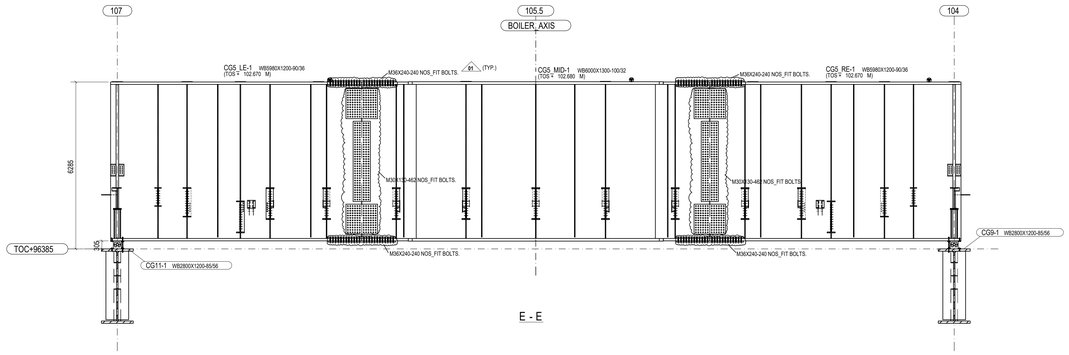
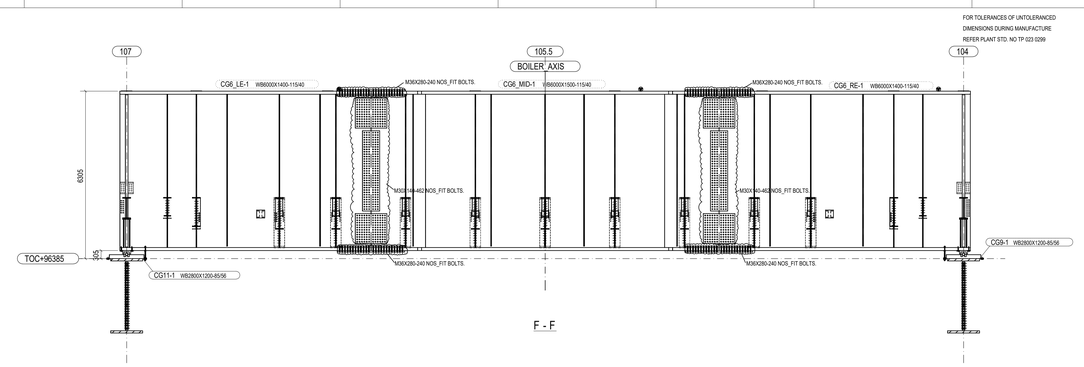
DRAWING NO: 0-35-212-34574

ASSEMBLY MARK NO	JOINT NO	TOP/ BOTTOM/ REST PLATE	
		BOLT SIZE	QTY
CG5_RE-1	-NA-	8.8XOX.M24x80	12
CG5_RE-1	-NA-	8.8XOX.M24x90	16
CG5_RE-1	-NA-	HSFG-10.9.M30x140	198
CG5_RE-1	-NA-	HSFG-10.9.M30x146	288
CG5_RE-1	-NA-	HSFG-10.9.M36x240	384
CG5_RE-1	-NA-	HSFG.M24x80	10
CG6_LE-1	-NA-	8.8XOX.M24x80	6
CG6_LE-1	-NA-	8.8XOX.M24x90	16
CG6_LE-1	-NA-	8.8XOX.M24x100	6
CG6_LE-1	-NA-	HSFG-10.9.M30x140	288
CG6_LE-1	-NA-	HSFG-10.9.M30x150	198
CG6_LE-1	-NA-	HSFG-10.9.M36x280	480
CG6_LE-1	-NA-	HSFG.M24x110	14
CG6_RE-1	-NA-	8.8XOX.M24x80	6
CG6_RE-1	-NA-	8.8XOX.M24x90	16
CG6_RE-1	-NA-	8.8XOX.M24x100	6
CG6_RE-1	-NA-	HSFG-10.9.M30x140	288
CG6_RE-1	-NA-	HSFG-10.9.M30x150	198
CG6_RE-1	-NA-	HSFG-10.9.M36x280	480
CG6_RE-1	-NA-	HSFG.M24x110	18
CG7_LE-1	-NA-	8.8XOX.M24x90	16
CG7_LE-1	-NA-	8.8XOX.M24x100	6
CG7_LE-1	-NA-	HSFG-10.9.M30x130	144
CG7_LE-1	-NA-	HSFG-10.9.M30x140	342
CG7_LE-1	-NA-	HSFG-10.9.M36x230	384
CG7_LE-1	-NA-	HSFG.M24x110	14
CG7_RE-1	-NA-	8.8XOX.M24x90	16
CG7_RE-1	-NA-	8.8XOX.M24x100	6
CG7_RE-1	-NA-	HSFG-10.9.M30x130	144
CG7_RE-1	-NA-	HSFG-10.9.M30x140	342
CG7_RE-1	-NA-	HSFG-10.9.M36x230	384
CG7_RE-1	-NA-	HSFG.M24x110	18
CG9-1	-NA-	HSFG-10.9.M30x170	336
CG9-1	-NA-	HSFG.M24x158	14
CG11-1	-NA-	HSFG-10.9.M30x170	336
CG11-1	-NA-	HSFG.M24x158	14

