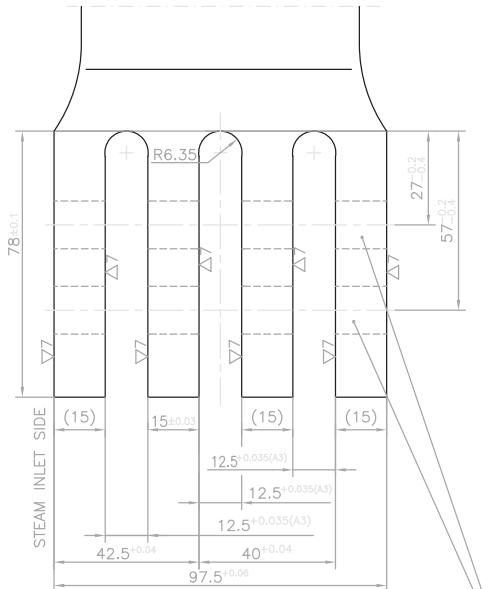


1305031E

DRAWING No.

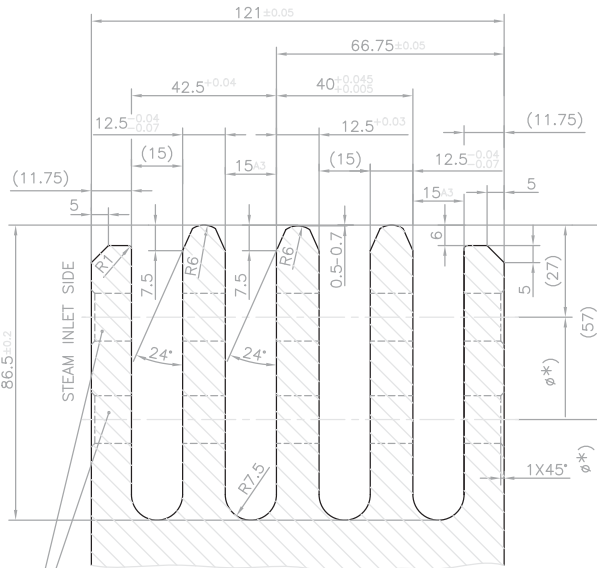
▽6 ALL OVER

▽6 REST



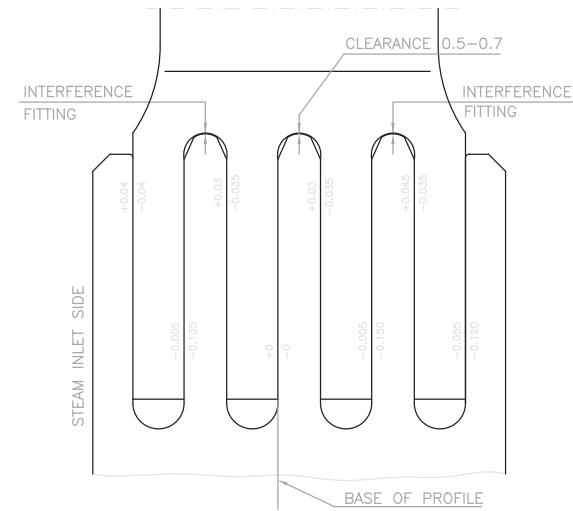
BLADE ROOT

FOR DIAMETER OF HOLE FOR RIVETS,
SEE-DRAWING OF BLADE.



DISC

FOR DIAMETER OF HOLE FOR
RIVET- SEE DRAWING OF DISC.



MATING OF BLADE ROOT AND DISC

(NOTATION: +FILING, -CLEARANCE)

FITTING OF BLADE IN DISC

FIT THE BLADE EITHER BY FORCE OF HAND
OR BY USE OF 800 gms. HAMMER.

TECHNICAL REQUIREMENTS:-

1. FOR ORIENTATION OF ROOT WITH RESPECT TO INLET EDGE OF BLADE,
SEE DRAWING OF BLADE.
2. DIMENSIONS IN BRACKET ARE FOR REFERENCE ONLY.
3. *) FOR DIAMETERS AND ALLOWANCES - SEE CORRESPONDING DISC DRAWING.

SUPERSEDES OLD DRAWING
UNDER THE SAME NUMBER
WITHOUT ANY CHANGE.

Ref: Drawing No
1020324

Sign & Date

Inventory No

REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED

GRADE OF UNTOL.DIM	
M/CG.- \varnothing /M/ \varnothing	AA0230208
WELDING-X/B/ \varnothing / \varnothing	AA0621104
GAS CUTTING-T3	AA0621101

CMS No./ CBOM No.	00031305000	STATUS OF DRG	
AGREED DEPT	NAME	SIGN	DATE
M	H.SINGH	sd	08.10.68

TYPE OF PRODUCT **STEAM TURBINE**
OR
NAME OF CUSTOMER/PROJECT **C-100-90**

BHARAT HEAVY ELECTRICALS LTD.
RANIPUR, HARDWAR

DRN	NAME	SIGN	DATE	NO. OF VAR
CHD	K.M.SINGHAL	sd/-	23.08.68	-
APPD	N.B.MATHUR	sd/-	31.08.68	-
	J.N.KARAN	sd/-	17.11.68	73 74

DEPT STE
CODE 4011

SCALE 1:1

WEIGHT (KG) -

REF. TO ASSY. DRG. 31305000

TITLE : **ROOT PROFILE NO.749 FOR ROOT OF WORKING BLADE & DISC**

DRAWING NO. **31305031**
SHEET No. 01 No. of SHEETS 01

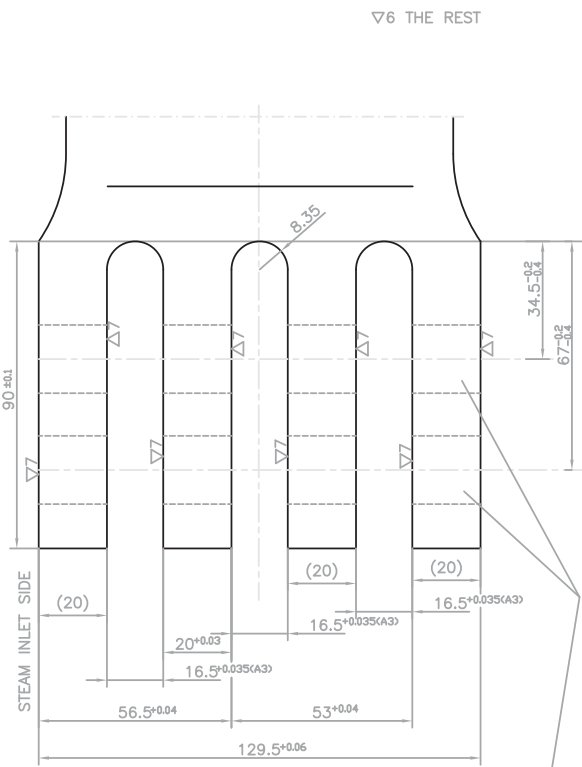
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DRAWING NO. 31305032

FIRST ANGLE PROJECTION

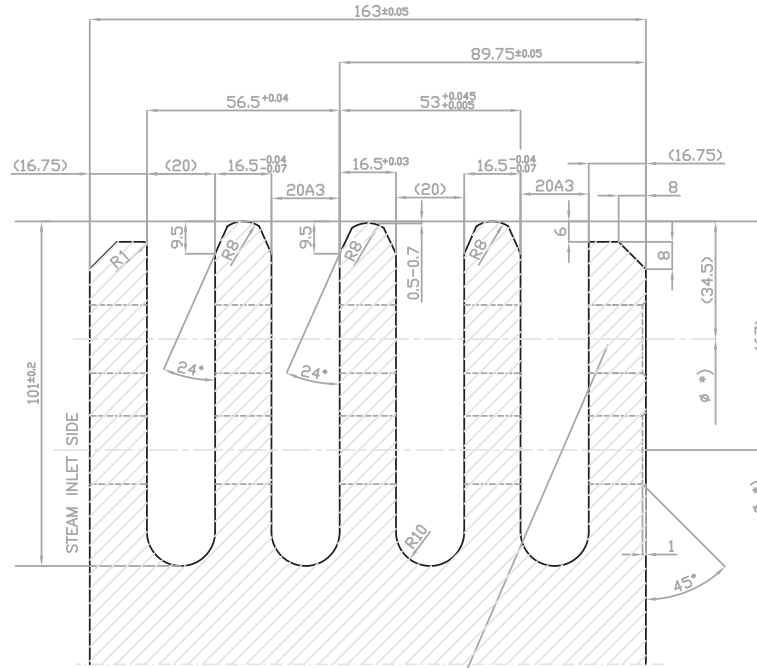
(ALL DIMENSIONS ARE IN mm)

