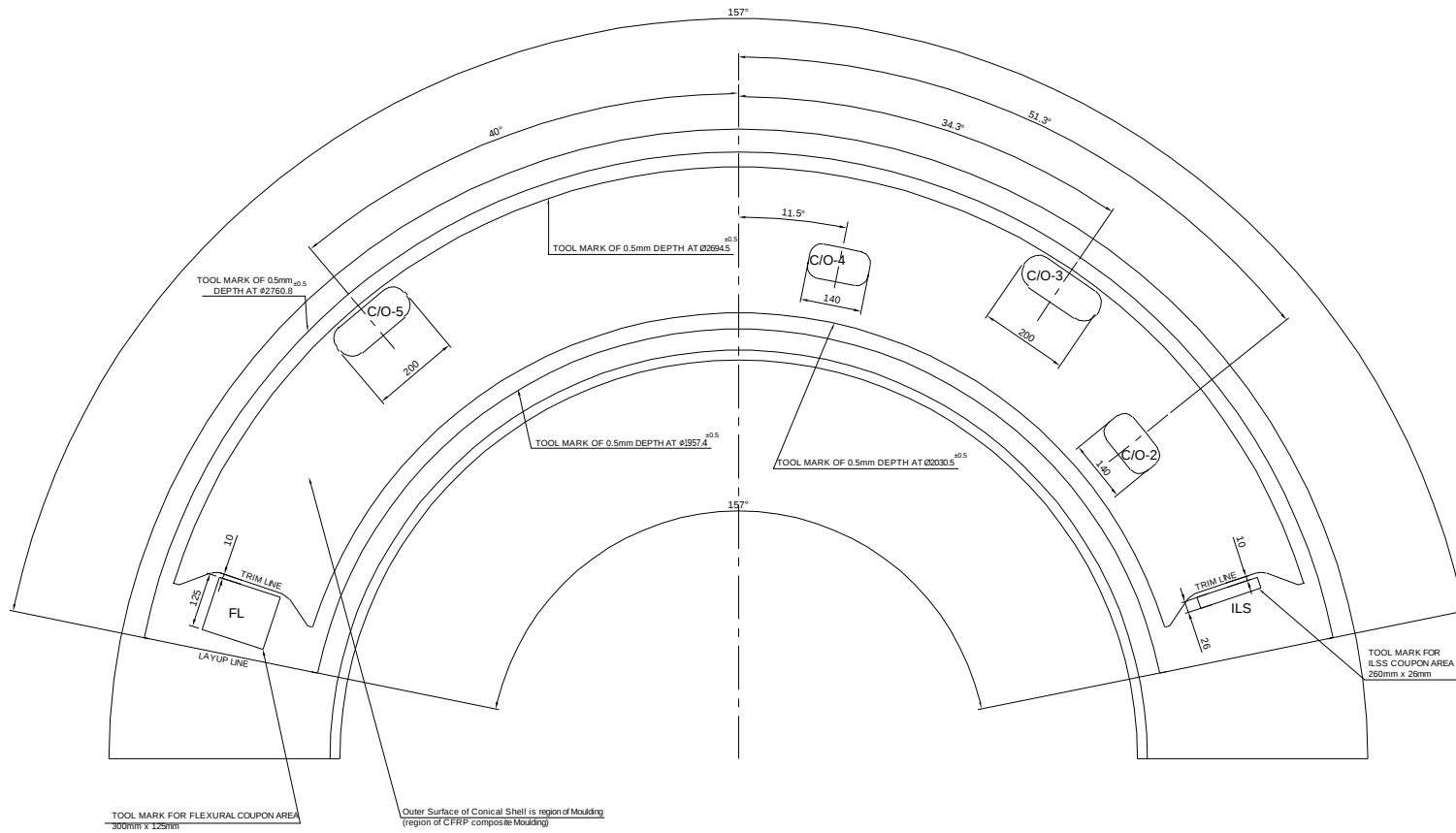


Drawings for
“Moulds” (with 7 different types)
for the Tender of
“Fabrication and Supply
of
Moulding Tools for PS3A”

Note: All the dimensions are in mm for all the drawings



Note: All dimensions are in mm

Name of the Mould : MOULD (P+) FOR PS3 ADAPTOR FOR PSLV

Material : Fe410W B IS2062

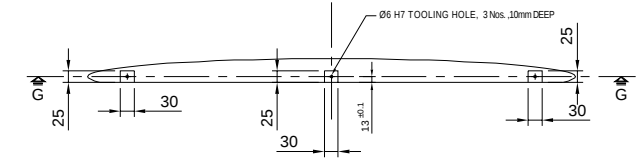
Scale : NTS

Drawing No: Mould-1-Assembly-PP-23

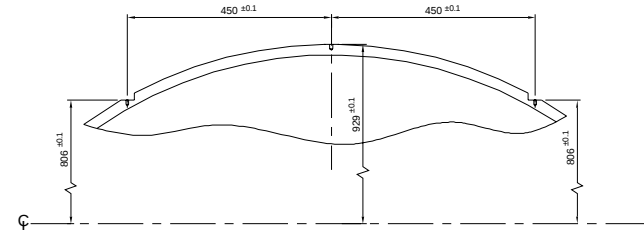
Sheet-2 of 2

VIEW-D
(TOOL MARKS ON MOULD SURFACE)