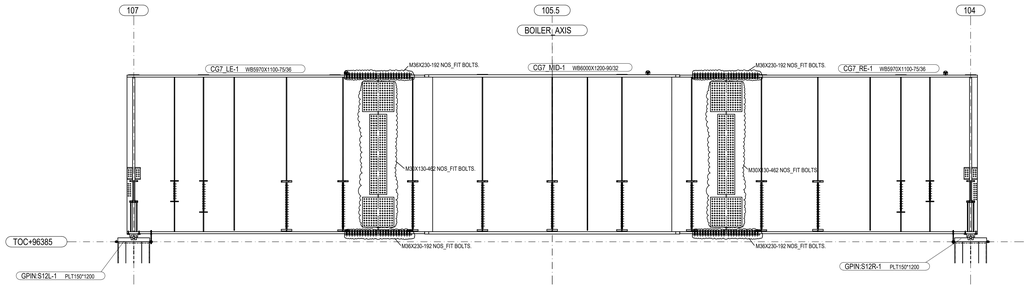
BOLT SUMMARY		
SL NO	BOLT SIZE & 1"WASHER"	QTY
1	8.8XOX.M24x80	24
2	8.8XOX.M24x90	80
3	8.8XOX.M24x100	24
4	HSFG-10.9.M30x130	288
5	HSFG-10.9.M30x140	1458
6	HSFG-10.9.M30x146	288
7	HSFG-10.9.M30x150	396
8	HSFG-10.9.M30x170	672
9	HSFG-10.9.M36x230	768
10	HSFG-10.9.M36x240	384
11	HSFG-10.9.M36x280	960
12	HSFG.M24x80	10
13	HSFG.M24x110	64
14	HSFG.M24x158	28
15	TOTAL	5444



