

(ALL DIMENSIONS ARE IN mm)
REFER DETAIL 'A'

FIRST ANGLE PROJECT.
ON 2906
RD DG 4 35 1351 1700

RD DG 4 35 1351 1700
ON 2906
REFER DETAIL 'A'

ITEM NO.	DESCRIPTION	DRAWING NO.	IT. NO.	MATL. CODE	UNIT WT.	QTY.
09	COVER-III &IV	RD DG 4 35 0617 0422E		SS-304 L		03
08	COVER-II	RD DG 4 35 0617 0422D		SS-304 L		01
07	FLANGE-II	RD DG 4 35 0617 0422C		SS-304 L		01
06	FLANGE-I	RD DG 4 35 0617 0422B		SS-304 L		03
05	GUIDE ASSY.	RD DG 4 35 1133 1704		SS-304L		01
04	FLANGE	RD DG 4 35 1351 1703		SS-304L		01
03	FLANGE	RD DG 4 35 1133 4150		SS-304L		01
02	SHELL	RD DG 4 35 1351 1702		SS-304L		01
01	SS PLATE	RD DG 4 35 1351 1701		SS-304L		01

TYPE OF PRODUCT: CGSM-145
NAME OF CUSTOMER: BHARAT HEAVY ELECTRICALS LTD. HYDERABAD

DEPT. CODE: NTS
SCALE: 1:1
REV. DATE: 31.07.14
SIGNED: [Signature]
DATE: 31.07.14
ITEM NO. OF REV. NO. 01

REF. TO: RD DG 4 35 1351 1000
DRAWING NO. RD DG 4 35 1351 1700
SHEET NO. 1 NO. OF SHEETS 1

TITLE: MECHANISM SUPPORT ASSY.

NOTE:

- PIPE AND FLANGES TO BE TIG/MIG WELDED WITH SUITABLE SS ELECTRODE
- THE ROOT SHOULD BE HOMOGENEOUS AND CONTINUOUS.
- PRESSURE TEST AT 15 BAR FOR 15 MINUTS
- TESTED ASSEMBLIES TO BE DECREASED, SAND BLASTED AND POWDER COATED ON OUTSIDE
- ELECTRO POLISH INSIDE SURFACE.
- ORIENTATION SHALL BE APPROVED BY BHEL PRIOR TO WELDING OF SS PLATE

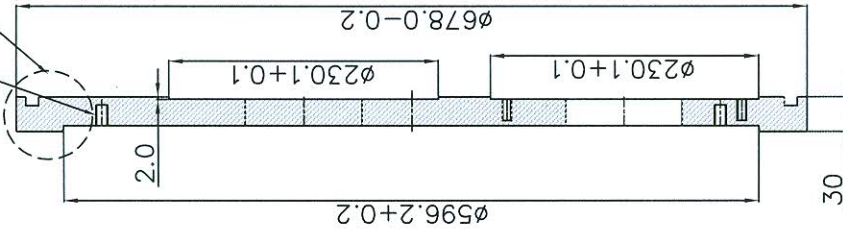
10/1 1351 35 4 50 RD
ON 380

FIRST ANGLE PROJECT.

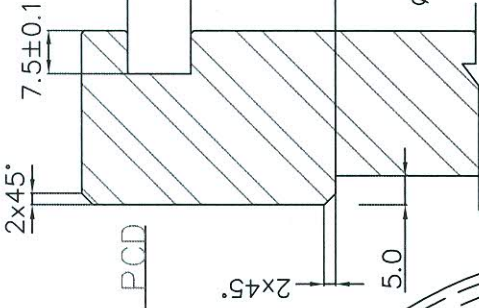
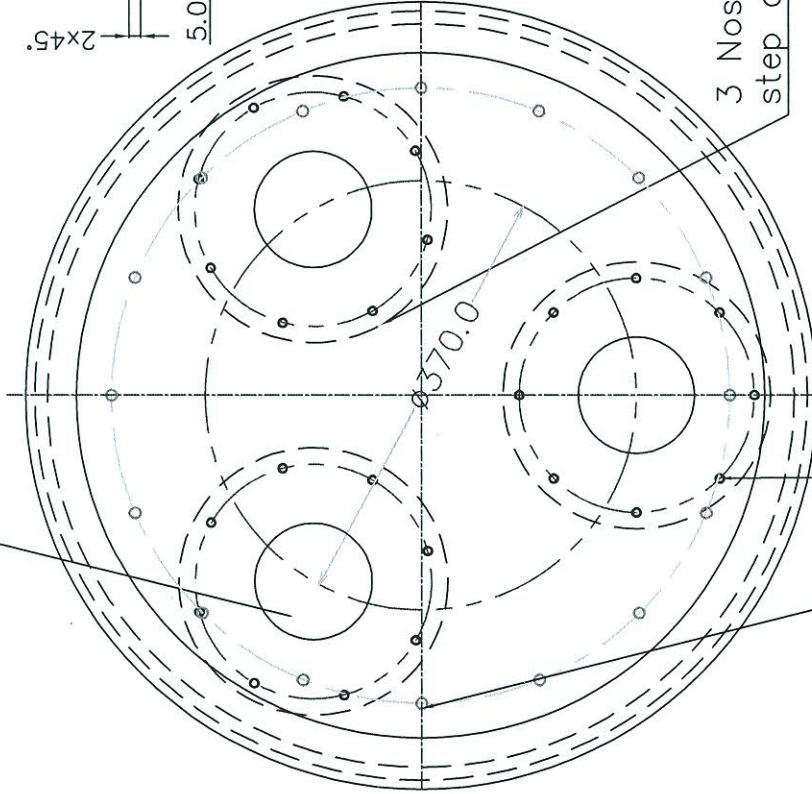
(ALL DIMENSIONS ARE IN mm)

M10x18 Taps @ 530 PCD

REFER DETAIL 'A'



3 Nos. $\phi 100$ holes @ 370 PCD



DETAIL 'A'

3 Nos. $\phi 230.1+0.1 \times 2.0$ mm deep
step cutting at 370 PCD

16 Nos. M10x18 deep taps @ 530 PCD

3x8 Nos. M8x18 mm deep tapped holes @ 202 inner PCD

VAR. NO.	REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	QTY	SS-304L	UNIT WT.	NO. OF SHEETS