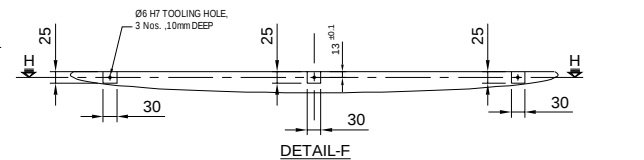
PROVISIONAL



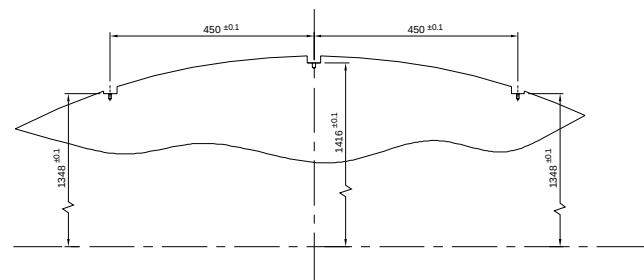
DETAIL-E



SECTION - GG

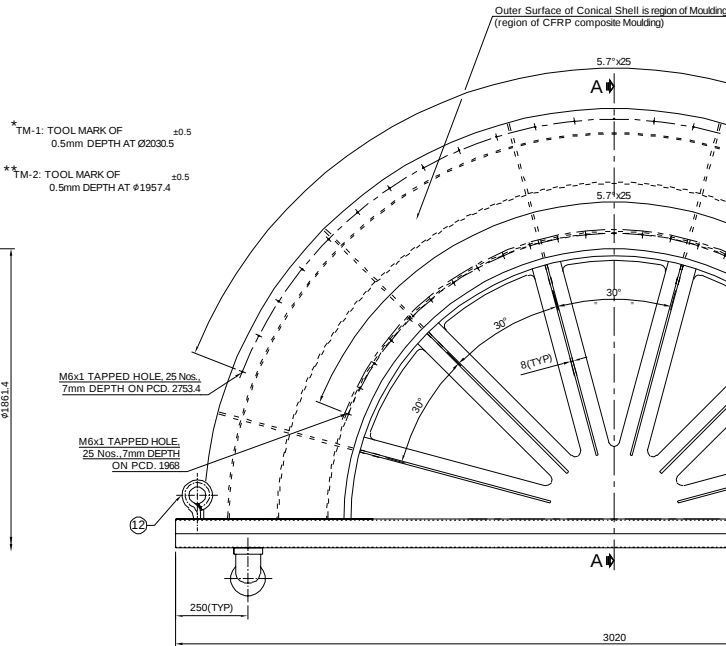
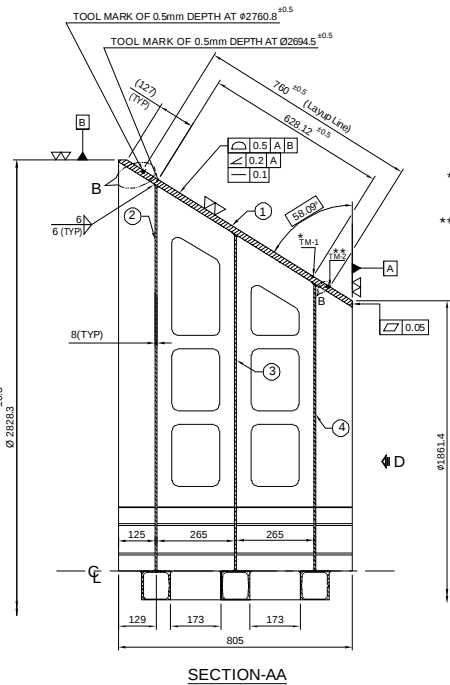
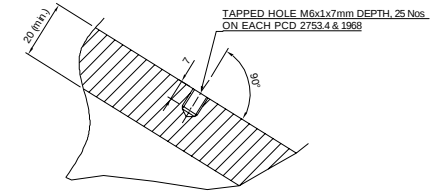
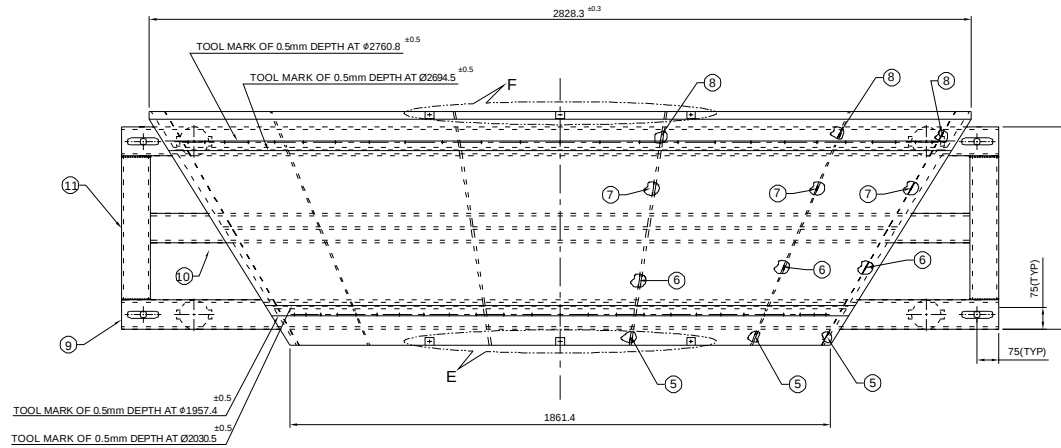


DETAIL-F



SECTION - HH

NOTE:- ALL TOOL MARKS SHALL BE PROVIDED AS PER 3D MODEL



PROVISIONAL

- NOTE:-
1. ALL JOINTS ARE TO BE WELDED BY 6mm FILLET WELD.
 2. STRESS RELIEVING TO BE DONE BEFORE MACHINING.
 3. STRESS RELIEVING TO BE DONE BY HEATING METHOD ONLY.