FORM DG 44(B)



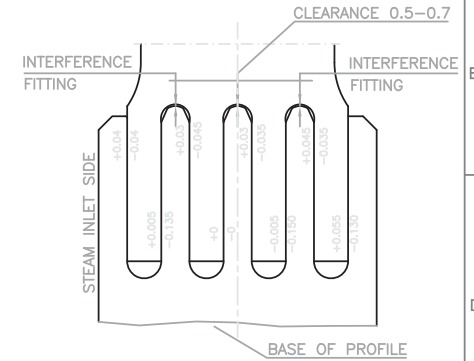
BLADE ROOT

FOR DIAMETER OF HOLE FOR RIVETS
SEE DRAWING OF BLADE



DISC

FOR DIAMETER OF HOLE FOR RIVET-SEE DRAWING OF DISC



MATING OF BLADE ROOT AND DISC

SCALE 1:2
(NOTATION: +FILING; -CLEARANCE)

FITTING OF BLADE IN DISC

FIT THE BLADE EITHER BY FORCE OF HAND OR BY USE OF 800 gms HAMMER

TECHNICAL REQUIREMENTS:-

1. FOR ORIENTATION OF ROOT W.R.T. WITH INLET EDGE OF BLADE - SEE DRG. OF BLADE.
2. DIMENSIONS IN BRACKET ARE FOR REFERENCE .
3. *) FOR DIAMETERS AND ALLOWANCES - SEE DRAWING OF DISC.

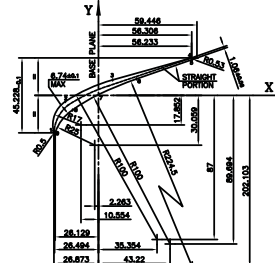
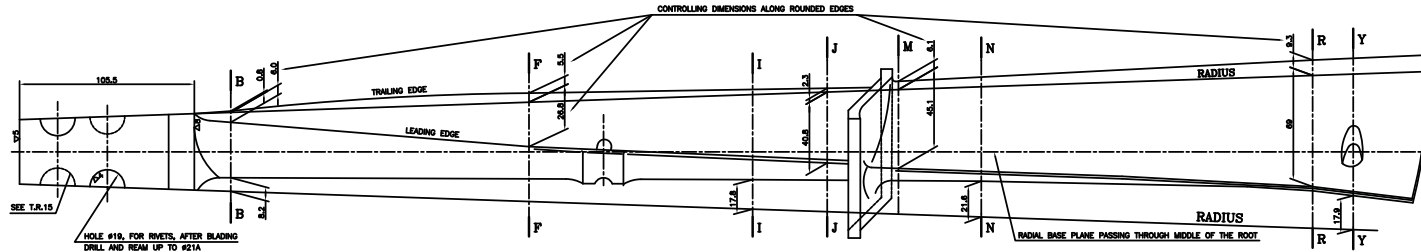
SUPERSEDES OLD DRAWING UNDER THE SAME NUMBER WITHOUT ANY CHANGE.

Ref. Drawing No. 1004769
 Sign & Date
 Inventory No.

REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED	REV	DATE	ALTERED CHECKED
8			7			6			5			4			3		

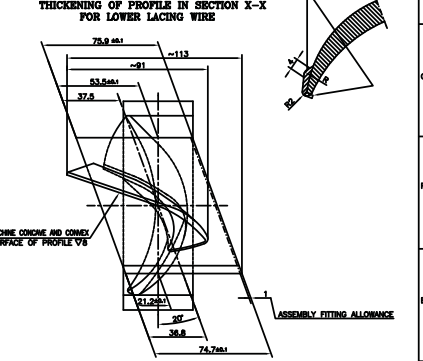
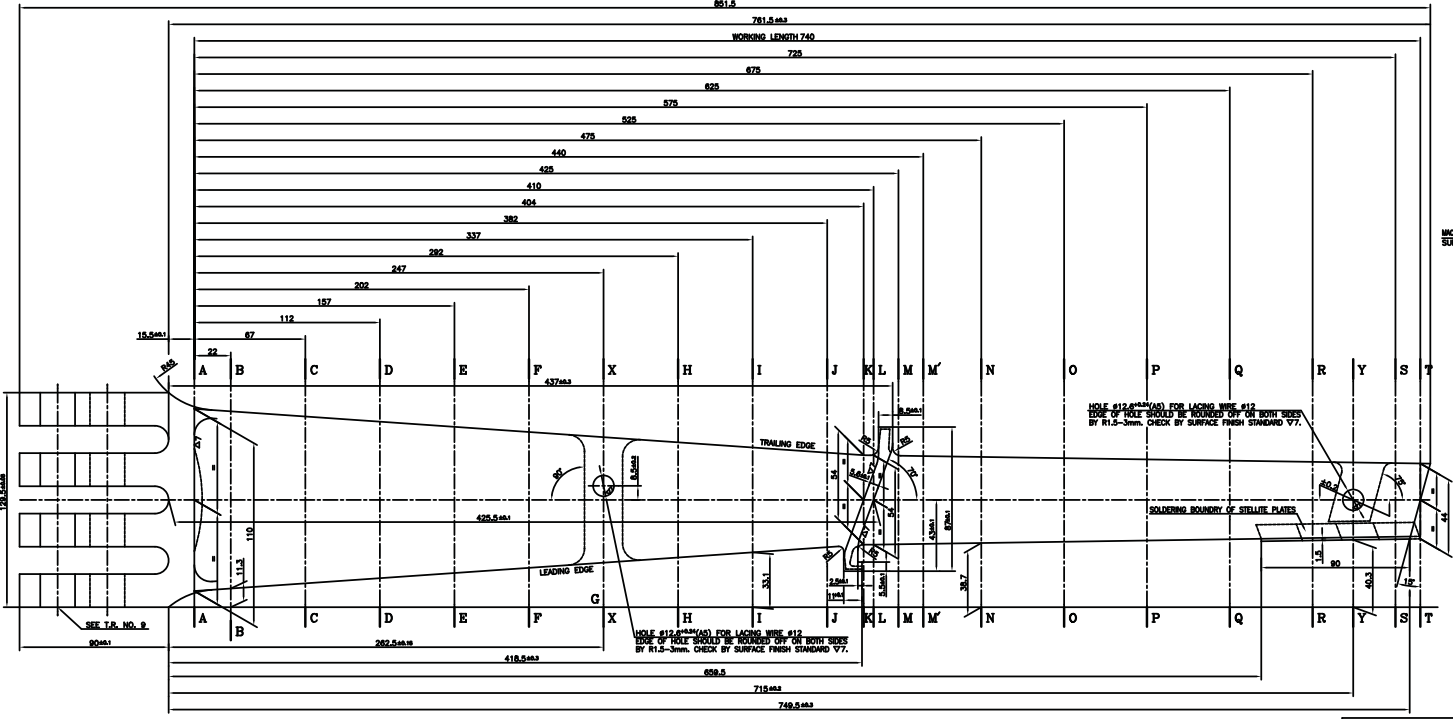
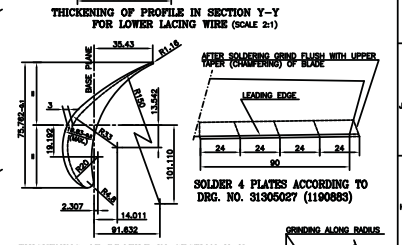
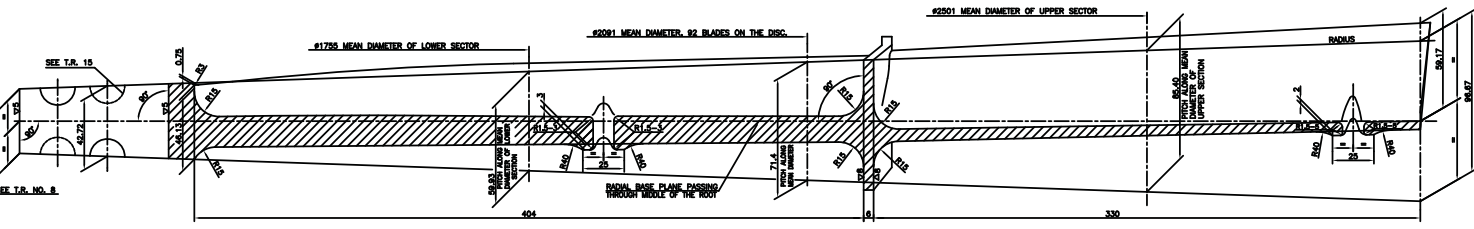
GRADE OF UNTOL.DIM		GMS No./ CBOM No.		STATUS OF DRG	
M/CG- ϕ /M/ ∇	AA0230208	00031305000		U	
WELDING-A/B/ ϕ / ∇	AA0621104	STT	H.SINGH	sd/-	6.10.68
GAS CUTTING-T3	AA0621101				