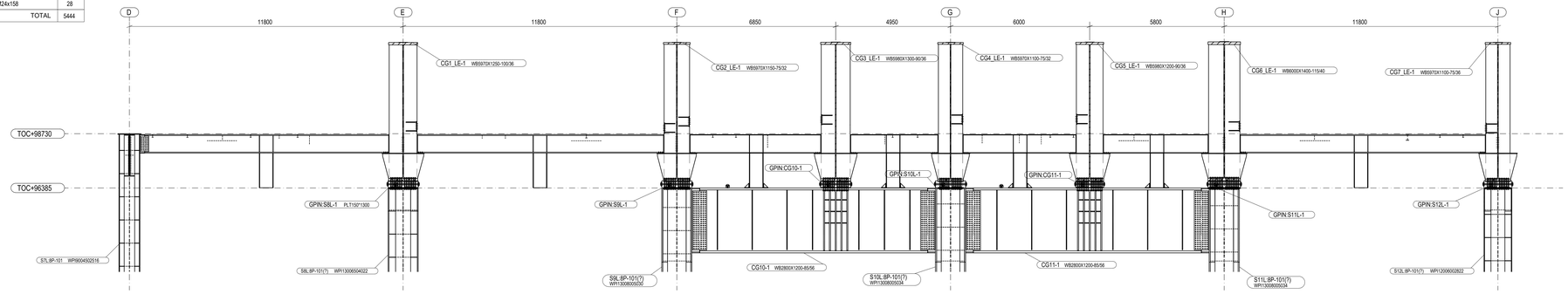
E - E



F - F



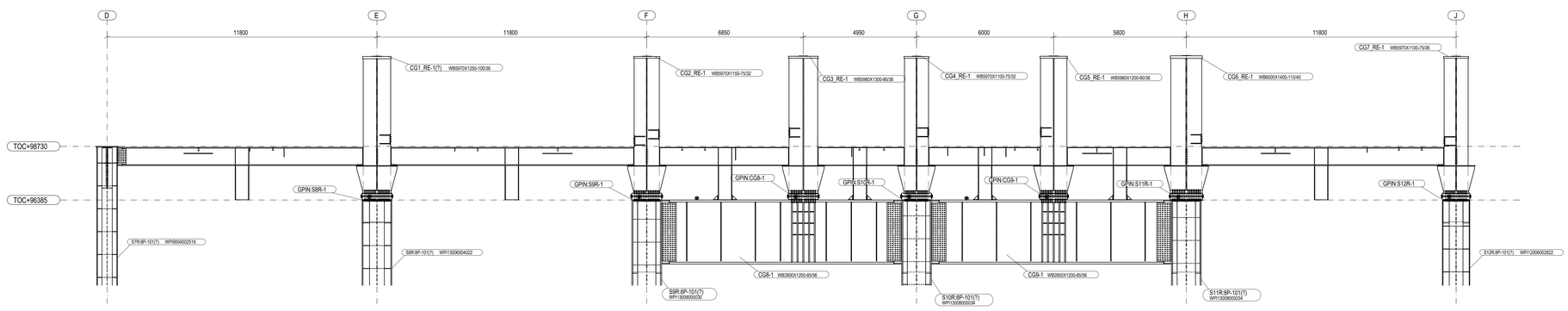
G-G



H - H

01

HSFG FIT BOLTS FOR GIRDER SPLICE					
	FLANGE (DIA OF BOLTXLENGTH)	Qty (NOS)	WEB (DIA OF BOLTXLENGTH)	Qty (NOS)	REMARKS
GIRDER-5	M36X240	960	M30X130	924	ONLY FIT BOLTS ARE TO BE USED FOR GIRDER SPLICES, RELEASED IN PG-MA:35- 730[DU NO.S.10 TO 17]
GIRDER-6	M36X280	960	M30X140	924	
GIRDER-7	M36X230	768	M30X130	924	



I - I

FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER PLANT STD. NO TP 023 0299

NOTES :-

1) MATERIALS AND OTHER REQUIREMENTS ARE GIVEN PER BOILER ONLY.

2) MANUFACTURING REQUIREMENTS SHALL BE AS PER RELEVANT QCP(LATEST REV).

3) FOR MANUFACTURING AND WELD DETAILS REFER DRAWING NO: 1-35-211-15494

4) THIS DRAWING IS TO BE READ ALONG WITH DRAWING NO: 0-35-211-34506.

DRAWING NUMBER	ITEM NUMBER	DESCRIPTION	STD	DRAWING NUMBER	ITEM NO / VAR NO	MATERIAL CODE / MATERIAL SPECN	A/C/P	UNIT / DI	UNIT WEIGHT / QUANTITY	CG	ZONE
	11	CG11-1 WB2800X1200-85/56		0-35-212-34595				No	32277.843		
	10	CG9-1 WB2800X1200-85/56		0-35-212-34593				No	32277.843		
	9	CG7_RE-1 WB5970X1100-75/36		0-35-212-34591				No	43246.687		
	8	CG7_MID-1 WB6000X1200-90/32		0-35-212-34589				No	47294.977		
	7	CG7_LE-1 WB5970X1100-75/36		0-35-212-34587				No	43242.958		
	6	CG6_RE-1 WB6000X1400-115/40		0-35-212-34585				No	62783.630		
	5	CG6_MID-1 WB6000X1500-115/40		0-35-212-34583				No	69138.287		
	4	CG6_LE-1 WB6000X1400-115/40		0-35-212-34581				No	62783.630		
	3	CG5_RE-1 WB5980X1200-90/36		0-35-212-34579				No	51706.921		
	2	CG5_MID-1 WB6000X1300-100/32		0-35-212-34577				No	56368.946		
	1	CG5_LE-1 WB5980X1200-90/36		0-35-212-34575				No	51706.921		

TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT

Bharat Heavy Electricals Ltd
UNIT: HIGH PRESSURE BOILER PLANT
TIRUCHIRAPALLI - 620014