TYPE OF PRODUCT: SS PLATE
 NAME OF CUSTOMER: CGSM-145
 DRAWING NO.: RD DG 4 35 1351 1700
 SHEET NO.: RD DG 4 35 1351 1701

REV.	DATE	ALTERED	CHECKED	ZONE

REV.	DATE	ALTERED	CHECKED	ZONE

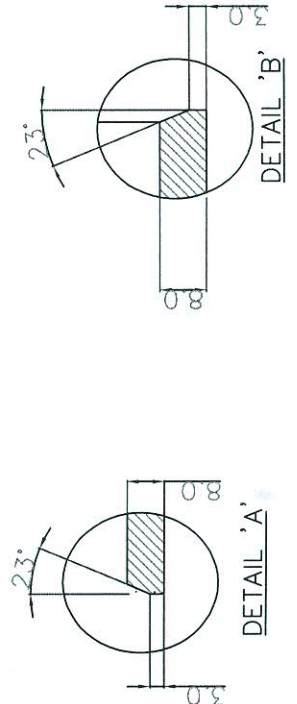
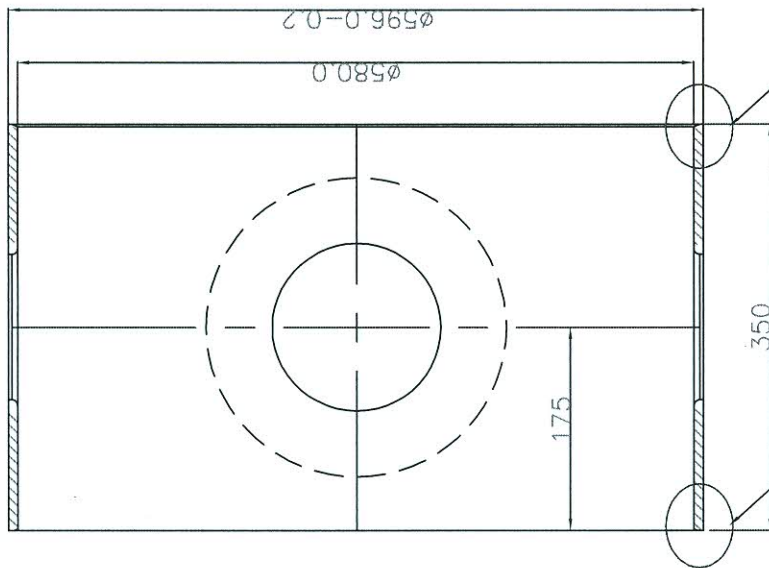
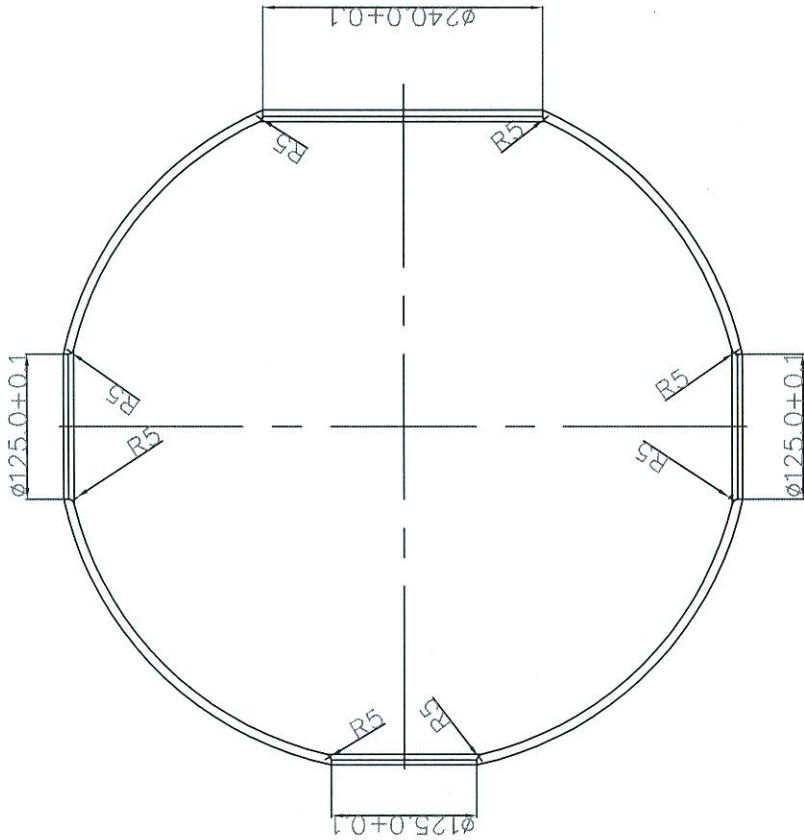
DEPT. CODE: NTS
 SCALE: NTS
 WEIGHT(KG):
 GRADE OF TOL. DIM. C/M/F:
 NAME OF CUSTOMER: CGSM-145
 TYPE OF PRODUCT: SS PLATE
 DRAWING NO.: RD DG 4 35 1351 1700
 SHEET NO.: RD DG 4 35 1351 1701

INVENTORY NO. SIGN. AND DATE REF. DRG. NO. THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

(ALL DIMENSIONS ARE IN MM)

FIRST ANGLE PROJECT

DRG. NO.
RD DG 4 35 1351 1702



VAR. NO.	REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	STD	DRAWING NO.	IT. NO.	MATL. CODE	UNIT	QTY.
			01	SHELL		580 x 574 x 360				01