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		STEAM TURBINE C-100-90			
DRN	NAME	SIGN	DATE	NO. OF VAR	
CHD	N.B.MATHUR	sd/-	31.8.68	-	
APPD	J.N.KARAN	sd/-	28.11.68	73 74	
DEPT	STE	SCALE	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM No.
4011		1:1	-	31305000	-
TITLE :		CARD CODE	DRAWING NO.	NO. OF SHEETS	
ROOT PROFILE NO.746 FOR ROOT OF WORKING BLADE & DISC		7	31305032	23 24	
			SHEET No. 01	No. Of SHEETS 01	



CO-ORDINATES OF CONJUGATION POINTS

POINT NO.	X	Y
1	-26.977	-22.243
2	-16.807	-3.889
3	0.528	6.537
4	56.104	22.924
5	56.480	21.582
6	23.007	-0.844
7	0.232	0.589
8	-17.424	-10.181
9	-26.019	-22.270



- TECHNICAL REQUIREMENTS:-**
- SECTIONS B-A, C-C, D-D, E-E, F-F, G-G, H-H, I-I, J-J, M-M, N-N, O-O, P-P, Q-Q, R-R, Y-Y, S-S ARE CONTROLLING ONES.
 - FOR BLADE SECTIONS - SEE DRG. NO. 32305028 (A-1191878) IN TWO SHEETS.
 - FOR BLADE SECTIONS - SEE DRG. NO. 32305029 (A-1192421) 2nd SHEET & SECTION M-M' IN 1st SHEET.
 - CONCRETE AND CORNER SURFACE OF GENERATING LINES IN SECTION DRAWING.
 - PERMISSIBLE DEVIATIONS FROM THEORETICAL PROFILE (CLEARANCE) ALONG CONCRETE AND CORNER SURFACE OF GENERATING LINES BETWEEN CONCRETE SECTIONS WITH TOLERANCE LENGTH 100-150mm.
 - PERMISSIBLE DEVIATIONS FROM STRAIGHTNESS OF GENERATING LINES BETWEEN CONCRETE SECTIONS WITH TOLERANCE LENGTH 100-150mm.
 - PERMISSIBLE DEVIATIONS FROM TEMPERATURE NOT TO EXCEED 20.0mm.
 - BLADE MANUFACTURING TOL. OF ALL THE BLADES SHOULD BE MANUFACTURED WITH PITCH TOLERANCE 0.03mm.
 - LEADING EDGE OF STELLITE PART OF BLADE SHOULD BE GRINDED H.A.T. SIDE SURFACE OF ROOT, PERMISSIBLE DEVIATION UP TO 1.0mm AT UPPER.
 - LEADING EDGE OF THE BLADE IN PLACES OF SHOULDERING FIT BY GRINDING SURFACE OF STELLITE PART OF BLADE SHOULD BE GRINDED H.A.T. BEFORE SOLDERING THE PLATES SOLDERING BOUNDS OF LEADING EDGE TO BE POLISHED Y8-Y8.
 - FITTING OF REINFORCING BLADE-BLADES IS DONE AS PER INSTRUCTIONS OF ASSEMBLY DRG. OF L.P. BLADING SEE DRG. NO. 32305000 (A-1192020).
 - FINAL MACHINING (TURNING) OF BLADES IS DONE WITH ROTOR ACCORDING TO FINAL MACHINING AND BALANCING DRG. OF L.P. ROTOR.
 - SOLDERING OF STELLITE PLATES IS CARRIED OUT ACCORDING TO INSTRUCTION OF REPAIRING SECTION.
 - AFTER FINAL MACHINING, BLADES UNDER GO:
 - TESTING BY MECHANICAL METHOD.
 - VIBRATION TESTING OF BLADES IN VICES ACCORDING TO INSTRUCTIONS OF S.T. LAB.
 - MOMENT BENDING ACCORDING TO INSTRUCTIONS NO. 310-40.
 - BENDING IN COMMERCIAL BALANCES, WEIGHT OF BLADE 7.7-200 kg.
 - IN EDGE BLADES OF A STAGE, HOLES FOR RIVETS ARE TO BE MADE ON OPPOSITE SIDE AS SHOWN WITH DOTTED LINES.

LOWER SECTOR PROFILE NO. 1984, DRG. NO. 32305026 (A-1191878) (IN TWO SHEETS)
 UPPER SECTOR PROFILE NO. 1192, DRG. NO. 32305029 (A-1192421) (2nd SHEET & SECTION OF M-M' IN 1st SHEET)
 ROOT PROFILE NO.746 DRG. NO. 31305028 (1004769)

REVISES OLD DRAWING UNDER THE SAME NUMBER WITHOUT ANY CHANGE.

GRADE OF UNTOLOM
 M/CG-2/1/7 MAG202028
 TEL: 252528 252528
 (SAS CUTTING-TEAM081101)