	NAME	SIGNATURE	DATE
DRN	K.S.PANDIAN		26.12.2024
CHD	HARIKRISHNA T		27.12.2024
APPD	VSRK		28.12.2024

DEPT: ST
CODE: 122
ALL DIMENSIONS ARE IN MM
PROJECTION
SCALE: NTS
WEIGHT (Kg): 501121.721
REF TO ASSY / OLD DWG

TITLE: CEILING MAIN GIRDER AND CROSS GIRDER-2ND PASS

DRAWING NO : 0-35-212-34574

REV: 01

REV	DATE	ALTERED : NARMATHA.S
0/1	06.05.2025	CHD & APPD : HARIKRISHNA T
ZONE: B1	GIRDER SPLICE - FIT BOLTS & TABLE ADDED AS MARKED.	

CAUTION: The information on this document is the property of BHARAT HEAVY ELECTRICALS LTD and must be used directly or indirectly in any way prejudicial to the interests of the company.

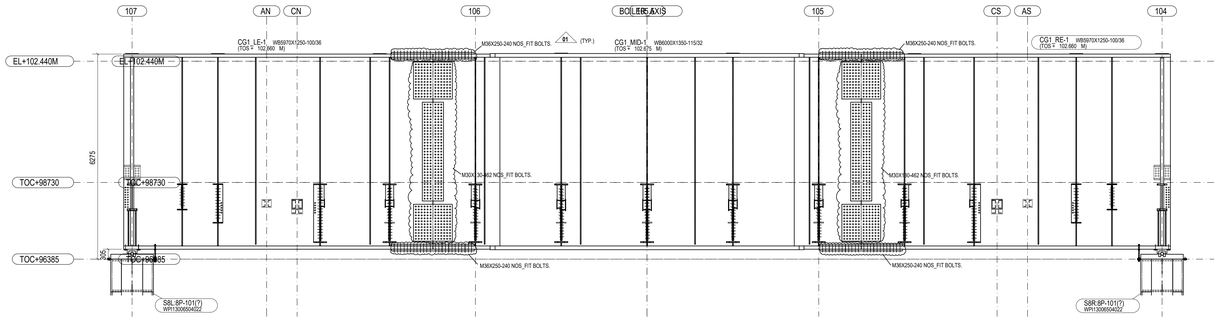
CORPORATE DRG ID:TP-DG-0-35-211-34505/01

DRAWING NO: 0-35-211-34505

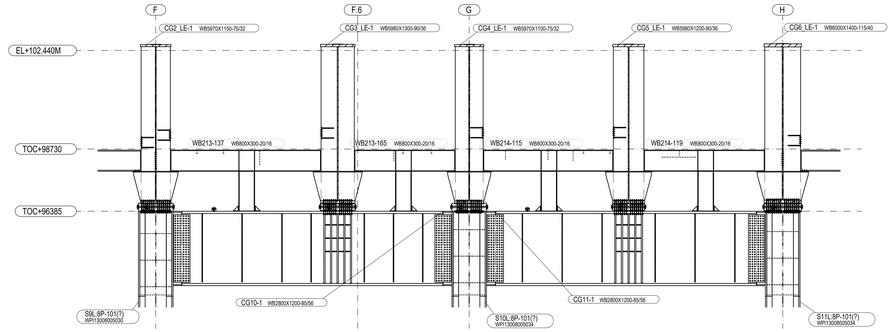
FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER PLANT STD. NO.TP-023-0299