TYPE OF PRODUCT: CGSM-145

NAME OF CUSTOMER: BHARAT HEAVY ELECTRICALS LTD. HYDERABAD

DEPT. CODE: NTS

SCALE: NTS

TITLE: SHELL

REV. DATE ALTERED CHECKED

REV. DATE ALTERED CHECKED

ZONE

ZONE

REF. TO: RD DG 4 35 1351 1700

DRAWING NO. RD DG 4 35 1351 1702

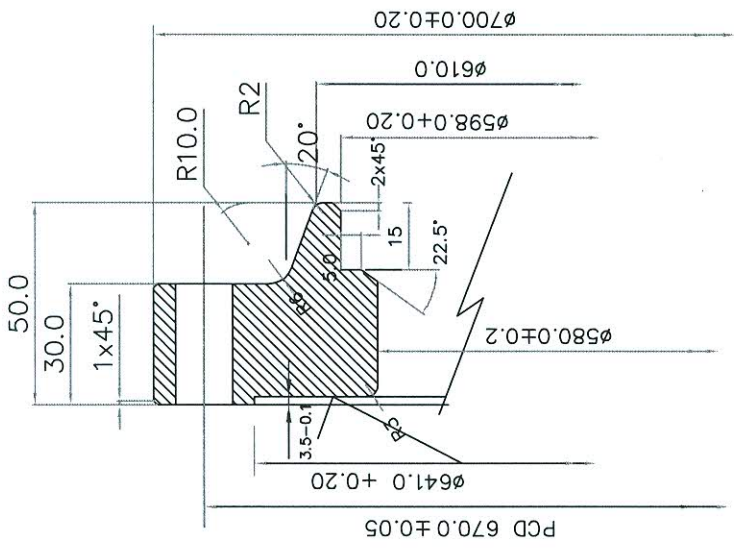
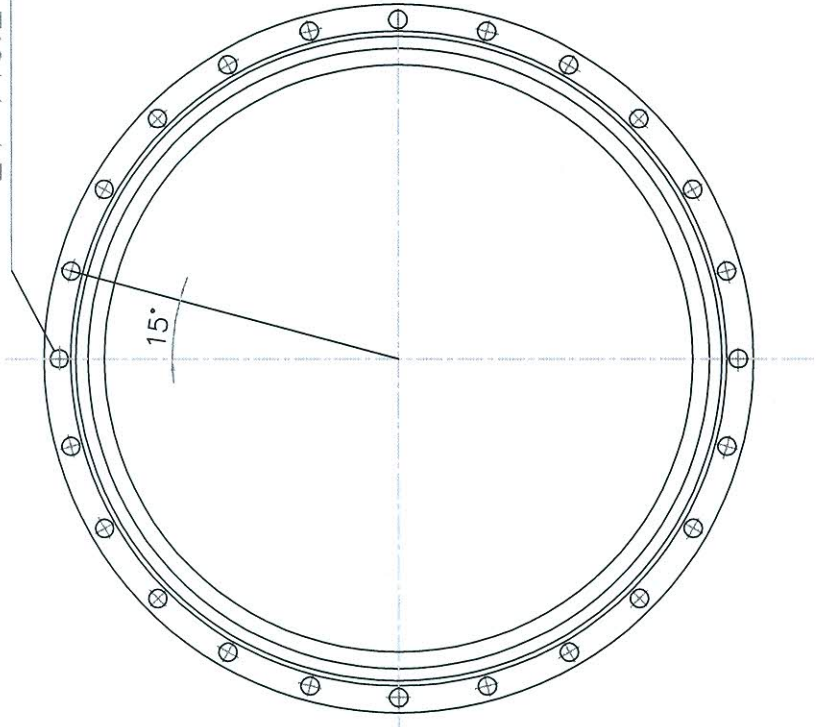
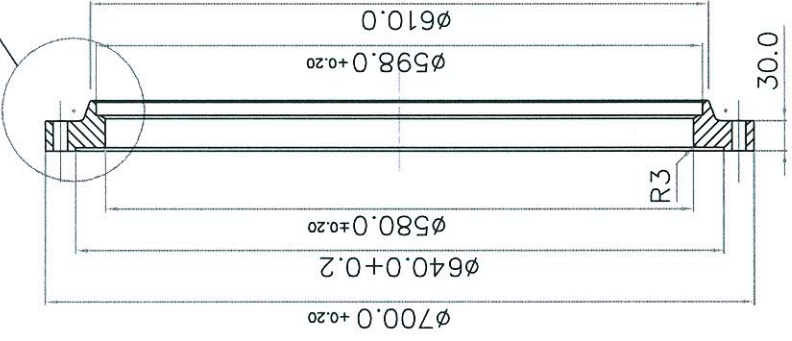
SHEET NO. NO. OF SHEETS

INVENTORY NO. SIGN. AND DATE REF. DRG. NO.

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24- ϕ 13.2 Holes @ PCD 670.0 \pm 0.05

VIEW 'A'



ENLARGED VIEW 'A'

Note:

1. Sealing area shall be polished to RA 0.8 or better.
2. ϕ 14.0 holes shall be chamfered uniformly (0.8x45°).
3. PCD and flange centre shall be concentric within \pm 0.05
4. Finished flange shall be degreased and packed in 125 micron poly bag and sealed.

VAR. NO.	REMARKS	VAR. NO.	ITEM NO.	01	BLOCK	ϕ 710.0x55.0	SS-304L
					DESCRIPTION	DRAWING NO.	MATL. CODE
							MATL. SPECN.
							UNIT WT.
							QTY.