FINISH:- ∇(▽▽)

Note: All dimensions are in mm

Name of the Mould : MOULD (P-) FOR PS3 ADAPTOR FOR PSLV

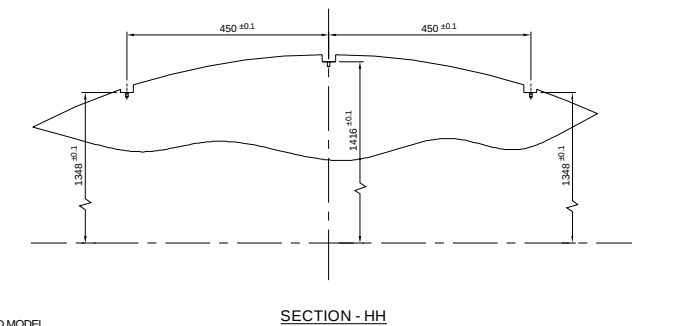
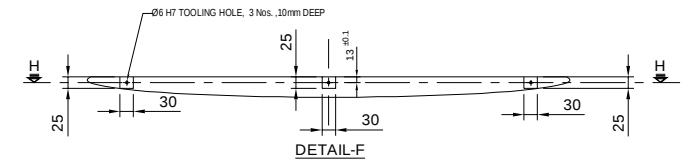
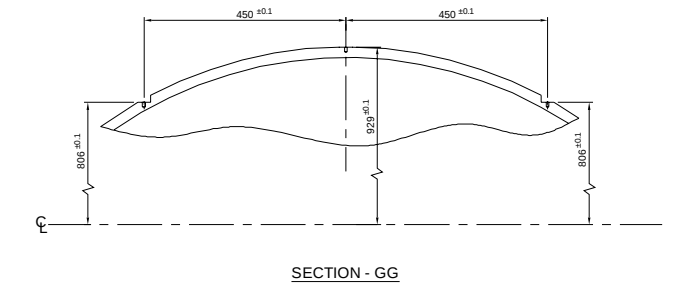
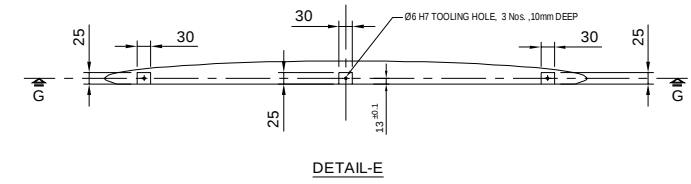
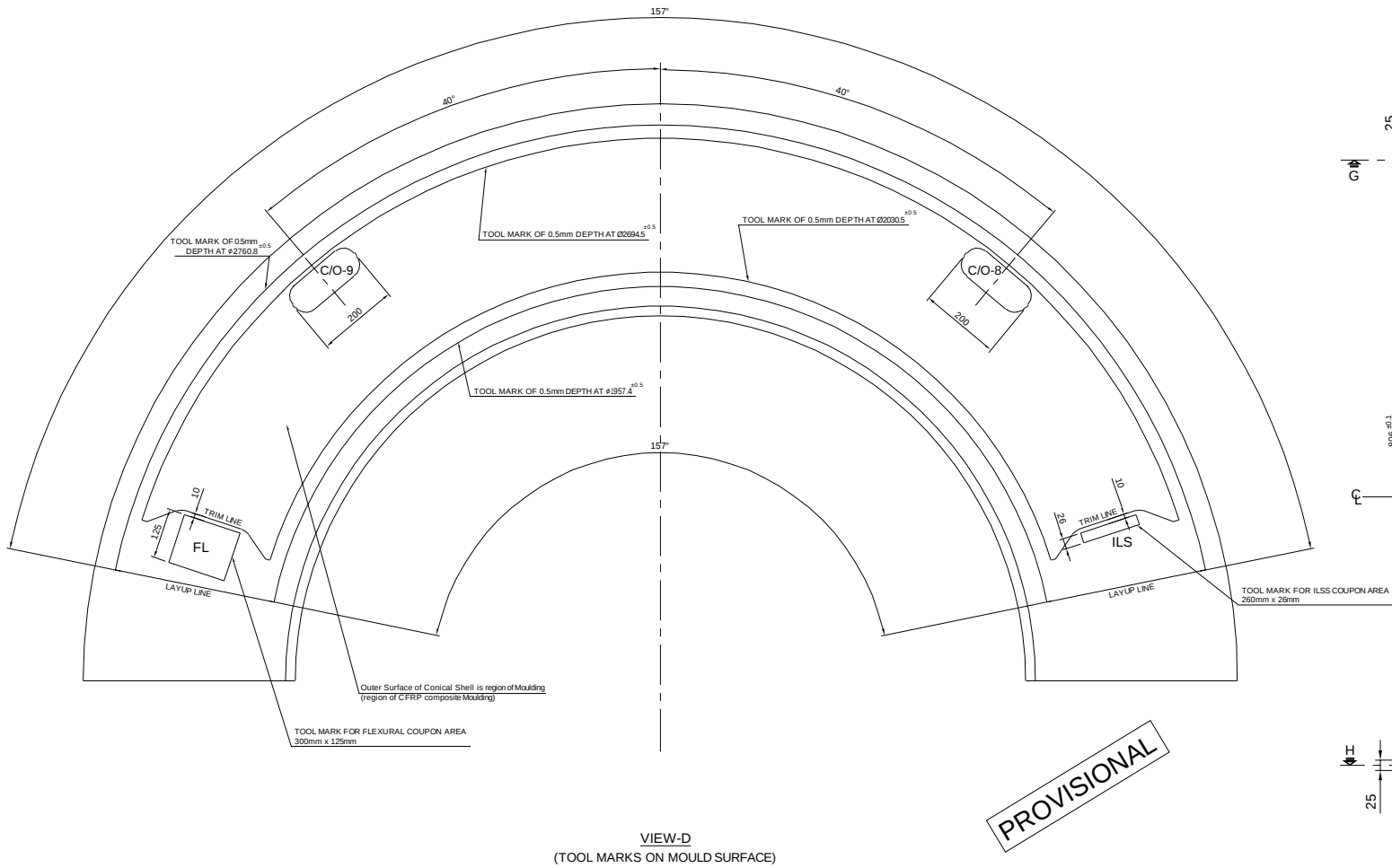
Material : Fe410W B IS2062