ASSEMBLY MARK NO	JOINT NO	TOP/ BOTTOM/ REST PLATE	
		BOLT SIZE	QTY
CG1_LE-1	-NA-	8.8XOX:M24x90	16
CG1_LE-1	-NA-	8.8XOX:M24x100	12
CG1_LE-1	-NA-	HSFG-10.9:M30x130	144
CG1_LE-1	-NA-	HSFG-10.9:M30x140	342
CG1_LE-1	-NA-	HSFG-10.9:M36x250	480
CG1_LE-1	-NA-	HSFG:M24x110	18
CG1_RE-1	-NA-	8.8XOX:M24x90	16
CG1_RE-1	-NA-	HSFG-10.9:M24x110	6
CG1_RE-1	-NA-	HSFG-10.9:M30x130	144
CG1_RE-1	-NA-	HSFG-10.9:M30x140	144
CG1_RE-1	-NA-	HSFG-10.9:M30x146	198
CG1_RE-1	-NA-	HSFG-10.9:M36x272	480
CG1_RE-1	-NA-	HSFG:M24x110	6
CG1_RE-1	-NA-	HSFG:M24x116	18
CG2_LE-1	-NA-	8.8XOX:M24x80	6
CG2_LE-1	-NA-	8.8XOX:M24x90	32
CG2_LE-1	-NA-	8.8XOX:M24x100	6
CG2_LE-1	-NA-	HSFG-10.9:M30x130	486
CG2_LE-1	-NA-	HSFG-10.9:M36x230	384
CG2_LE-1	-NA-	HSFG:M24x80	10
CG2_LE-1	-NA-	HSFG:M24x100	18
CG2_RE-1	-NA-	8.8XOX:M24x90	32
CG2_RE-1	-NA-	HSFG-10.9:M30x130	486
CG2_RE-1	-NA-	HSFG-10.9:M36x230	384
CG2_RE-1	-NA-	HSFG:M24x80	10
CG2_RE-1	-NA-	HSFG:M24x90	6
CG2_RE-1	-NA-	HSFG:M24x100	18
CG2_RE-1	-NA-	HSFG:M24x110	6
CG3_LE-1	-NA-	8.8XOX:M24x80	12
CG3_LE-1	-NA-	8.8XOX:M24x90	16
CG3_LE-1	-NA-	HSFG-10.9:M30x130	342
CG3_LE-1	-NA-	HSFG-10.9:M30x140	144
CG3_LE-1	-NA-	HSFG-10.9:M36x240	480
CG3_RE-1	-NA-	8.8XOX:M24x80	12
CG3_RE-1	-NA-	8.8XOX:M24x90	16
CG3_RE-1	-NA-	HSFG-10.9:M30x130	72
CG3_RE-1	-NA-	HSFG-10.9:M30x140	342
CG3_RE-1	-NA-	HSFG-10.9:M30x146	72
CG3_RE-1	-NA-	HSFG-10.9:M36x240	480
CG4_LE-1	-NA-	8.8XOX:M24x80	12
CG4_LE-1	-NA-	8.8XOX:M24x90	16
CG4_LE-1	-NA-	HSFG-10.9:M30x130	486
CG4_LE-1	-NA-	HSFG-10.9:M36x230	384
CG4_RE-1	-NA-	HSFG:M24x100	18
CG8-1	-NA-	HSFG-10.9:M30x170	336
CG8-1	-NA-	HSFG:M24x158	14
CG10-1	-NA-	HSFG-10.9:M30x170	336
CG10-1	-NA-	HSFG:M24x158	14

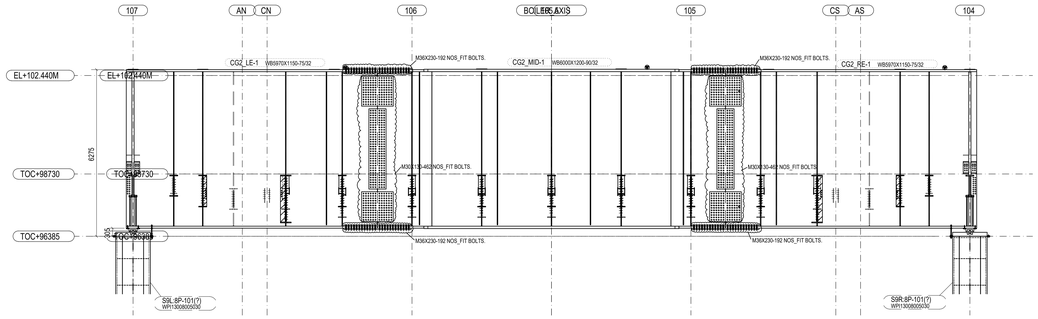
BOLT SUMMARY		
SL NO	BOLT SIZE & 1"WASHER*	QTY
1	8.8XOX:M24x80	54
2	8.8XOX:M24x90	160
3	8.8XOX:M24x100	18
4	HSFG-10.9:M24x110	6
5	HSFG-10.9:M30x130	2646
6	HSFG-10.9:M30x140	972
7	HSFG-10.9:M30x146	270
8	HSFG-10.9:M30x170	672
9	HSFG-10.9:M36x230	1536
10	HSFG-10.9:M36x240	960
11	HSFG-10.9:M36x250	480
12	HSFG-10.9:M36x272	480
13	HSFG:M24x80	20
14	HSFG:M24x90	6
15	HSFG:M24x100	54
16	HSFG:M24x110	30
17	HSFG:M24x116	18
18	HSFG:M24x158	28
19	TOTAL	8410