TYPE OF PRODUCT: **CGSM-145**

NAME OF CUSTOMER: **BHARAT HEAVY ELECTRICALS LTD. HYDERABAD**

DRN: **KSRAO** DATE: **06.01.12** NO. OF VAR.: **01**

AL/BSM: **MMRAO** APPD: **MMRAO** REF. TO: **RD DG 4 35 1351 1700**

WEIGHT(KG): **NTS** SCALE: **NTS**

GRADE OF TOL. DIM. C/N/F: **NTS**

DRAWING NO.: **RD DG 4 35 1133 4150 00**

SHEET NO.: **FLANGE**

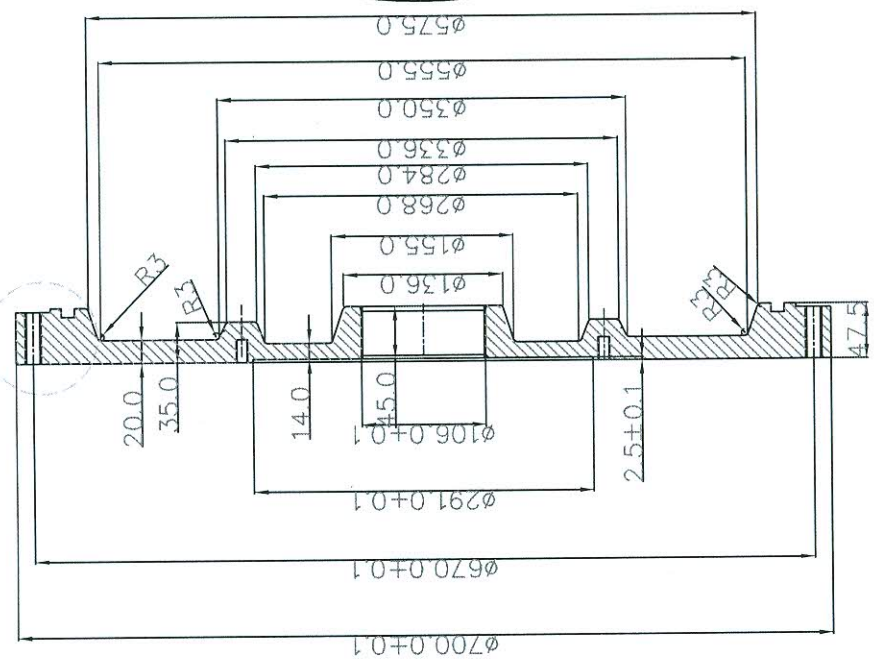
NO. OF SHEETS: **3**

REV.	DATE	ALTERED	CHECKED	ZONE

RD DG 4 35 1351 1703

FIRST ANGLE PROJECT.

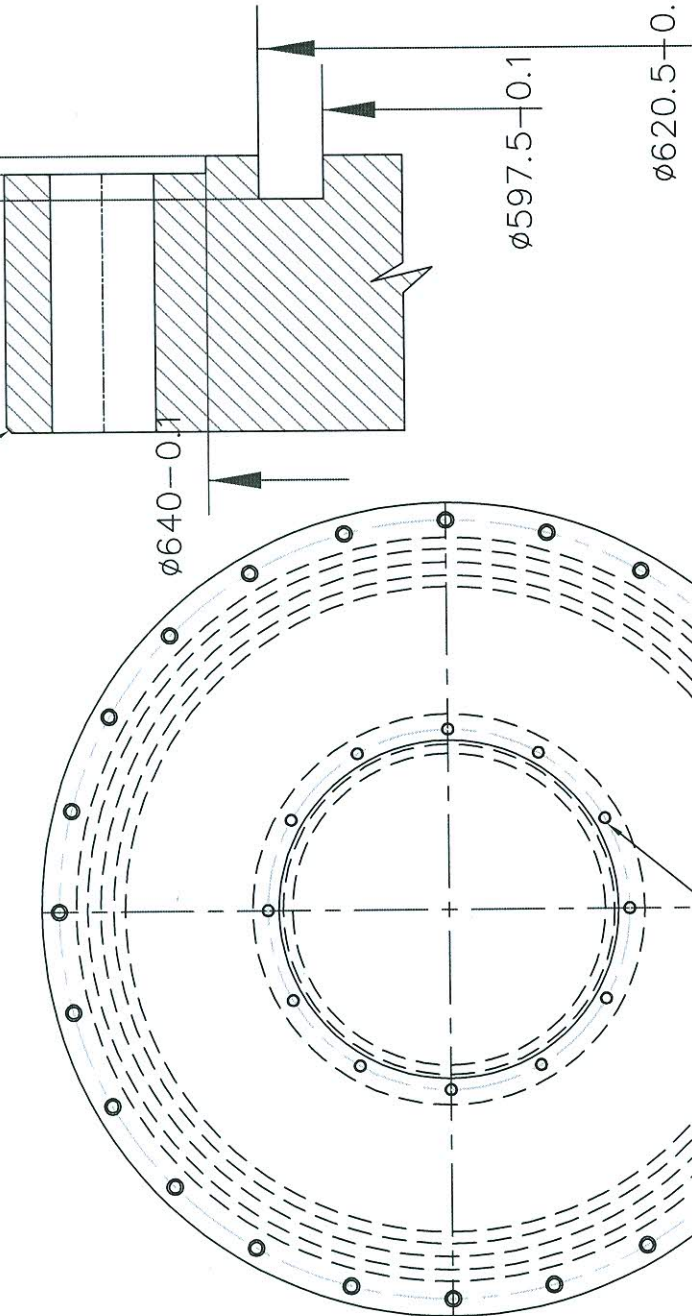
REFER DETAIL 'A'



(ALL DIMENSIONS ARE IN mm)

DETAIL 'A' 7.5±0.1

2.5±0.1



12 Nos. M10x20 deep taps @ 310 PCD

24 Nos. M12 TAPS @ 670 PCD

SS-304L	01	SS PLATE	710 x 50	SS-304L	01
VAR	ITEM NO.	DESCRIPTION	DRAWING NO.	MATL. CODE	UNIT WT.
REMARKS	NO.			MATL. SPECN.	QTY.