Scale : NTS

Drawing No: Mould-2-Assembly-PM-24

Sheet 1 of 2

14	SQUARE SECTION WITH EYE BOLT	STD	4	Drawing No for this part No-14 is SS-W-EB-1 This part No-14 is not shown in this drawing. This part No-14 to be welded with BOX section (Part No-11) at 4 places. Position and welding details for the Part No-14 will be mentioned in the final approved drawing along with Purchase Order.
13	DETACHABLE WHEEL	BUCKLE WAVE	4	
12	EYE BOLT M24 WITH WASHER & NUT	STD	4	IS:1570
11	ISLC100 x 100 x 496 L (BOX SECTION)	STD	2	IS:808
10	ISLC100 x 100 x 2820 L (BOX SECTION)	STD	1	IS:808
9	ISLC100 x 100 x 3020 L (BOX SECTION)	STD	2	IS:808
8	WEB-4	Fe410WB IS2062	6	P7-W-4-23-7
7	WEB-3	Fe410WB IS2062	6	P6-W-3-23-6
6	WEB-2	Fe410WB IS2062	6	P5-W-2-23-5
5	WEB-1	Fe410WB IS2062	6	P4-W-1-23-4
4	CIRCULAR STIFFENER-3	Fe410WB IS2062	1	P3-CS-3-23-3
3	CIRCULAR STIFFENER-2	Fe410WB IS2062	1	P2-CS-2-23-2
2	CIRCULAR STIFFENER-1	Fe410WB IS2062	1	P1-CS-1-23-1
1	CONICAL SHELL 180° x 20 THK.	Fe410WB IS2062	1	
Item No / Sub Part No	Name of the item / Name of the Sub Part	Material	Qty	Drawing No of Sub Part / Remarks