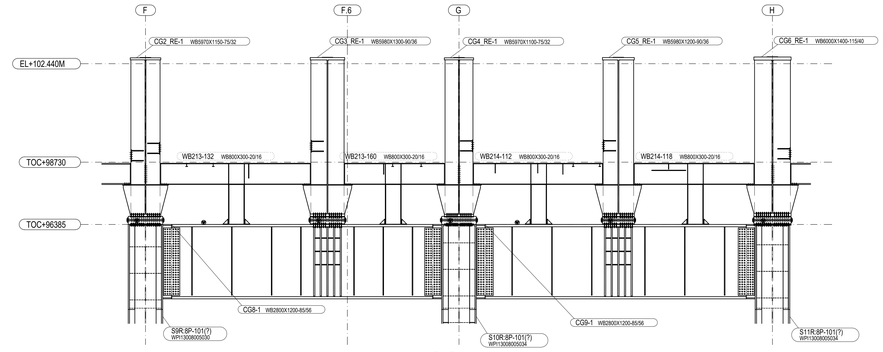
A - A



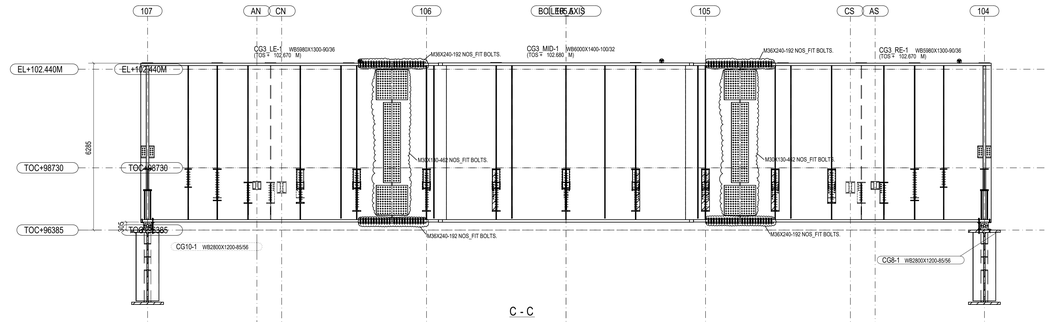
A - A



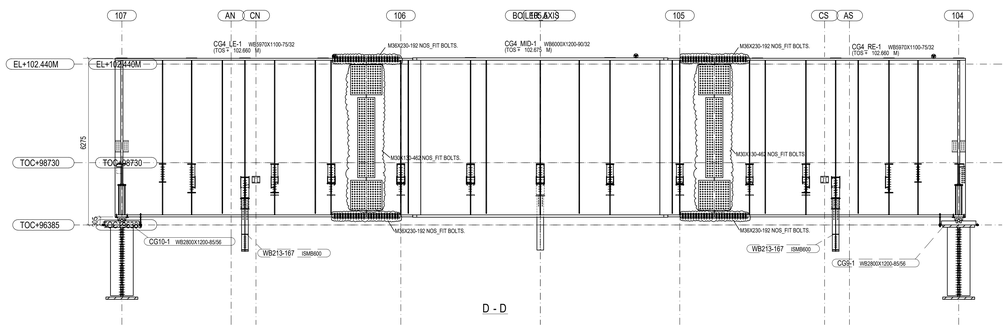
B - B



B - B



C - C



D - D

NOTES :-

1) MATERIALS AND OTHER REQUIREMENTS ARE GIVEN PER BOILER ONLY.
2) MANUFACTURING REQUIREMENTS SHALL BE AS PER RELEVANT QCP(LATEST REV).
3) FOR MANUFACTURING AND WELD DETAILS REFER DRAWING NO: 1-35-211-15484
4) THIS DRAWING IS TO BE READ ALONG WITH DRAWING NO: 0-35-211-34506 AND 0-35-212-34574.