TYPE OF PRODUCT: CGSM-145

NAME OF CUSTOMER: BHARAT HEAVY ELECTRICALS LTD. HYDERABAD

DEPT. CODE: NTS

TITLE: FLANGE

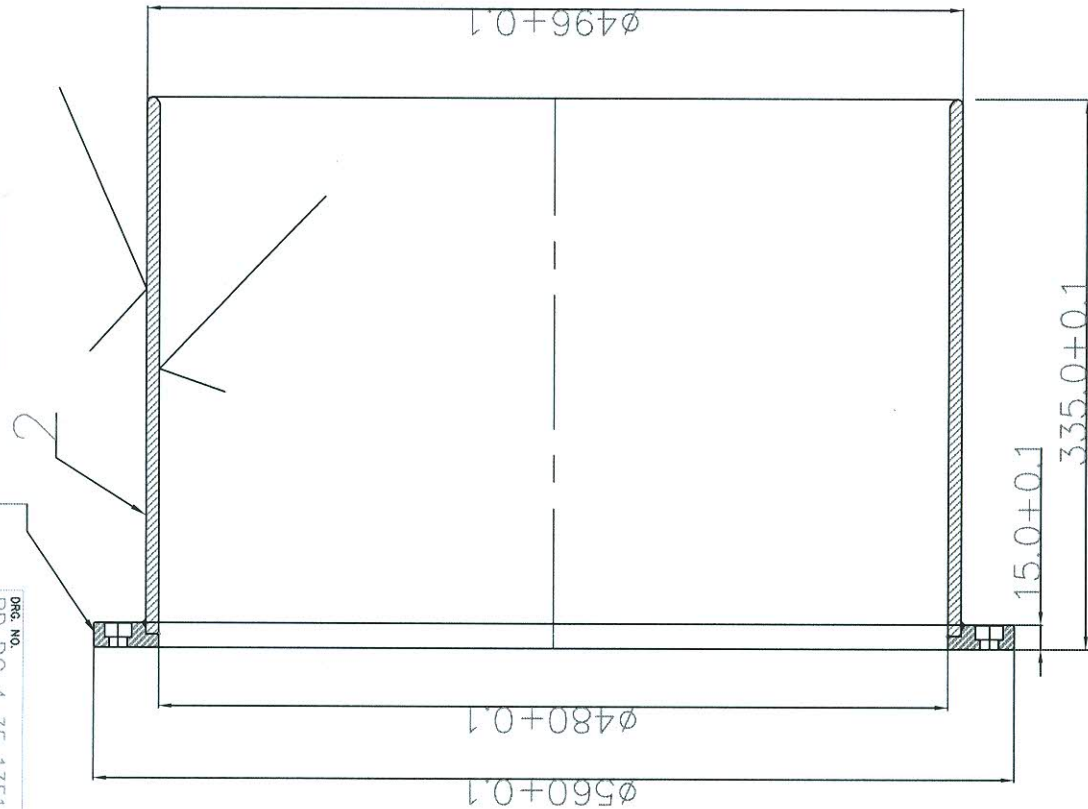
REV.	DATE	ALTERED	CHECKED	ZONE

DRN	NAME	DATE	NO. OF
BSM	SSM	31.07.14	VAR.
CHK	BSM	31.07.14	01
APPD	MHR/RO	31.07.14	NO. OF
REF. TO	RD DG 4 35 1351 1700	1	ITEM
DRAWING NO.	RD DG 4 35 1351 1703	1	NO.
CARD CODE	RD DG 4 35 1351 1703		REV.
SHEET NO.	RD DG 4 35 1351 1703		NO. OF SHEETS

DRG. NO. RD DG 4 35 1351 1704

FIRST ANGLE PROJECT

(ALL DIMENSIONS ARE IN mm)



(-1.6)

NOTE:

1. PIPE AND FLANGES TO BE TIG/MIG WELDED WITH SUITABLE SS ELECTRODE
2. THE ROOT SHOULD BE HOMOGENEOUS AND CONTINUOUS.
3. ELECTRO POLISH INSIDE SURFACE.
4. INNER SURFACE SHALL BE FINISHED TO RA0.6

VAR. NO.	REMARKS	ITEM NO.	DESCRIPTION	DRWG. NO.	IT. NO.	MATL. CODE	UNIT WT.	QTY.
02			PIPE	RD DG 4 35 1351 1704B		SS-304L		01
01			PLATE	RD DG 4 35 1351 1704A		SS-304L		01

TYPE OF PRODUCT: CGSM-145
 NAME OF CUSTOMER: BHARAT HEAVY ELECTRICALS LTD. HYDERABAD
 DEPT. CODE: NTS
 SCALE: NTS
 WEIGHT(KG):
 REF. TO: RD DG 4 35 1351 1700
 DRAWING NO. RD DG 4 35 1351 1704
 TITLE: GUIDE ASSY.

INVENTORY NO.	SIGN. AND DATE	REF. DRG. NO.
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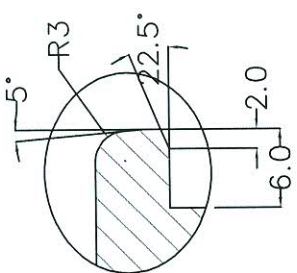
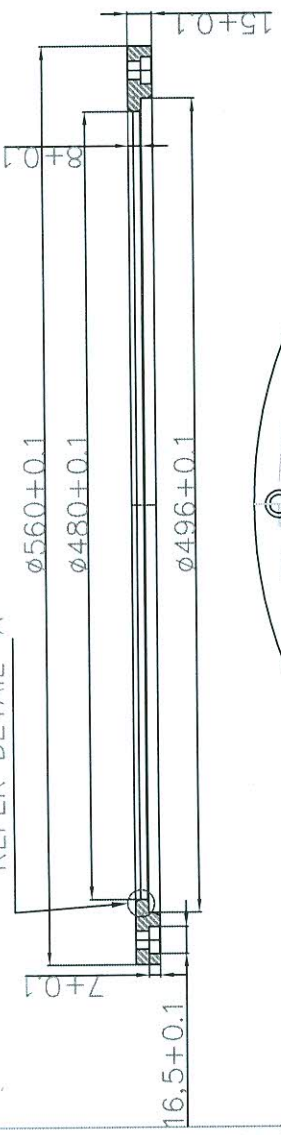
RD DG 4 35 1351 1704A
ON DRG

FIRST ANGLE PROJECT.