Note: All dimensions are in mm

Name of the Mould : MOULD (P-) FOR PS3 ADAPTOR FOR PSLV

Material : Fe410W B IS2062

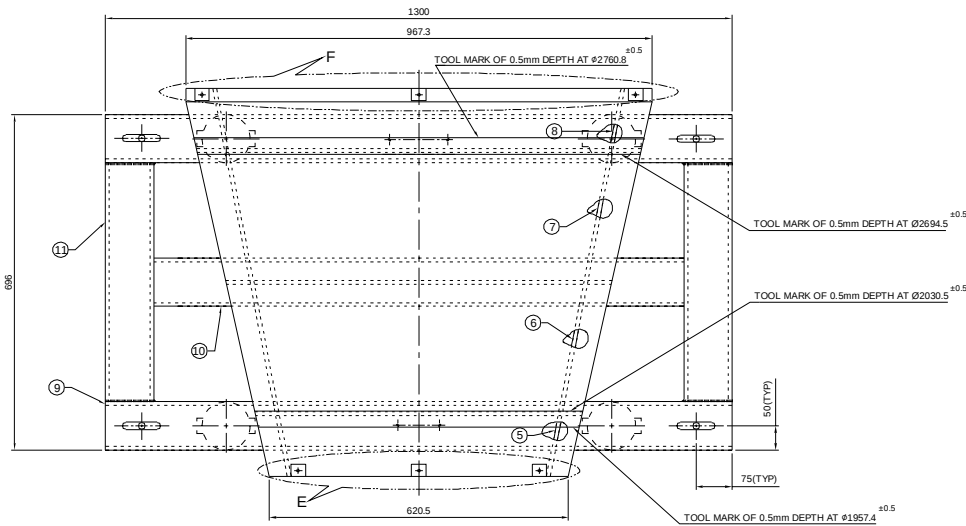
Scale : NTS

Drawing No: Mould-2-Assembly-PM-24

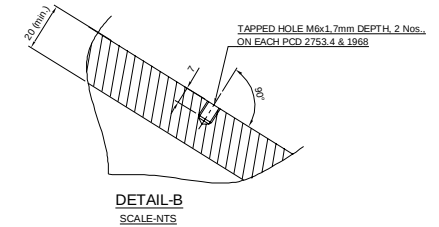
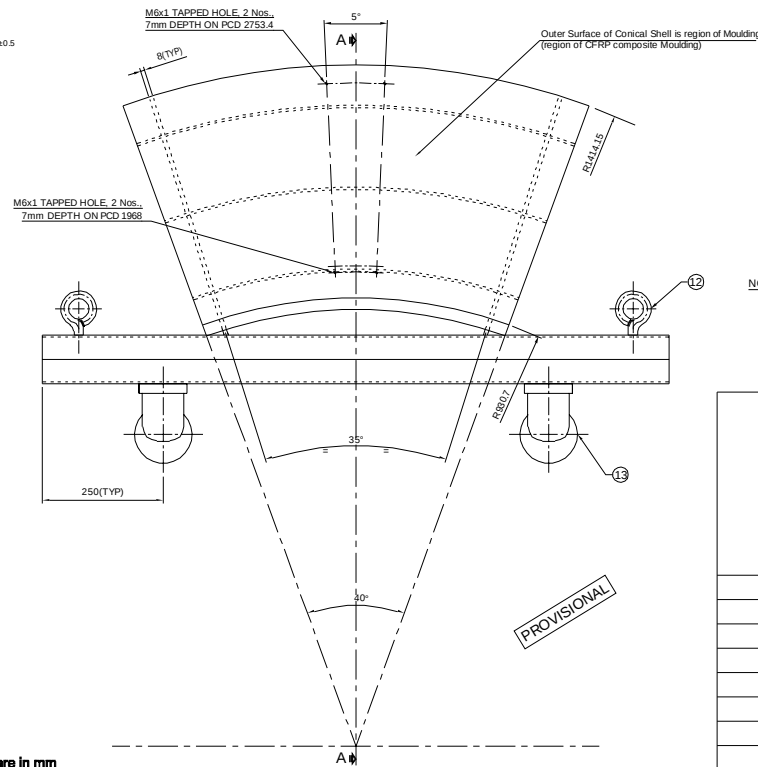
Sheet-2 of 2

NOTE:- ALL TOOL MARKS SHALL BE PROVIDED AS PER 3D MODEL.

PROVISIONAL

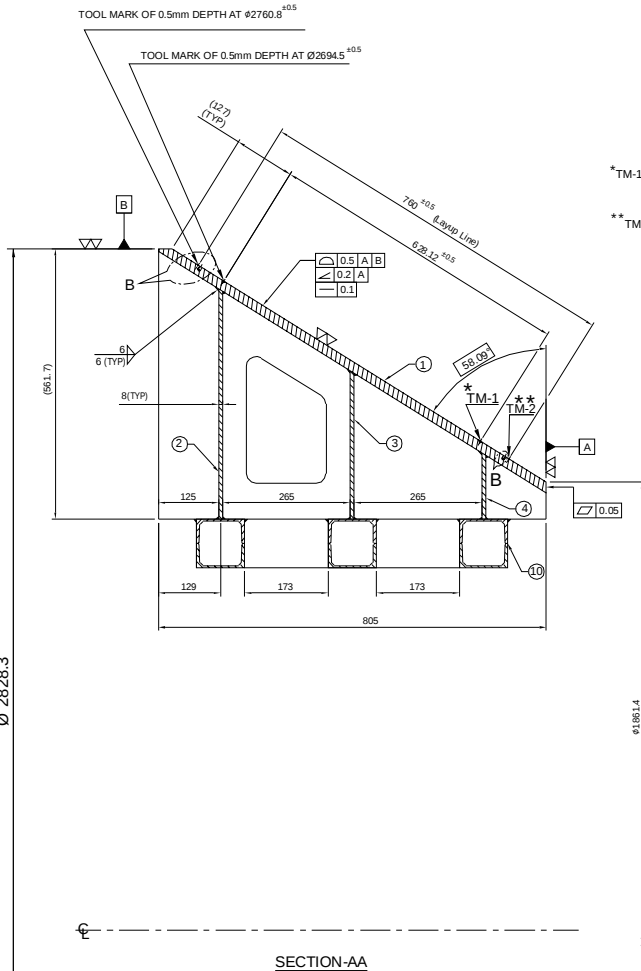


*TM-1: TOOL MARK OF 0.5mm DEPTH AT Ø2030.5
 **TM-2: TOOL MARK OF 0.5mm DEPTH AT Ø1957.4



NOTE:-
 1. ALL JOINTS ARE TO BE WELDED BY 6mm FILLET WELD.
 2. STRESS RELIEVING TO BE DONE BEFORE MACHINING.
 3. STRESS RELIEVING TO BE DONE BY HEATING METHOD ONLY.

