
REV.	DATE	ALTERED VK <i>Abjt</i>	REV.	DATE	ALT. SDB <i>abent</i>	
08	01.12.17	CHECKED AJ <i>Abjt</i>	09	09.01.18	CHK. AS <i>Abjt</i>	
		APPROVED AJ <i>Abjt</i>			APPD. AS <i>Abjt</i>	
DIMN. 12.2 DELETED & DIMN. 31.5 ADDED. TOL. ON DIMN. 19.5 ADDED.			TOOL NOS. 1605078 & 1605079 ADDED. (TCM-352).			
REV.	DATE	ALTERED SDB <i>abent</i>	REV.	DATE	ALT. SDB <i>abent</i>	
10	11.08.18	CHECKED AS <i>Abjt</i>	11	18.10.18	CHK. ABHIJIT <i>Abjt</i>	
		APPROVED AS <i>Abjt</i>			APPD. ABHIJIT <i>Abjt</i>	
IN TOOL LIST, TOOL NO. 1605088 ADDED & 1605003 TO 1605005 DELETED. (TCM-352)			NOTE-2 DELETED. NOTE-7 MODIFIED.			
REV.	DATE	ALTERED SDB <i>abent</i>	REV.	DATE	ALT. SDB <i>abent</i>	
12	15.12.18	CHECKED ABHIJIT <i>Abjt</i>	13	12.02.19	CHK. AS <i>Abjt</i>	
		APPROVED ABHIJIT <i>Abjt</i>			APPD. AS <i>Abjt</i>	
IN TITLE BLOCK R/WT & FINISH WT. WERE 8.56 & 2.61KG.			IN TOOL LIST, TOOL NO. 1605005 ADDED. (TCM-353)			
NOTES:-						

NOTES:-

1. REMOVE ALL SHARP EDGES.
2. MATERIAL: SPHEROIDAL GRAPHITE CAST-
IRON (SGCI) TO DIN-1693 PART-1
~~GR.GGG/40 OR GR-400/18 OF IS:1865-1991(LATEST VERSION).~~
3. ALL 10 NOS. "◻" MARKED DIMENSION ARE CRITICAL TO QUALITY (CTQ) & SL. NO. OF CTQ DIMENSION ARE INSCRIBED IN ◻ e.g. 10.
4. SUPPLIER'S INITIAL/TRADE MARK, MANUFACTURERS SERIAL NO. BHEL PO NO. BATCH NO. & DATE OF MFG. IN MM-YY FORMAT TO BE ETCHED AT THE SHOWN LOCATION.
5. MACHINING ALLOWANCE ON EACH TOOL POINT TO BE 5-7 MM IN CASE CASTING IS SUPPLIED OR 3-5 MM IN CASE ROUGH MACHINED CASTING IS SUPPLIED.
6. FOR QUALITY REQUIREMENT OF COMPONENT SPECIFICATION TM12545 TO BE REFERRED.
7. DIMENSIONS TO BE CHECKED ON SAMPLE BASIS. QUANTUM-
OF INSPECTION SHALL BE AS GIVEN BELOW (AT LEAST ONE NUMBER).

SL.NO.	CHECKING PARAMETER		BHEL Q.C.
001	CTQ DIMS.	DIMENSIONAL TOLERANCE	20%
		GEOMETRICAL TOLERANCE	20%
002	REMAINING DIMS.		5%

8. ALL MACHINED/ R.MACHINED SURFACES TO BE PROTECTED WITH TRP.

TOOL LIST	
TOOL NO.	DESCRIPTION
1577956	SNAP GAUGE $\phi 179.5^{+0.160}_{-0}$ (h10)
1605002	PIN GAUGE $\phi 157.5^{+0.160}_{-0}$ (H10)
1605003	SNAP GAUGE $\phi 139.5^{+0.160}_{-0}$ (h10)
1605004	SNAP GAUGE $\phi 139.1^{+0.160}_{-0}$ (h10)
1577960	PIN GAUGE $\phi 105^{+0.025}_{-0}$
1578505	GROOVE CHECKING GAUGE 9x12.2
1605005	GROOVE CHECKING GAUGE 4x5.5
1577962	STEP GAUGE 19.5
1577963	GRINDING FIXTURE
1605078	STEP GAUGE $31.7 \pm 0.3/0$
1605079	STEP GAUGE $19.5 \pm 0.2/0$
1605088	SNAP GAUGE $\phi 139.1^{+0.160}_{-0}$ (h10)
1605005	GROOVE GAUGE

	RAW WEIGHT 7.0 KG.		001	INNER LABYRINTH NDE (NDE)						KG	3.0			
							TM-11491							
59	64	65	75	25	27	29	58	59	34	45	55	56	58	65
VAR00		REMARKS		ITEM NO.		DESCRIPTION		STD	MATL. CODE		A	UNIT	UNIT WT.	
									46	54	C		68	71
									MATL. SPCN.				QTY.	



BHARAT HEAVY ELECTRICALS LTD.
BHOPAL

	NAME	SIGN	DATE	NO. OF VAR.
DRN.	S.D.BHAGAT	—sd—	02.09.10	
CHD.	D.K.	—sd—	02.09.10	
APPD.	A.S.	—sd—	02.09.10	

DEPT.	UNTOL. DIMS. GR.		SCALE	WEIGHT (K.G.)	REF. TO ASSY. DRG.	ITEM NO.	NO. OF ITEM
TME			N.T.S.	3.0	14454564053	002	001
CODE	405	TITLE <u>INNER LABYRINTH (NDE) (STOPPER)</u> <u>(CNC MACHINED)</u> <u>6FRA6068</u>			DRAWING NO. 4 445 44 64 051		REV. 14
					SHT. NO. 01	NO. OF SHT. 01	

SIZE A4