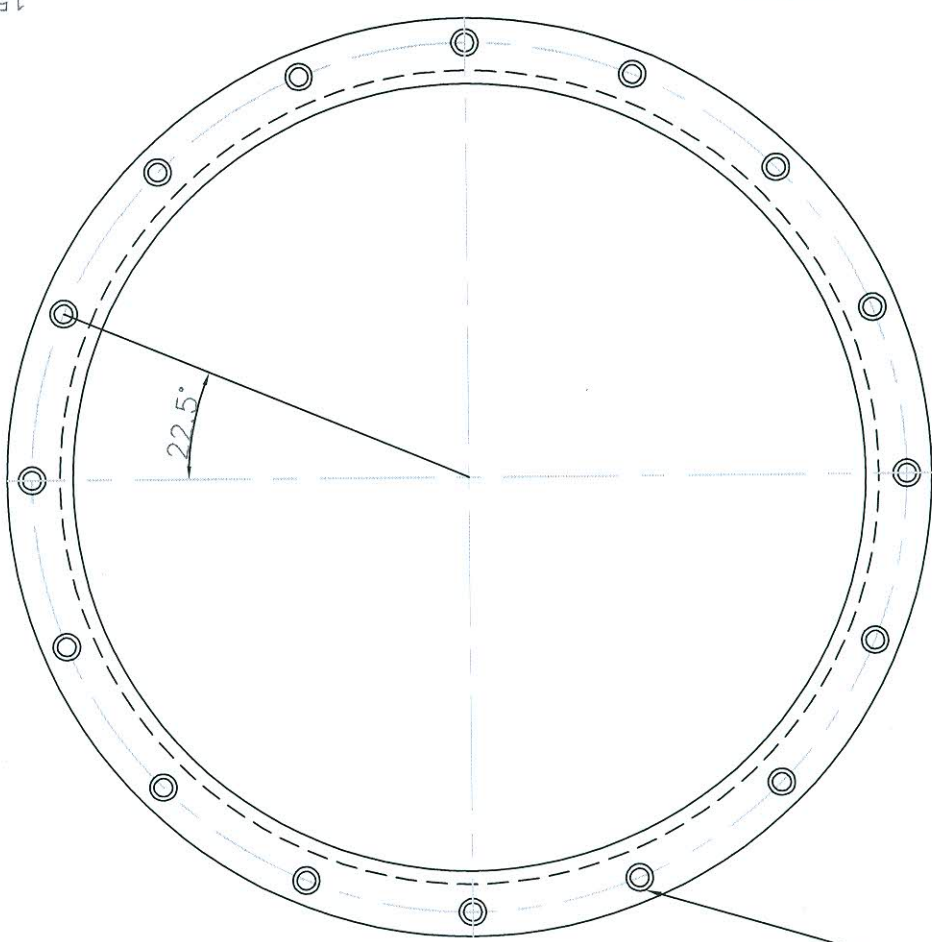
(ALL DIMENSIONS ARE IN mm)

(-1.6)

REFER DETAIL 'A'



DETAIL 'A'



16 Nos. ϕ 11.2 holes with counters @ 530 PCD

ALL SHARP EDGES SHALL BE MACHINED TO 0.4X45°

VAR. NO.	REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	DWG. NO.	IT. NO. VAR.	SS-304L	UNIT	01

TYPE OF PRODUCT: CGSM-145
 NAME OF CUSTOMER: BHARAT HEAVY ELECTRICALS LTD. HYDERABAD
 DEPT. CODE: NTS
 SCALE: NTS
 WEIGHT(KG):
 GRADE OF TOL. DIM. C/A/F:
 REF. TO: RD DG 4 35 1351 1704 1
 DRAWING NO. RD DG 4 35 1351 1704A
 SHEET NO. NO. OF SHEETS

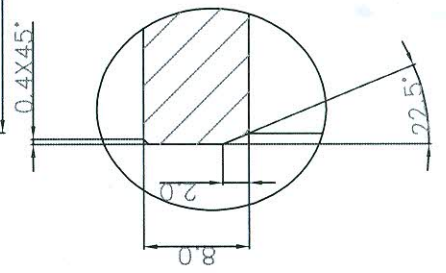
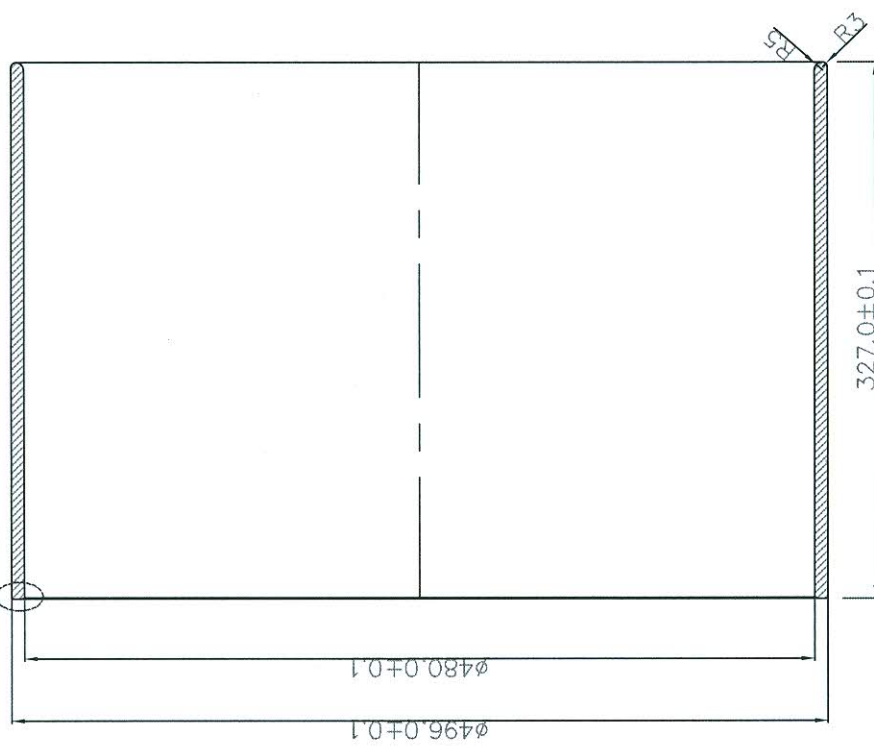
REV.	DATE	ALTERED	CHECKED
ZONE			