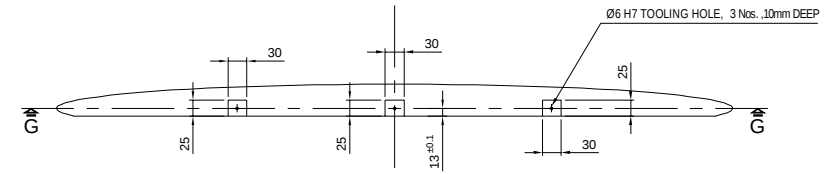
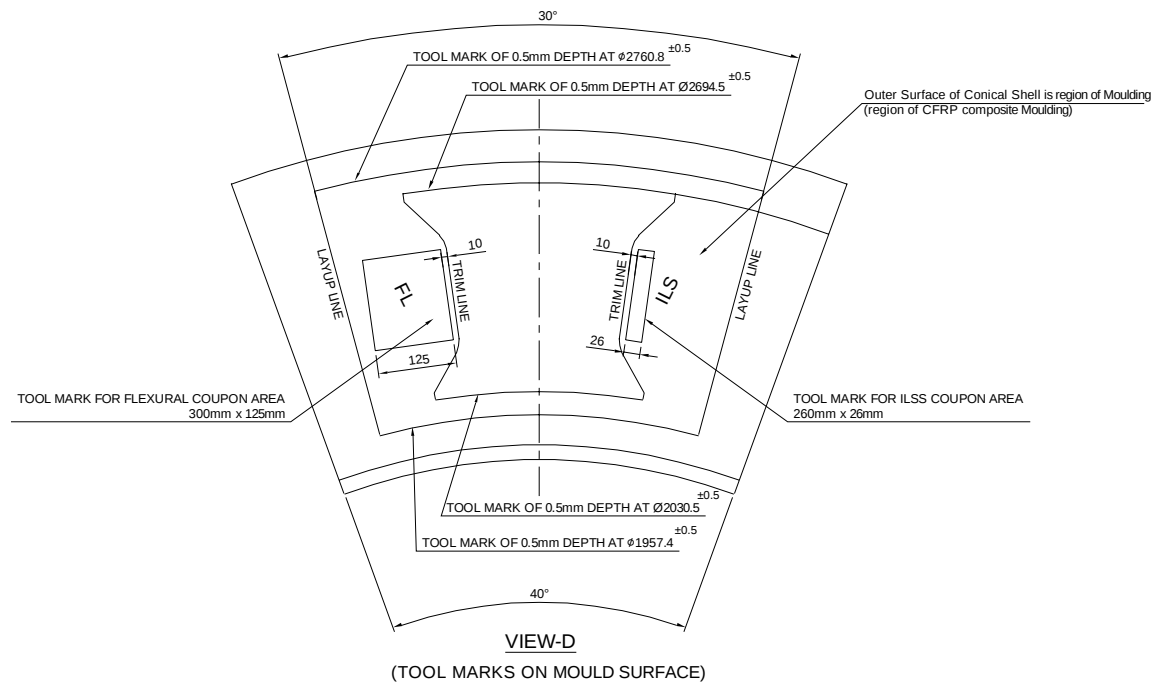
FINISH:- ▽ [▽▽]



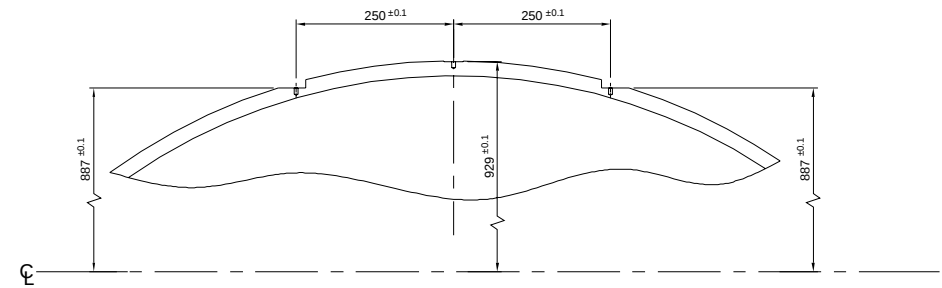
Note: All dimensions are in mm

Name of the Mould : MOULD (Y+/-) FOR PS3 ADAPTOR FOR PSLV
 Material : Fe410W B IS2062
 Scale : NTS
 Drawing No: Mould-3-Assembly-YPM-22
 Sheet-1 of 2

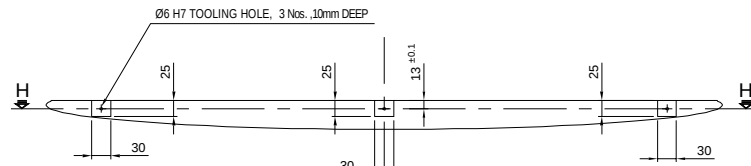
14	SQUARE SECTION WITH EYE BOLT	STD	4	Drawing No for this part No-14 SS-W-EB-1 This part No-14 is not shown in this drawing. This part No-14 to be welded with BOX section (Part No-11) at 4 places. Position and welding details for the Part No-14 will be mentioned in the final approved drawing along with Purchase O
13	DETACHABLE WHEEL	BUCKLE MAKE	4	
12	EYE BOLT M20 WITH WASHER & NUT	STD	4	IS:1570
11	ISLC100 x 100 x 496 L (BOX SECTION)	STD	2	IS:808
10	ISLC100 x 100 x 1100 L (BOX SECTION)	STD	1	IS:808
9	ISLC100 x 100 x 1300 L (BOX SECTION)	STD	2	IS:808
8	WEB-4	Fe410W B IS2062	2	P7-W-4-22-7
7	WEB-3	Fe410W B IS2062	2	P6-W-3-22-6
6	WEB-2	Fe410W B IS2062	2	P5-W-2-22-5
5	WEB-1	Fe410W B IS2062	2	P4-W-1-22-4
4	CIRCULAR STIFFENER-3	Fe410W B IS2062	1	P3-CS-3-22-3
3	CIRCULAR STIFFENER-2	Fe410W B IS2062	1	P2-CS-2-22-2
2	CIRCULAR STIFFENER-1	Fe410W B IS2062	1	P1-CS-1-22-1
1	CONICAL SHELL 40° x 20 THK.	Fe410W B IS2062	1	
Item No / Sub Part No	Name of the item / Name of the Sub Part	Material	Qty	Drawing No of Sub Part Remarks