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT
 STEAM TURBINE

DRYDEN ELECTRICALS LTD
 RUMFORD, BARROTT

DEPT. SITE
 CODE 4011

SCALE
 1:1

REF. TO ARBY. DRG.
 32305000

DRAWING NO.
 32305003

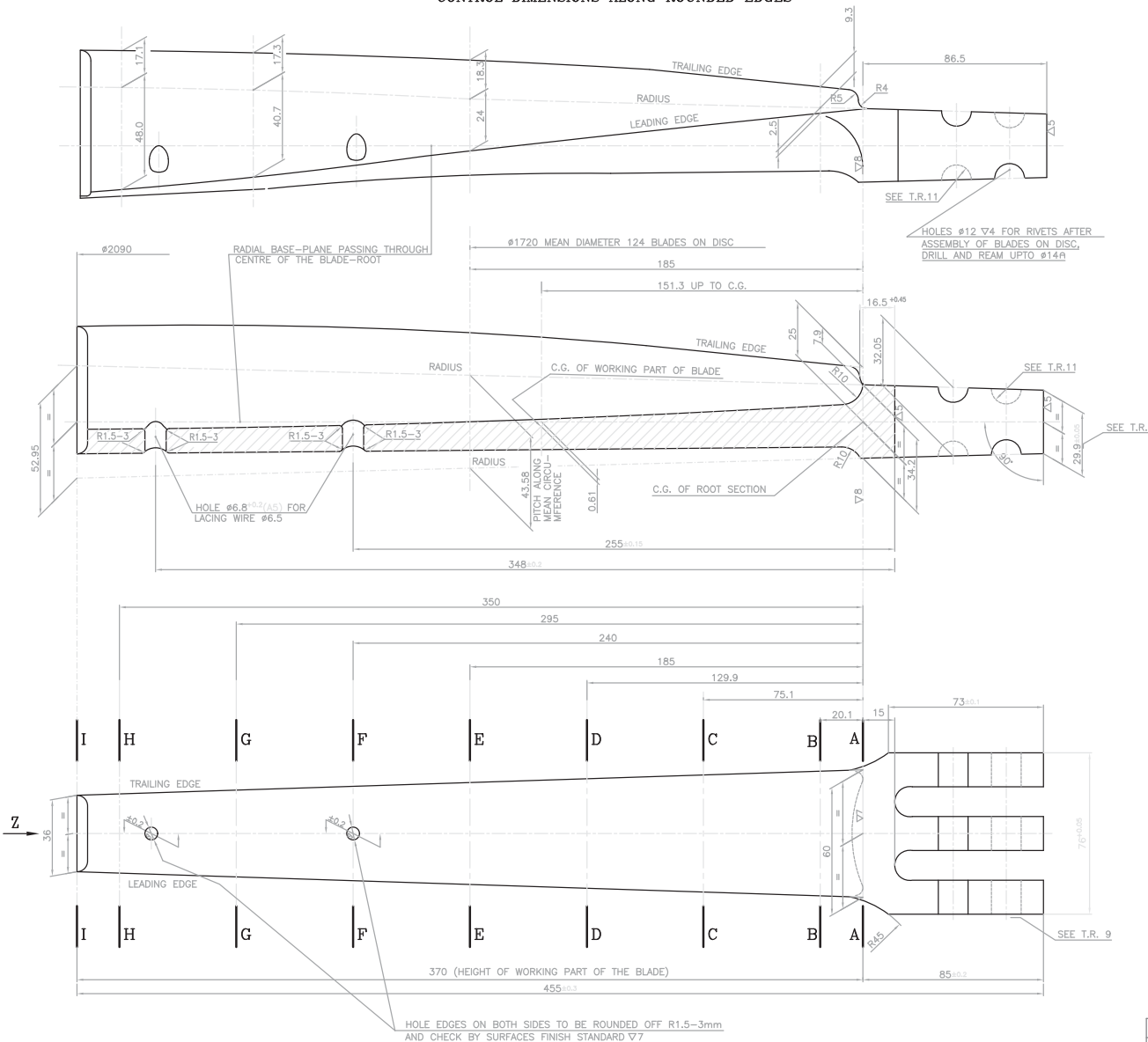
TITLE
 BLADE
 26th STAGE

200-13
 200-0500,706
 2x13 QUANT Y-1-187-07

90090828

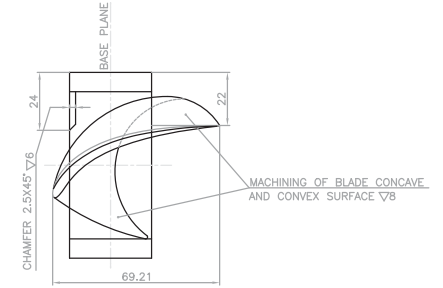
CONTROL DIMENSIONS ALONG ROUNDED EDGES

√6 THE REST



TECHNICAL REQUIREMENTS:

1. SECTIONS B-B, C-C, D-D, E-E, F-F, G-G, H-H ARE CONTROLLING ONES.
2. FOR BLADE SECTIONS, SEE DRG. NO. 32305026 (G-1138417).
3. FOR ROUNDING OFF EDGES- SEE BLADE PROFILE DRAWING.
4. FOR PERMISSIBLE DEVIATION FROM THEORETICAL PROFILE CLEARANCE ALONG BLADE-CONCAVE AND CONVEX SURFACES- SEE DRG. OF SECTIONS.
5. PERMISSIBLE DEVIATION FROM STRAIGHTNESS ALONG GENERATING LINES (BETWEEN CONTROL SECTIONS) WITH TEMPLATE LENGTH 40mm-0.1mm.
6. PERMISSIBLE DEVIATION FROM TEMPLATE NOT TO EXCEED ±0.2mm.
7. RADIAL ANGLE TO BE MAINTAINED ACCORDING TO GAUGE WITH CLEARANCE 0.05 (FROM THEORETICAL ANGLE).
8. WHILE MANUFACTURING, 10% OF THE BLADES SHOULD BE MANUFACTURED WITH PITCH TOLERANCE ±0.1°.
9. LEADING EDGE OF WORKING PART OF BLADE TO BE ORIENTED W.r.t. SIDE SURFACE OF ROOT. PERMISSIBLE DEVIATION UP TO 0.2mm AT UPPER CONTROL DIMENSION.
10. AFTER FINAL MACHINING, BLADES UNDERGO -
(i) TESTING BY MAGANFLUX METHOD.
(ii) VIBRATION-TESTING OF BLADES IN VICES ACCORDING TO INSTRUCTIONS OF STEAM TURBINE LABORATORY.
- (b) MOMENT WEIGHING IN ACCORDANCE WITH INSTRUCTIONS NO. 1310-65.
(v) WEIGHING IN COMMERCIAL BALANCES, Wt. OF BLADES 2.56±0.060kg.
11. IN 50% BLADES OF A STAGE, HOLES FOR RIVETS ARE TO BE MADE ON OPPOSITE SIDE AS SHOWN WITH DOTTED LINES.



MACHINING OF UPPER END OF BLADE
(SCALE 2:1)

SUPERSEDES OLD DRAWING UNDER THE SAME NUMBER WITHOUT ANY CHANGE.

ROOT PROFILE NO.551
DRG. No. 32304017(A-316244).

Z0Cr13
Cs50-0500.706
2x131W4MT V-1-187-67

GRADE OF UNTOL.DIM	
M/CG.-G/W/F	AA0230208
WELDING-R/B/G/D	AA0621104
GAS CUTTING-T3	AA0621101

REV	DATE	ALTERED	CHECKED	BY
01	9.12.11	KARASH	PK	BANSAL

QMS-NO./ C.B.O.M.- NO.	STATUS OF DRG.
0002305000	ISSUED
DRG. NO.	DATE
32305000	02.04.74

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT	
STEAM TURBINE	

NAME	SIGN	DATE	NO. OF VAR
N.B.MATHUR	Sd/-	30.03.74	73
N.B.MATHUR	Sd/-	02.04.74	74
K.L.KHURANA	Sd/-	08.05.74	75
			76
			77

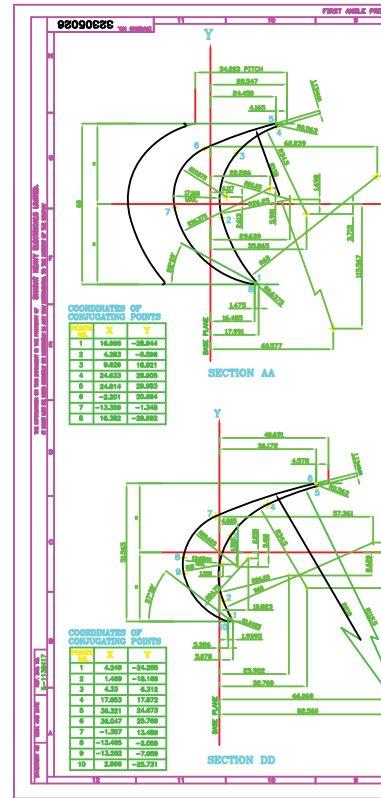
DEPT	STE	SCALE	WEIGHT (KG)
4011		1:1	2.56