01

HSFG FIT BOLTS FOR GIRDER SPLICE					
	FLANGE (DIA OF BOLT X LENGTH)	Qty (NOS)	WEB (DIA OF BOLT X LENGTH)	Qty (NOS)	REMARKS
GIRDER-1	M36X250	960	M30X130	924	ONLY FIT BOLTS ARE TO BE USED FOR GIRDER SPLICES, RELEASED IN PG-MA: 35-730 [DU NO.S.10 TO 17]
GIRDER-2	M36X230	768	M30X130	924	
GIRDER-3	M36X240	768	M30X130	924	
GIRDER-4	M36X230	768	M30X130	924	

VARIANT NUMBER	ITEM NUMBER	DESCRIPTION	STD	DRAWING NUMBER	ITEM NO / VAR NO	MATERIAL CODE / MATERIAL SPECN	AUOP	UNIT	UNIT WEIGHT / QUANTITY	CG	ZONE
	14	CG10-1 WB2800X1200-85/56		0-35-211-34545				No	32682.412 / 1		
	13	CG8-1 WB2800X1200-85/56		0-35-211-34543				No	32682.412 / 1		
	12	CG4_RE-1 WB5970X1100-75/32		0-35-211-34540				No	44436.846 / 1		
	11	CG4_MID-1 WB6000X1200-90/32		0-35-211-34537				No	49274.384 / 1		
	10	CG4_LE-1 WB5970X1100-75/32		0-35-211-34534				No	44436.846 / 1		
	9	CG3_RE-1 WB5980X1300-90/36		0-35-211-34531				No	53453.178 / 1		
	8	CG3_MID-1 WB6000X1400-100/32		0-35-211-34528				No	55238.187 / 1		
	7	CG3_LE-1 WB5980X1300-90/36		0-35-211-34525				No	53453.178 / 1		
	6	CG2_RE-1 WB5970X1150-75/32		0-35-211-34522				No	43879.069 / 1		
	5	CG2_MID-1 WB6000X1200-90/32		0-35-211-34519				No	48676.243 / 1		
	4	CG2_LE-1 WB5970X1150-75/32		0-35-211-34516				No	43879.069 / 1		
	3	CG1_RE-1 WB5970X1250-100/36		0-35-211-34513				No	54522.769 / 1		
	2	CG1_MID-1 WB6000X1350-115/32		0-35-211-34510				No	61382.666 / 1		
	1	CG1_LE-1 WB5970X1250-100/36		0-35-211-34507				No	54522.769 / 1		

REV	DATE	ALTERED : NARMATHA S
01	07.05.2025	CHD & APPD : HARIKRISHNA.T
ZONE	GIRDER SPLICE - FIT BOLTS & TABLE ADDED AS MARKED.	

CAUTION : The information on this document is the property of BHARAT HEAVY ELECTRICALS LTD. It must not be used directly or indirectly in any way detrimental to the interest of the company.

CONTRACTOR: Bharat Heavy Electricals Ltd

CUSTOMER NO :
PROJECT NAME :