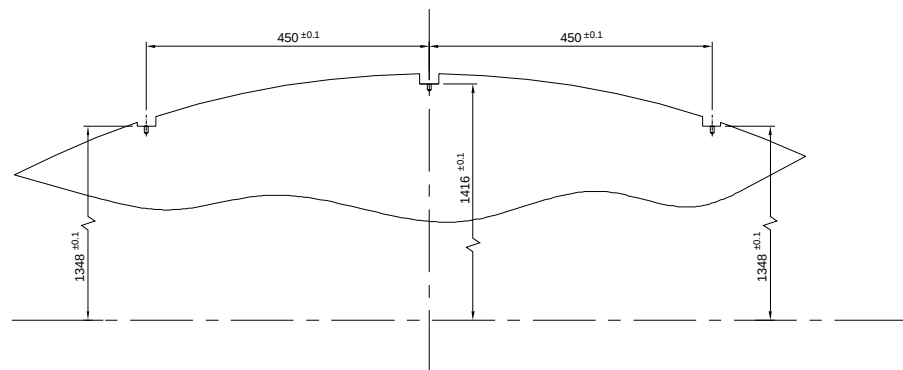
DETAIL-E



SECTION - GG



DETAIL-F



SECTION - HH

PROVISIONAL

NOTE:- ALL TOOL MARKS SHALL BE PROVIDED AS PER 3D MODEL.

Note: All dimensions are in mm

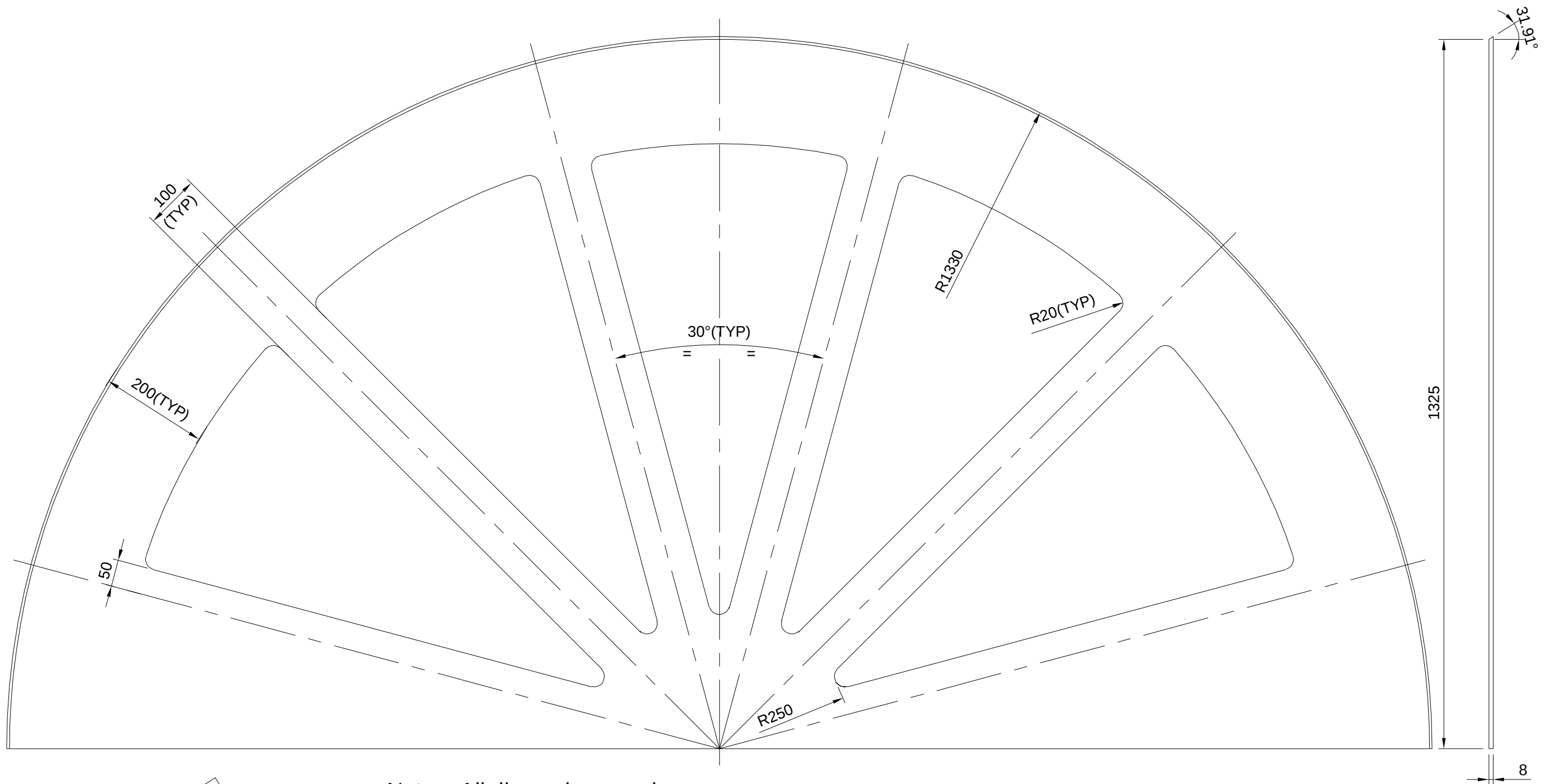
Name of the Mould : MOULD (Y+Y-) FOR PS3 ADAPTOR FOR PSLV