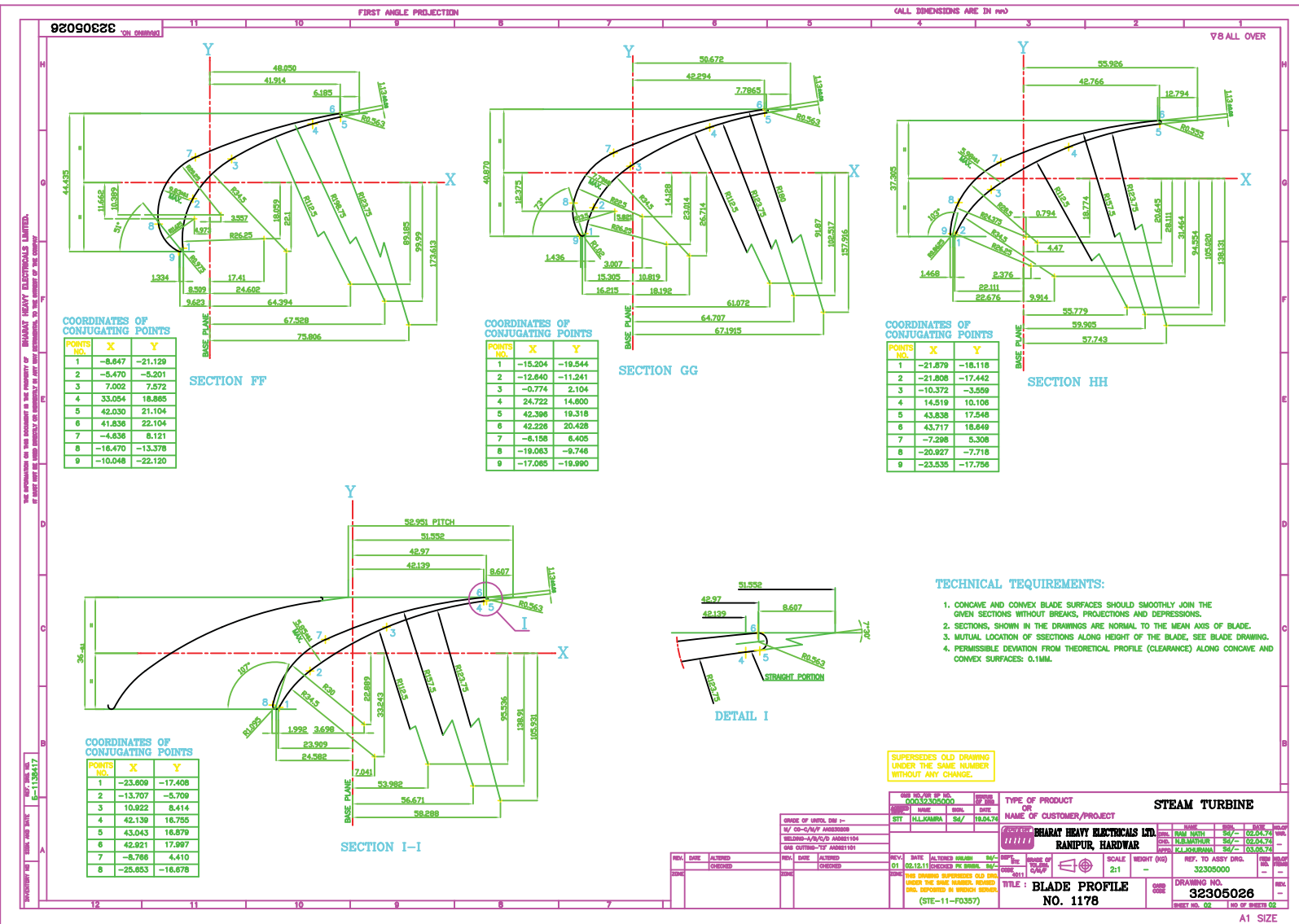
CARD CODE	DRAWING NO.	REF. TO ASSY. DRG.	ITEM No.	NO. OF SHEETS	NO. OF ITEMS
	32305000	32305000	22	01	23

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INVENTORY NO. SIGN AND DATE: 11.38.424

SIZE: A1





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 BHARAT HEAVY ELECTRICALS LIMITED
 RAIPUR, HARYANA
 INDIA

ALL DIMENSIONS ARE IN mm

FIRST ANGLE PROJECTION

VS ALL OVER

COORDINATES OF CONJUGATING POINTS

POINTS NO.	X	Y
1	-8.647	-21.129
2	-8.470	-8.201
3	7.002	7.572
4	33.054	18.885
5	42.030	21.104
6	41.838	22.104
7	-4.838	8.121
8	-18.470	-13.378
9	-10.048	-22.120

SECTION FF

COORDINATES OF CONJUGATING POINTS

POINTS NO.	X	Y
1	-15.204	-19.544
2	-12.840	-11.241
3	-0.774	2.104
4	24.722	14.800
5	42.398	19.318
6	42.228	20.428
7	-8.158	6.405
8	-19.083	-9.748
9	-17.085	-19.990

SECTION GG

COORDINATES OF CONJUGATING POINTS

POINTS NO.	X	Y
1	-21.879	-10.110
2	-21.808	-17.442
3	-10.372	-3.509
4	14.519	10.108
5	43.838	17.548
6	43.717	18.649
7	-7.298	5.308
8	-20.927	-7.718
9	-23.535	-17.756

SECTION HH

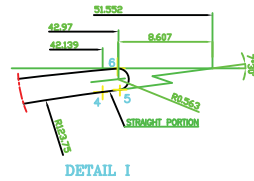
COORDINATES OF CONJUGATING POINTS

POINTS NO.	X	Y
1	-23.809	-17.408
2	-13.707	-5.709
3	10.922	8.414
4	42.139	18.755
5	43.043	18.879
6	42.921	17.997
7	-8.766	4.410
8	-25.853	-16.878

SECTION I-I

TECHNICAL REQUIREMENTS:

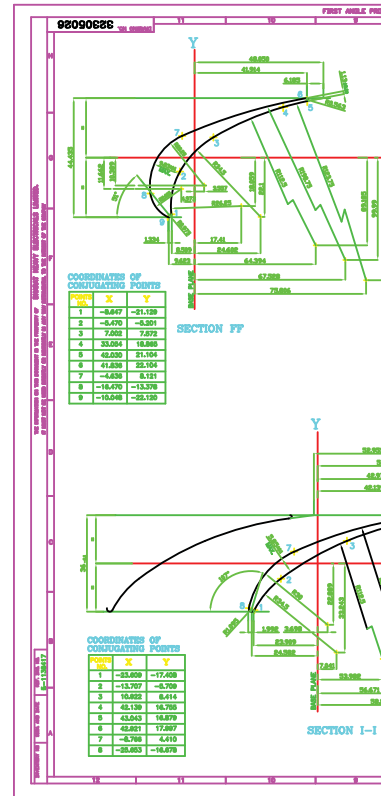
1. CONCAVE AND CONVEX BLADE SURFACES SHOULD SMOOTHLY JOIN THE GIVEN SECTIONS WITHOUT BREAKS, PROJECTIONS AND DEPRESSIONS.
2. SECTIONS, SHOWN IN THE DRAWINGS ARE NORMAL TO THE MEAN AXIS OF BLADE.
3. MUTUAL LOCATION OF SSECTIONS ALONG HEIGHT OF THE BLADE, SEE BLADE DRAWING.
4. PERMISSIBLE DEVIATION FROM THEORETICAL PROFILE (CLEARANCE) ALONG CONCAVE AND CONVEX SURFACES: 0.1MM.

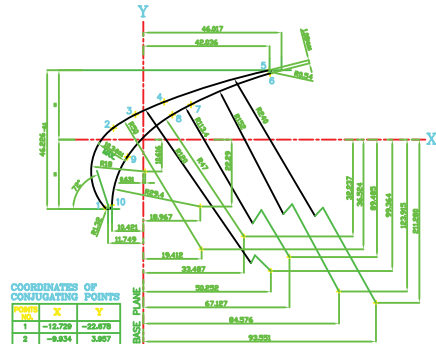


DETAIL I

SUPSEDES OLD DRAWING UNDER THE SAME NUMBER WITHOUT ANY CHANGE.

DRG NO. AS PER NO. 0032305000 NY CP-50/P 0032305000 DESIGNER: A.K./P 0032305000 DSG OUTDRG: TF 0032305000		TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT STEAM TURBINE	
DRG NO. AS PER NO. 0032305000 NY CP-50/P 0032305000 DESIGNER: A.K./P 0032305000 DSG OUTDRG: TF 0032305000		NAME, DESIG. DATE, DESIG. NO. BHARAT HEAVY ELECTRICALS LTD. RAIPUR, HARYANA	
REV. DATE ALTERED CHECKED		SCALE WEIGHT (KG) 2:1	
REV. DATE ALTERED CHECKED		REF. TO ASSY DRG. 32305000	
THIS DRAWING SUPSEDES OLD DRG UNDER THE SAME NUMBER, REVISIONS ARE INDICATED IN REVISION NUMBER. (STE-11-F0357)		DRAWING NO. 32305026 SHEET NO. 02 OF 02 SHEETS	

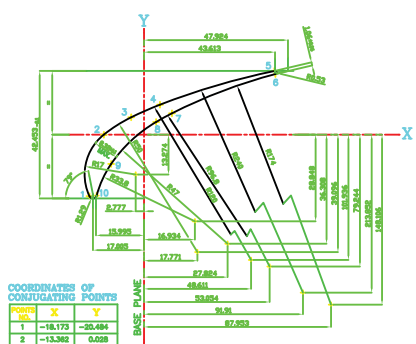




COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	-12.729	-22.678
2	-8.834	3.887
3	-2.817	8.362
4	5.883	12.852
5	41.820	23.10
6	43.187	22.684
7	18.883	11.488
8	8.679	8.288
9	-3.288	-3.784
10	-10.428	-21.814