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FIRST ANGLE PROJECT

RD DG 4 35 1351 1704B

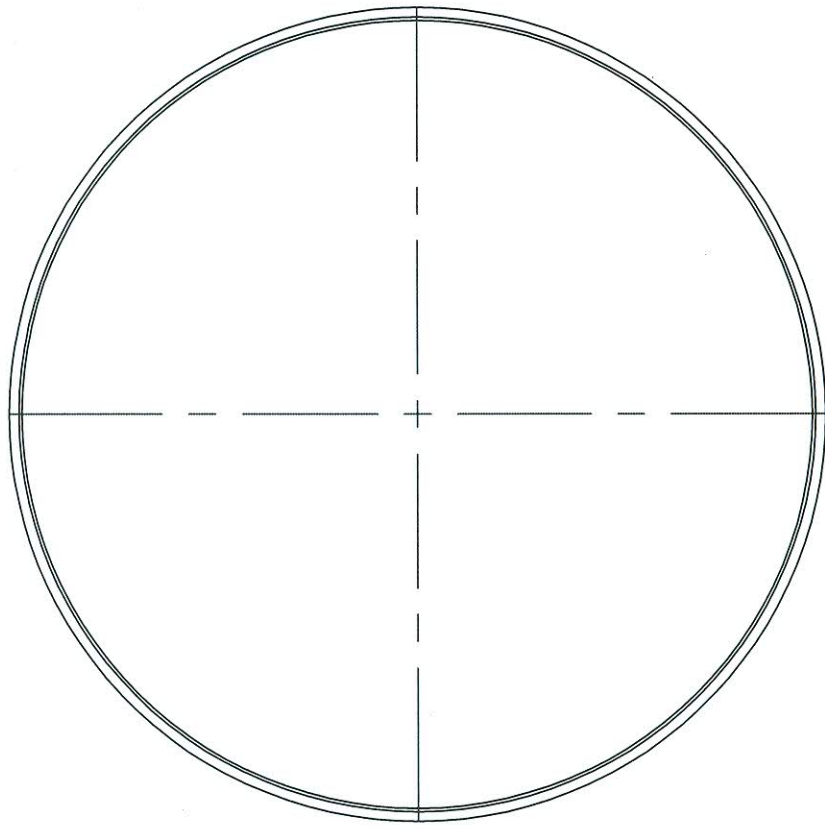
REFER DETAIL 'A'



DETAIL 'A'

(ALL DIMENSIONS ARE IN mm)

(~1.6)



VAR. NO.	REMARKS	VAR. NO.	ITEM NO.	SS TUBE	DESCRIPTION	DRAWING NO.	IT. NO.	MATL. CODE	SS-304L	UNIT WT.	QTY.	ZONE
											01	

TYPE OF PRODUCT: CGSM-145
 NAME OF CUSTOMER: BHARAT HEAVY ELECTRICALS LTD. HYDERABAD
 DEPT. CODE: NTS
 SCALE: NTS
 GRADE OF TOL. DIM. C/M/F: NTS
 WEIGHT(KG):
 REF. TO: RD DG 4 35 1351 1704 1
 DRAWING NO.: RD DG 4 35 1351 1704B
 SHEET NO.:
 IND. OF SHEETS:

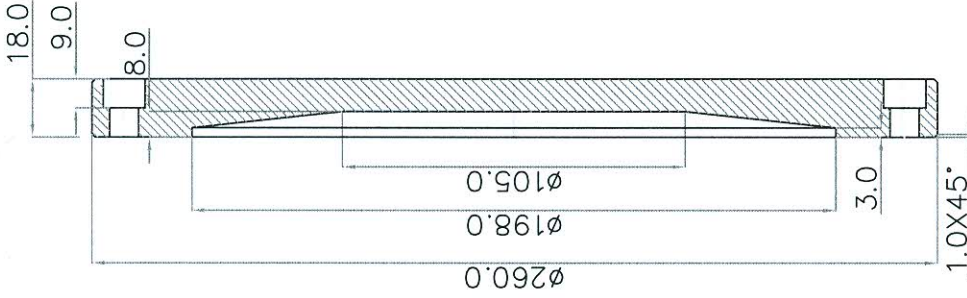
REV.	DATE	ALTERED	CHECKED	DATE	ALTERED	CHECKED	ZONE

INVENTORY NO.	SGN. AND DATE	REF. DRG. NO.

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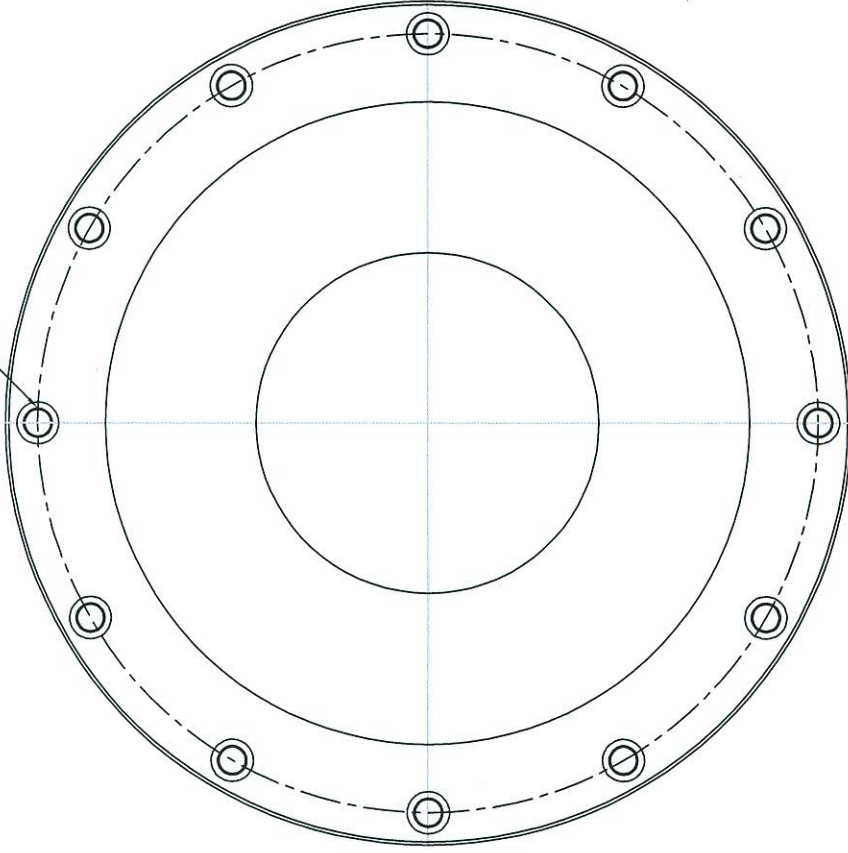
DRG. NO.
RD DG 4 35 0019 0422D

FIRST ANGLE PROJECT



(ALL DIMENSIONS ARE IN mm)