SUB CONTRACTOR: Bharat Heavy Electricals Ltd, HIGH PRESSURE BOILER PLANT, TRICHY

	NAME	SIGNATURE	DATE
DRN	K.S.PANDIAN		26.12.2024
CHD	HARIKRISHNA.T		27.12.2024
APPD	VSRK		28.12.2024

DETAILER

DEPT: ST
CODE: 122
ALL DIMENSIONS ARE IN MM
PROJECTION
SCALE: NTS
WEIGHT (Kg): 672520.027
REF TO ASSY / OLD DWG

TITLE: CEILING MAIN GIRDER AND CROSS GIRDER-1ST PASS

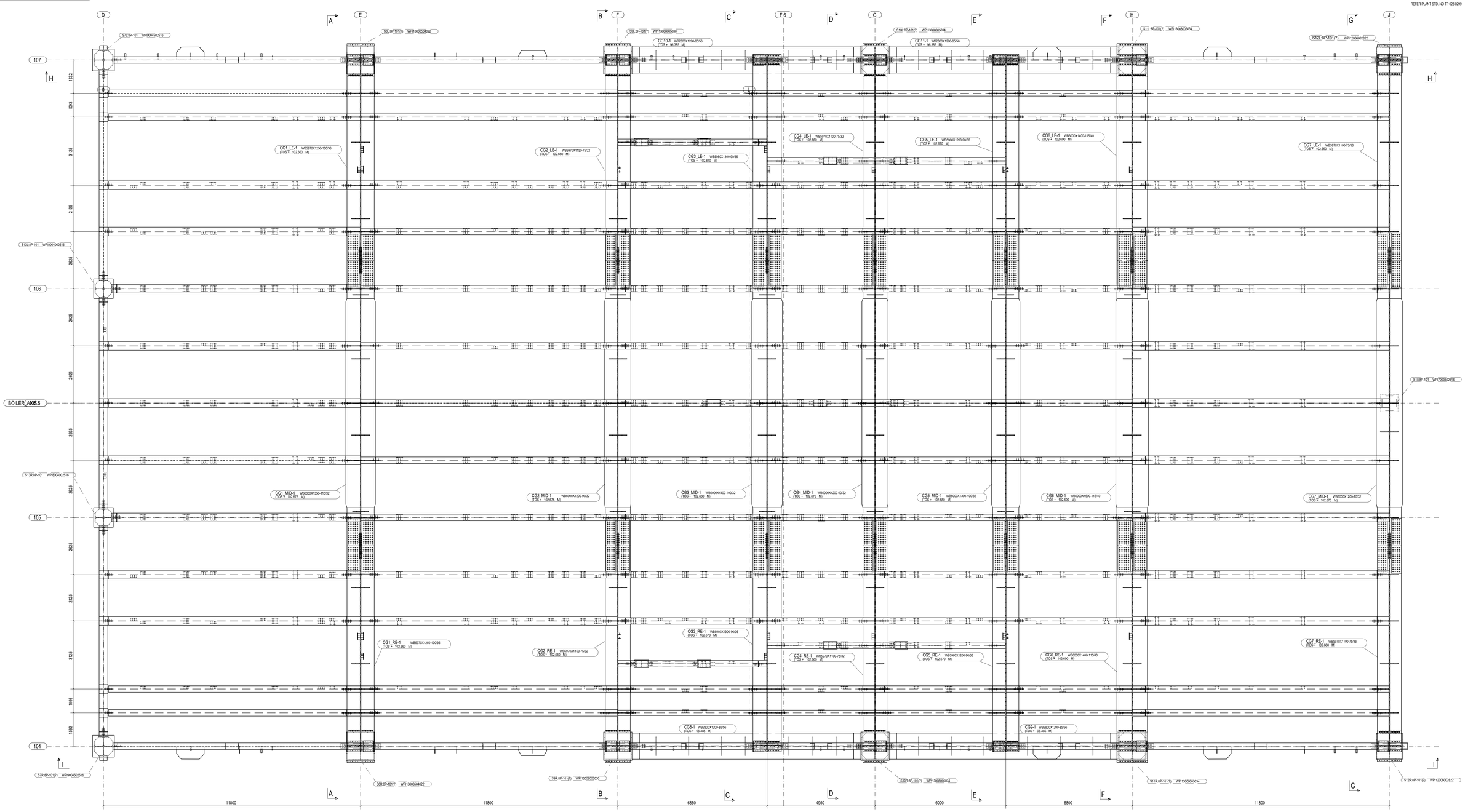
DRAWING NO : 0-35-211-34505
REV: 01

CORPORATE DRG ID:TP-DG-0-35-211-34505/01

CORPORATE DRG ID:TP-DG-0-35-211-34506/00

0-35-211-34506
DRAWING NO

FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER PLANT STD. NO TP 023 0299



CEILING STRUCTURE ASSEMBLY

NOTES :-

1) THIS DRAWING IS TO BE READ ALONG WITH DRAWING NO: 0-35-211-34505 AND 0-35-212-34574

VARIANT NUMBER	ITEM NUMBER	DESCRIPTION	STD	DRAWING NUMBER	ITEM NO / VAR NO	MATERIAL CODE / MATERIAL SPECN	AUGP / DI	UNIT WEIGHT / QUANTITY	UG	ZONE

TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT

Bharat Heavy Electricals Ltd
UNIT: HIGH PRESSURE BOILER PLANT
TIRUCHIRAPALLI - 620014

	NAME	SIGNATURE	DATE
DRN	K.S.PANDIAN		26.12.2024
CHD	HARIKRISHNA T		27.12.2024
APPD	VSRK		28.12.2024

DEPT 300-052 ST
CODE 122
ALL DIMENSIONS ARE IN MM
PROJECTION
SCALE NTS
WEIGHT (Kg)
REF TO ASSY / OLD DWG

TITLE
CEILING STRUCTURE ASSEMBLY - 1ST & 2ND PASS

DRAWING NO : 0-35-211-34506
REV 00

CAUTION: The information on this document is the property of BHARAT HEAVY ELECTRICALS LTD and not to be used directly or indirectly in any manner to the detriment of the company.

CORPORATE DRG ID:TP-DG-0-35-211-34506/00