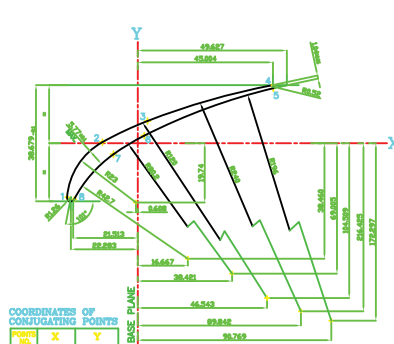
SECTION HH



COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	-18.173	-20.484
2	-13.362	0.628
3	-4.288	5.790
4	5.312	9.380
5	43.428	21.218
6	43.748	20.184
7	8.288	7.101
8	5.612	4.214
9	-10.851	-3.748
10	-18.787	-20.288

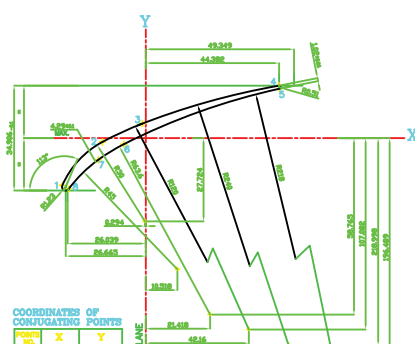
SECTION I-I



COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	-23.54	-17.883
2	-11.778	0.38
3	3.341	7.407
4	44.807	18.331
5	45.128	18.314
6	5.188	2.532
7	-8.104	-3.678
8	-21.187	-18.063

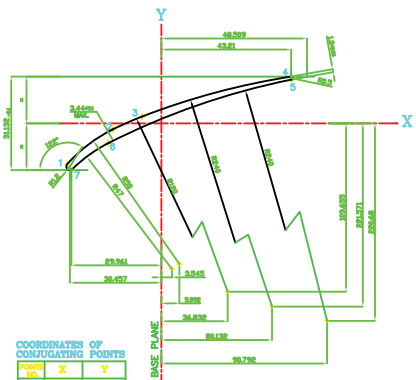
SECTION JJ



COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	-27.782	-18.731
2	-14.448	-1.271
3	-1.138	4.824
4	44.388	17.448
5	44.881	18.448
6	-7.258	-2.638
7	-18.883	-7.231
8	-28.878	-18.844

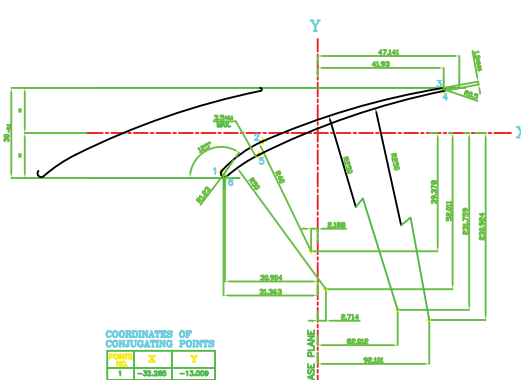
SECTION KK



COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	-31.283	-13.588
2	-18.037	-1.828
3	-6.488	2.281
4	43.133	16.588
5	43.288	14.578
6	-17.701	-3.602
7	-28.811	-18.218

SECTION LL



COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	-38.288	-13.008
2	-18.238	-3.728
3	41.88	14.884
4	42.03	14.010
5	-18.833	-7.283
6	-38.884	-14.888

SECTION MM

TECHNICAL REQUIREMENTS:

- CONCAVE & CONVEX BLADE SURFACES SHOULD SMOOTHLY JOIN ALL OTHER SECTIONS WITHOUT BULGES AND DEPRESSIONS.
- FOR INITIAL SECTION LOCATION ALONG BLADE HEIGHT SEE BLADE DRAWING.
- SECTIONS SHOWN IN DRAWING ALONG CONCAVE AND CONVEX BLADE SURFACES ARE NORMAL TO THE MEAN AXIS OF THE BLADE.
- PERMISSIBLE DEVIATIONS FROM THEORETICAL PROFILE (CLEARANCE) ALONG CONCAVE AND CONVEX SURFACES 0.1MM.
- BLEET ANGLES, SHOWN IN THE DRAWING CORRESPOND TO SKELETON ANGLES.

SUPersedes OLD DRAWING UNDER THE SAME NUMBER WITHOUT ANY CHANGE.

<p>UNIFORM CODE</p> <p>323050282</p> <p>DATE OF UNIFORM</p> <p>12/01/2011</p> <p>ISSUED BY</p> <p>12/01/2011</p>	<p>TYPE OF PRODUCT</p> <p>STEAM TURBINE</p> <p>BASE OF CONCAVE/SURFACE</p> <p>RAMPOUR, RAMPOUR</p>	<p>SCALE</p> <p>1:1</p> <p>REVISION</p> <p>001</p> <p>DATE</p> <p>12/01/2011</p> <p>BY</p> <p>12/01/2011</p>	<p>NO. OF SHEETS</p> <p>1</p> <p>TOTAL NO. OF SHEETS</p> <p>1</p>
<p>DEPT. CODE</p> <p>4011</p> <p>PROJECT CODE</p> <p>323050282</p>	<p>FILE NO.</p> <p>BLADE PROFILE</p> <p>NO. 1181</p>	<p>CHG. CODE</p> <p>323050282</p>	<p>DATE</p> <p>12/01/2011</p>

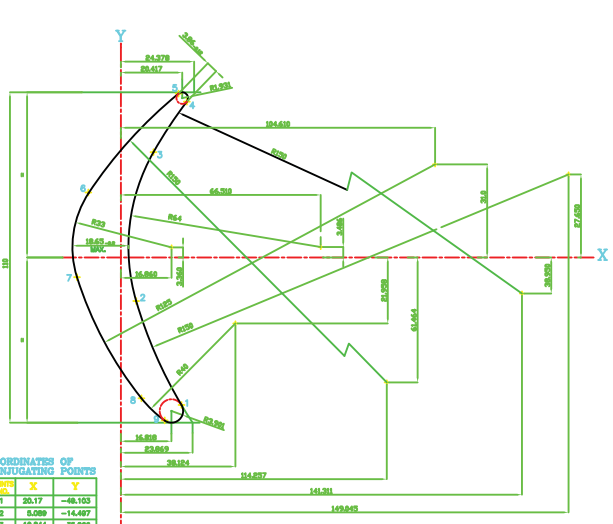
32305028

FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

FORM DO 46 (B)

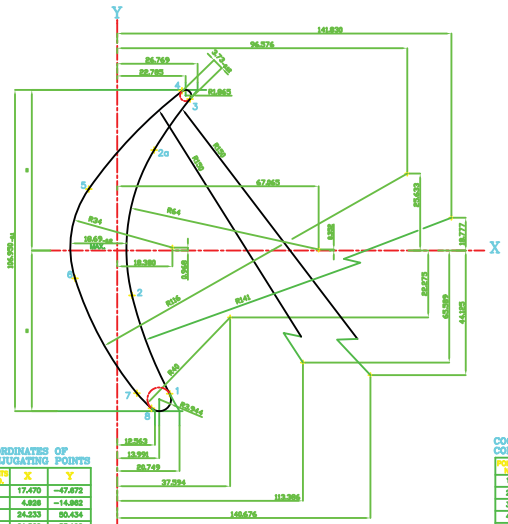
VS ALL OVER



COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	25.17	-61.103
2	6.209	-14.897
3	10.944	30.098
4	21.854	51.899
5	18.193	84.983
6	-15.842	21.844
7	-14.916	-8.394
8	6.839	-46.879
9	14.576	-84.348

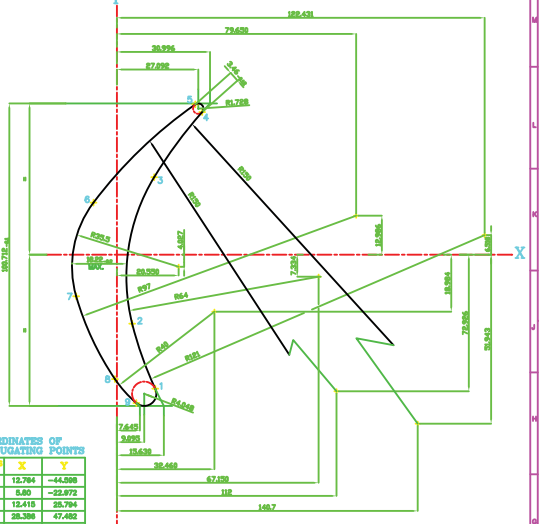
SECTION AA



COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	17.470	-47.872
2	4.898	-14.882
3	24.333	20.434
4	21.882	83.182
5	-8.467	20.478
6	-14.043	-9.287
7	6.261	-47.859
8	11.409	-82.312
9a	12.290	33.461