12 Nos. ϕ 9.2 CLEAR HOLES
@240 \pm 0.07 PCD WITH 0.4X45° C/F



(~1.6)

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INVENTORY NO. _____
SIGN. AND DATE _____
REF. DRG. NO. _____

VAR. NO.	REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION	ST. NO.	DRAWING NO.	SS-304L	01	UNIT WT.	QTY.
				BLANK		ϕ 270.0x20.0				

TYPE OF PRODUCT	NAME OF CUSTOMER	DEPT.	GRADE OF TOL. DIM. C/M/F	SCALE	WEIGHT(KG)	REF. TO	ITEM NO. OF NO. ITEMS
CGSM-145	BHARAT HEAVY ELECTRICALS LTD. HYDERABAD	NTS	6.8 KG	NTS	RD DG 4 35 1351 1702 4	RD DG 4 35 1351 1702 4	1

NAME	DATE	SIGN.	DATE	NO. OF VAR.
BSM	26.12.08			
CKD				
MIRAO	02.01.06			
MIRAO	02.01.06			

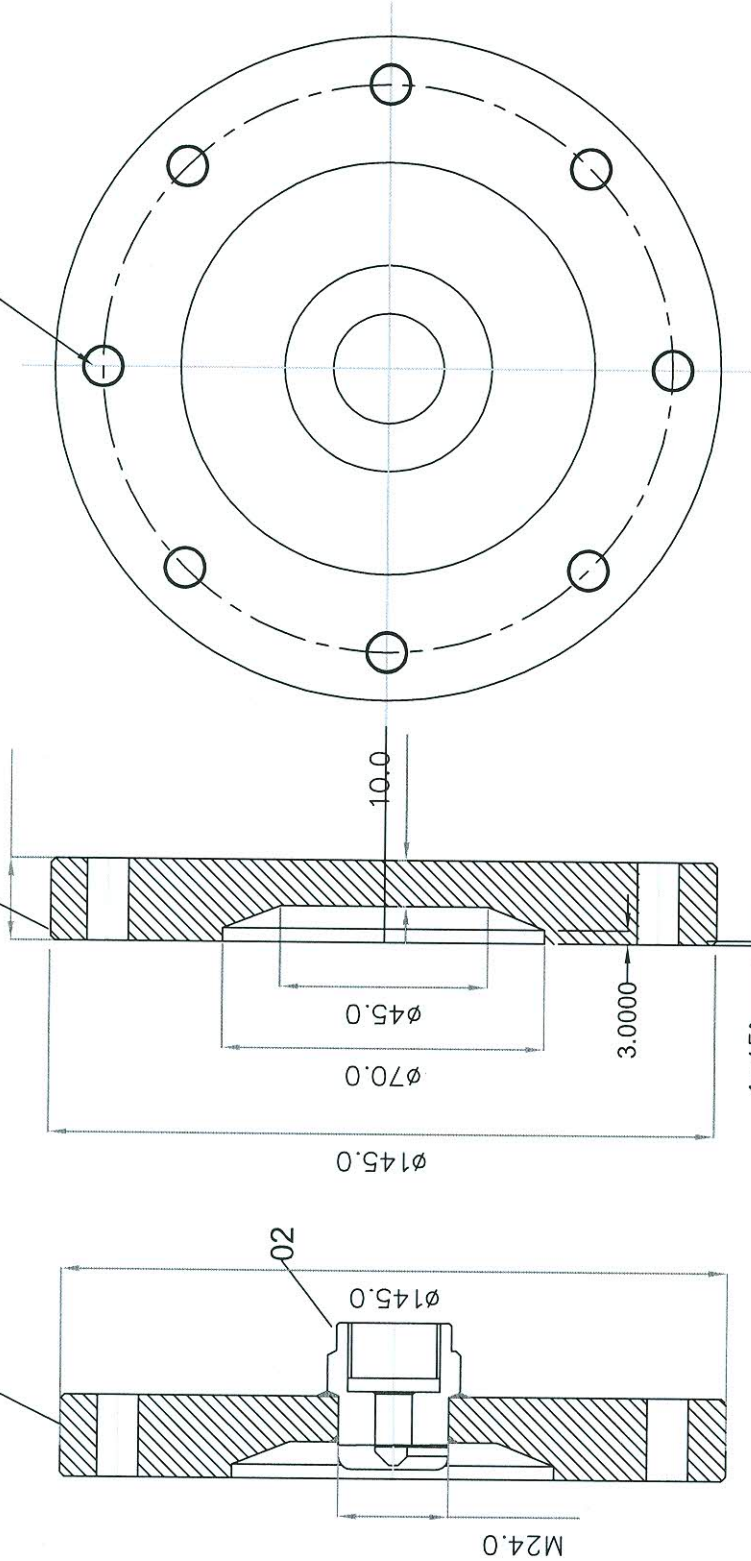
REV.	DATE	ALTERED CHECKED	DATE	ALTERED CHECKED	ZONE

TITLE	CARD CODE	DRAWING NO.	REV.
Cover-II		RD DG 4 35 0617 0422D	

8 Nos. $\phi 9.2$ CLEAR HOLES
@ 124 ± 0.07 PCD WITH $0.4 \times 45^\circ$ C/F

1 No. DUMMY PLATE
WITH OUT GAS STUD
18.6

2 Nos. WITH GAS STUD



COVER-III

COVER-IV
ASSEMBLY

02	GAS STUD	4070104060	0.16 Kg
01	DISK	S/S-304 AA1215XX	4Kg
	DESCRIPTION	DRAWING NO.	UNIT WT.
VAR. NO.	REMARKS	IT. NO.	FINOZ
		VAR.	NO.
			QTY.

TYPE OF PRODUCT
NAME OF CUSTOMER
CGSM-145

DRN	NAME	SIGN.	DATE	NO. OF
OKD	MMRAO	B.S.M.		VAR.
APPD	MMRAO			0
REF. TO	RD DG 435 1351			NO. OF
WEIGHT(KG)	3.6			ITEM
SCALE	1:1			NO. OF
DEPT. SSG	CGM/H			ITEMS
CODE 35				3
TITLE				REV.
				0
				1

NOTE:
GAS STUD TO BE FULLY TIG WELDED FROM INSIDE