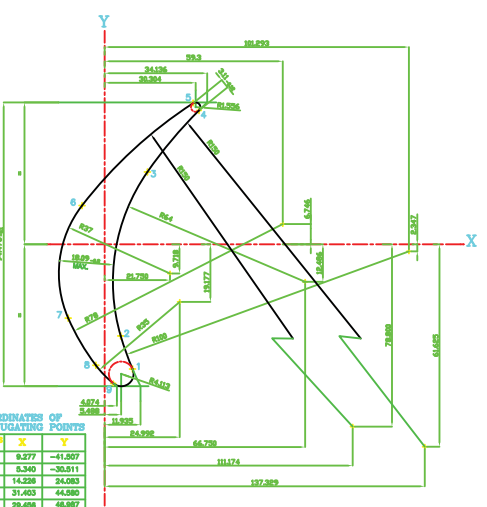
SECTION BB



COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	12.784	-44.598
2	5.80	-22.872
3	12.418	28.794
4	28.388	47.482
5	28.193	82.040
6	-7.803	17.330
7	-13.588	-13.848
8	-0.688	-41.419
9a	6.481	-48.354

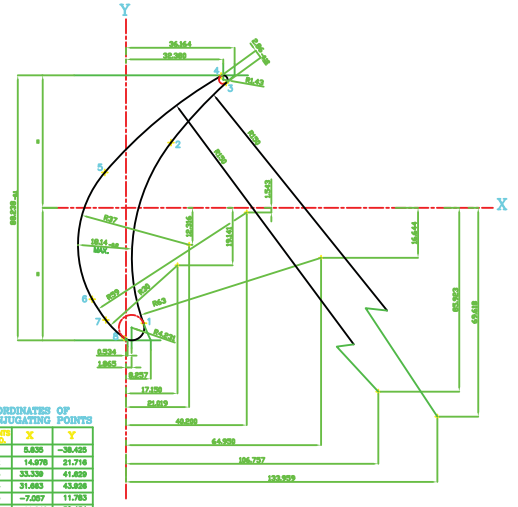
SECTION CC



COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	8.277	-41.897
2	5.340	-30.511
3	14.228	24.083
4	31.463	44.580
5	29.686	48.987
6	-7.230	12.802
7	-12.137	-24.978
8	-2.834	-40.378
9	2.887	-46.313

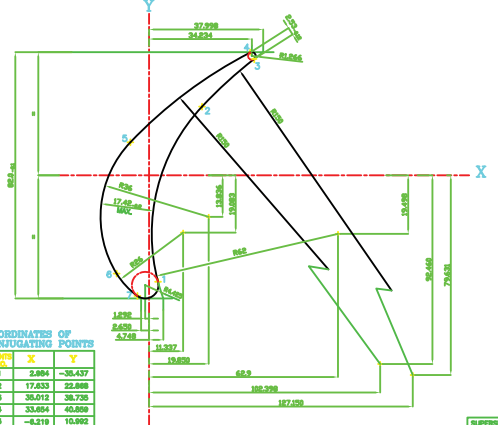
SECTION DD



COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	8.638	-38.485
2	14.978	21.718
3	33.339	41.899
4	31.683	43.828
5	-7.097	11.783
6	-11.240	-30.434
7	-8.898	-37.348
8	-0.648	-43.324

SECTION EE



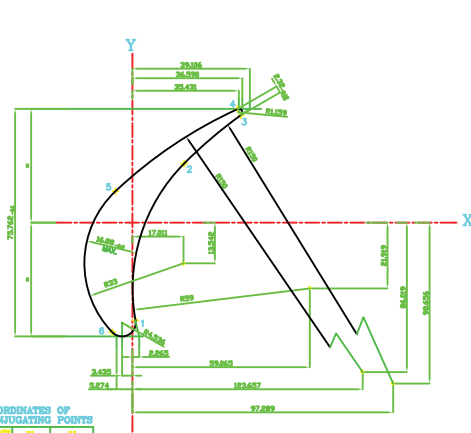
COORDINATES OF CONJUGATING POINTS

POINT NO.	X	Y
1	2.884	-38.437
2	17.633	22.888
3	35.012	38.735
4	33.884	40.889
5	-2.219	10.892
6	-10.791	-35.725
7	-3.882	-40.163

SECTION FF

SUPERSEDED OLD DRAWING UNDER THE SAME NUMBER WITHOUT ANY CHANGE.

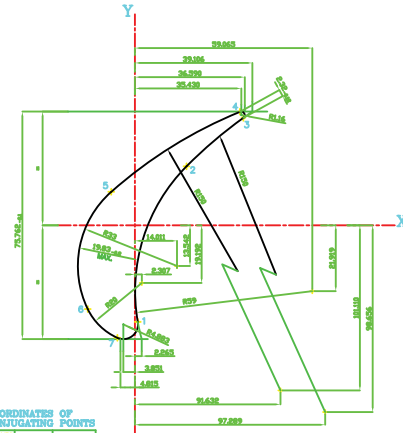
COMPANY CODE: 32305028 NAME OF COMPANY/PROJECT:		TYPE OF PRODUCT: STEAM TURBINE	
GROUP OF UNIFORM: 1100-2 (11/1) 10000000 UNIT: 1100-2 (11/1) 10000000 DRAWING NO.: 32305028 DATE: 11/11/2011	DEPT: SITE: 211 CODE: 4011	SCALE: 1:1 SHEET NO.: 211 CHG CODE: 32305028	FILE NO.: 32305028 SHEET NO. OF SHEET: 01
MANUFACTURED BY: BANGFOR, HANOVER		TITLE: BLADE PROFILE NO. 1264	



COORDINATES OF CONJUGATING POINTS

POINTS NO.	X	Y
1	1.027	-32.029
2	17.187	18.640
3	38.107	35.781
4	34.940	37.776
5	-5.632	10.486
6	-5.683	-35.001

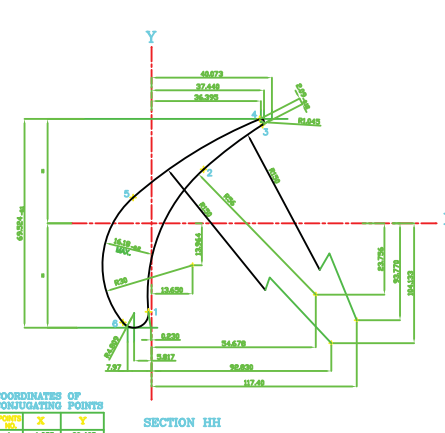
SECTION GG



COORDINATES OF CONJUGATING POINTS

POINTS NO.	X	Y
1	0.868	-32.151
2	17.187	18.640
3	38.107	35.780
4	34.880	37.824
5	-7.688	11.159
6	-15.889	-27.884
7	-5.840	-37.487

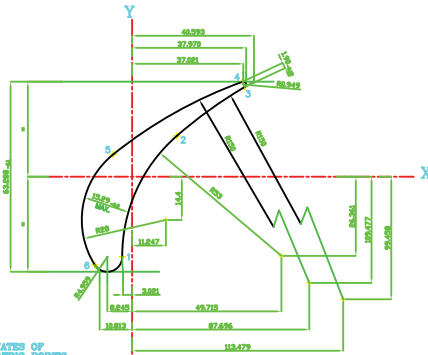
SECTION GG (THICKENED)



COORDINATES OF CONJUGATING POINTS

POINTS NO.	X	Y
1	-1.033	-28.463
2	17.312	17.854
3	38.505	35.835
4	35.899	34.891
5	-1.145	8.578
6	-8.833	-33.005

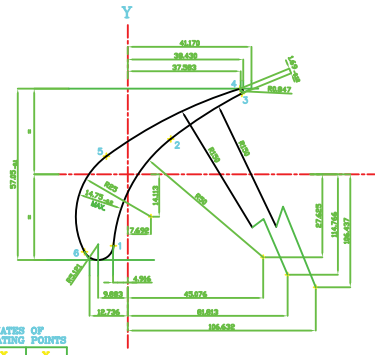
SECTION HH



COORDINATES OF CONJUGATING POINTS

POINTS NO.	X	Y
1	-3.588	-28.627
2	14.879	13.578
3	37.202	29.678
4	38.888	31.587
5	-4.539	7.451
6	-12.440	-28.328

SECTION I-I



COORDINATES OF CONJUGATING POINTS

POINTS NO.	X	Y
1	-4.777	-23.788
2	14.088	11.781
3	37.871	28.824
4	37.332	28.467
5	-2.132	6.018
6	-14.410	-26.787

SECTION JJ

TECHNICAL REQUIREMENTS:

1. GIVEN PROFILE IS OBTAINED FROM PROFILE NO. 1182, DRAWING NO. 32303028, (A-1138421, SH NO.1) BY SHIFTING CONCAVE SURFACE BY 2884 ALONG X- AXIS (DIRECTION OF ARROW) AND BY SHIFTING CONVEX SURFACE BY 2884 ALONG X-AXIS (OPPOSITE TO DIRECTION OF ARROW) CO-ORDINATES OF R100 ALONG CONVEX SURFACE OF TRAILING EDGE ARE CHANGED FOR THICKENING OF TRAILING EDGE.
2. X-COORDINATE OF TRAILING EDGE HAS BEEN INCREASED BY 1888 (ROUND IN TO CONSIDERATION ROUNDING RADII) BY COMPARISON WITH PROFILE NO. 1182.
3. FOR OTHER TECHNICAL REQUIREMENTS, SEE PROFILE NO. 1182, DRAWING NO. 32303028 (A-1138421).

SUPERSEDES OLD DRAWING UNDER THE SAME NUMBER WITHOUT ANY CHANGE.

GROUP OF UNIFORM 11/01/2011/14/0000000 11/01/2011/14/0000000 11/01/2011/14/0000000		TYPE OF PRODUCT OR NAME OF COMPANY/PROJECT STEAM TURBINE	
NAME (ARABIC) 32305028 CODE 4011		DEPT SITE 211	
NAME (ARABIC) 32305028 CODE 4011		SCALE 1:1	
NAME (ARABIC) 32305028 CODE 4011		SERIAL NO. 32305028	
NAME (ARABIC) 32305028 CODE 4011		FILE NO. 32305028	
NAME (ARABIC) 32305028 CODE 4011		SHEET NO. 01 OF 01 SHEETS	

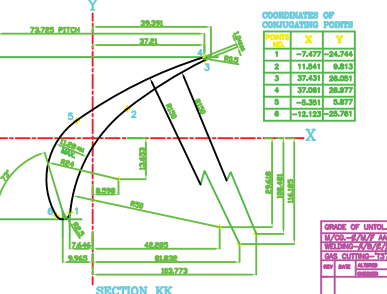
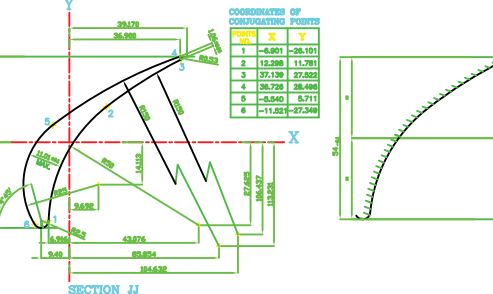
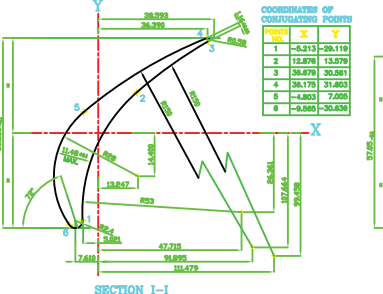
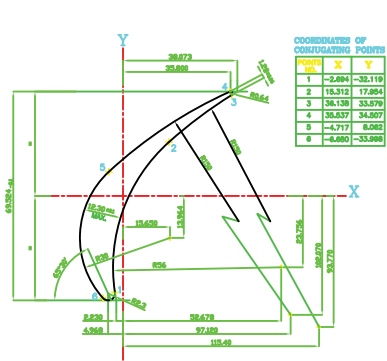
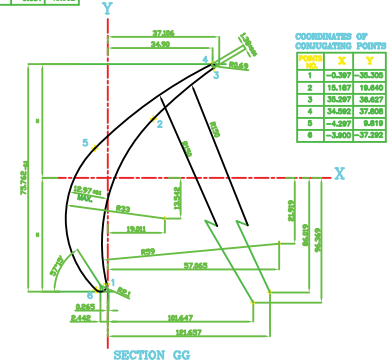
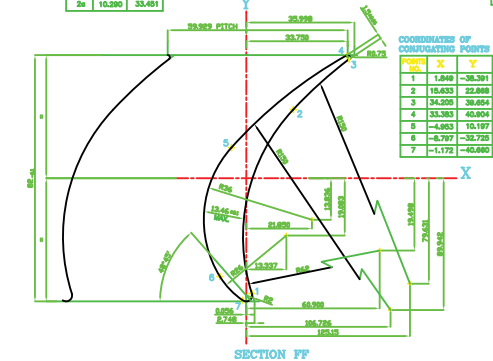
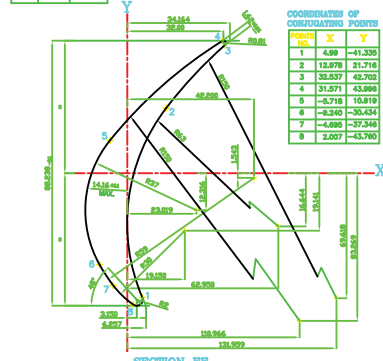
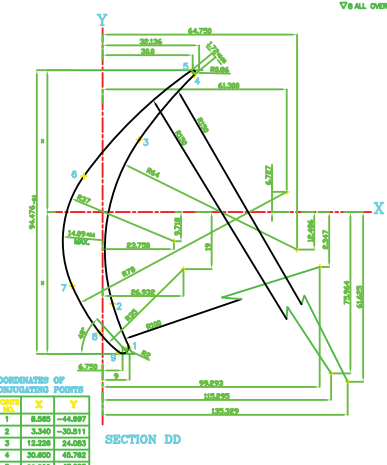
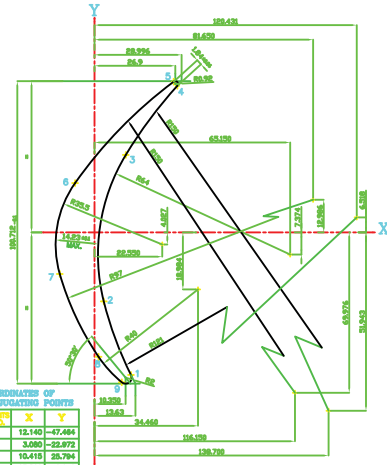
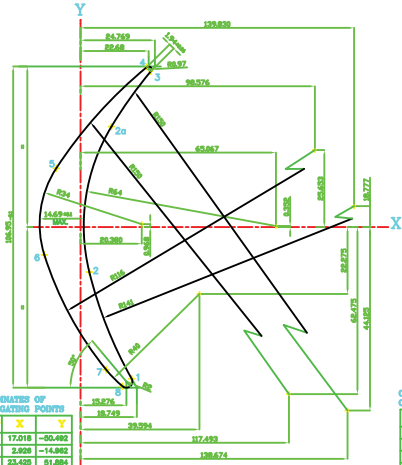
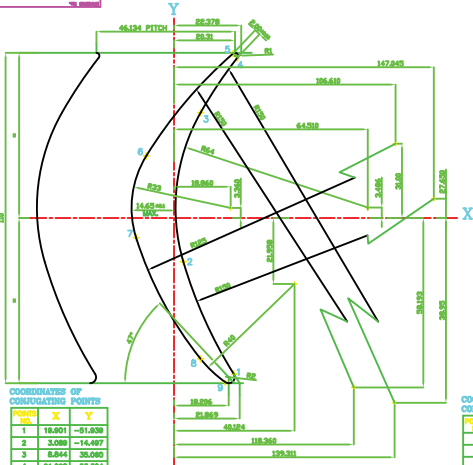
82050228

FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

FORM DD 48 (B)

7/8 ALL OVER



SUPERSEDES OLD DRAWING UNDER THE SAME NUMBER WITHOUT ANY CHANGE.

DESIGNER	DATE	TYPE OF PRODUCT	SCALE
PROJECT ENGINEER	15/08/2008	STEAM TURBINE	1:1
CHECKED		NAME OF COMPANY/PROJECT	
APPROVED		BLADE PROFILE	
		NO. 118E	
		BLADE PROFILE	
		NO. 118E	
		32305028	

NO. 118E

A0 SIZE