Material : Fe410W B IS2062

Scale : NTS

Drawing No: Mould-3-Assembly-YPM-22

Sheet-2 of 2



PROVISIONAL

Note : All dimensions are in mm

Name of the Part : CIRCULAR STIFFENER-1

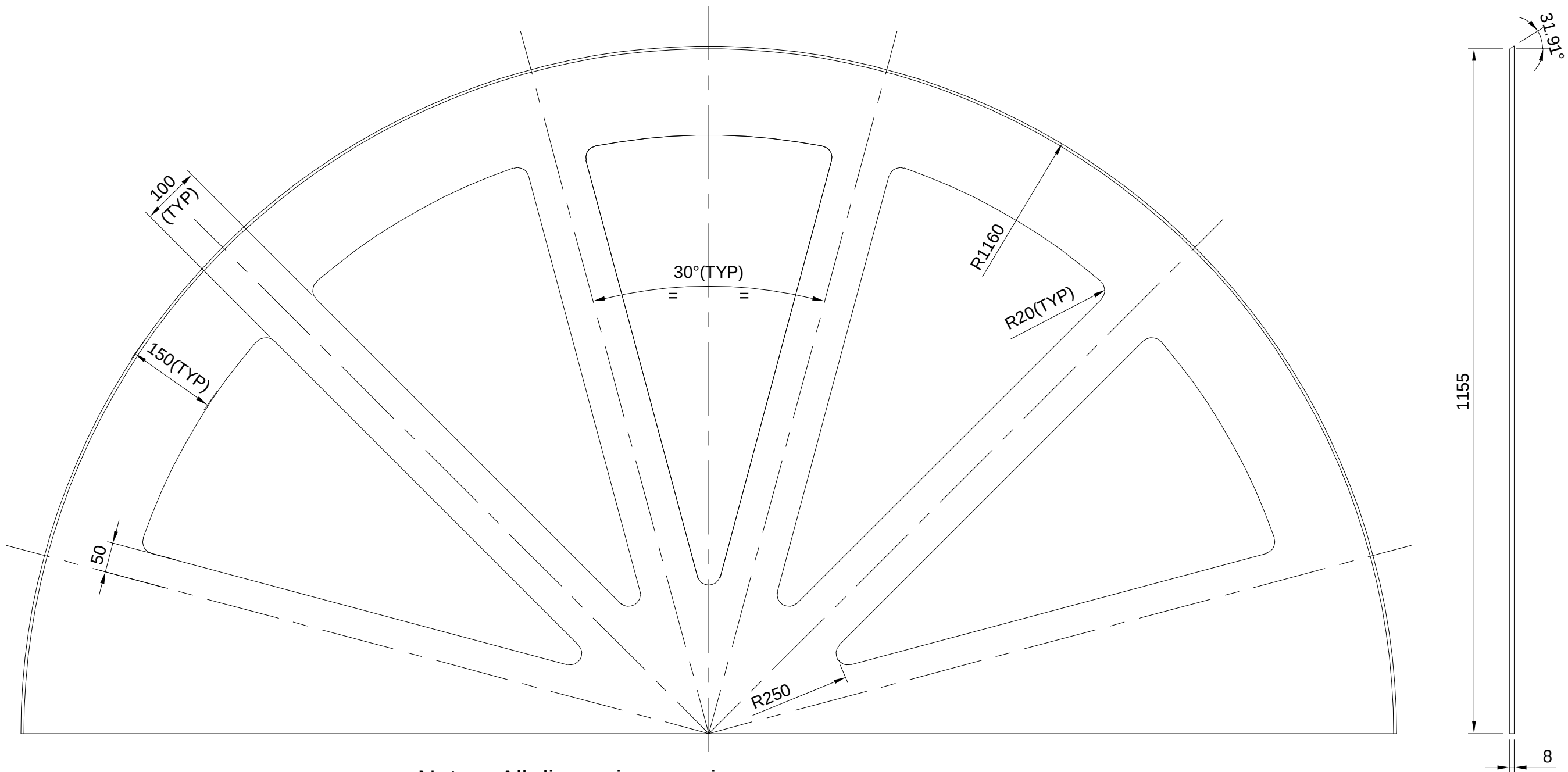
Material: Fe410W B IS2062

Qty : 1

Scale : NTS

Drawing No : P1-CS-1-23-1

FINISH:- ▽



Note : All dimensions are in mm

Name of the Part : CIRCULAR STIFFENER-2

Material: Fe410W B IS2062

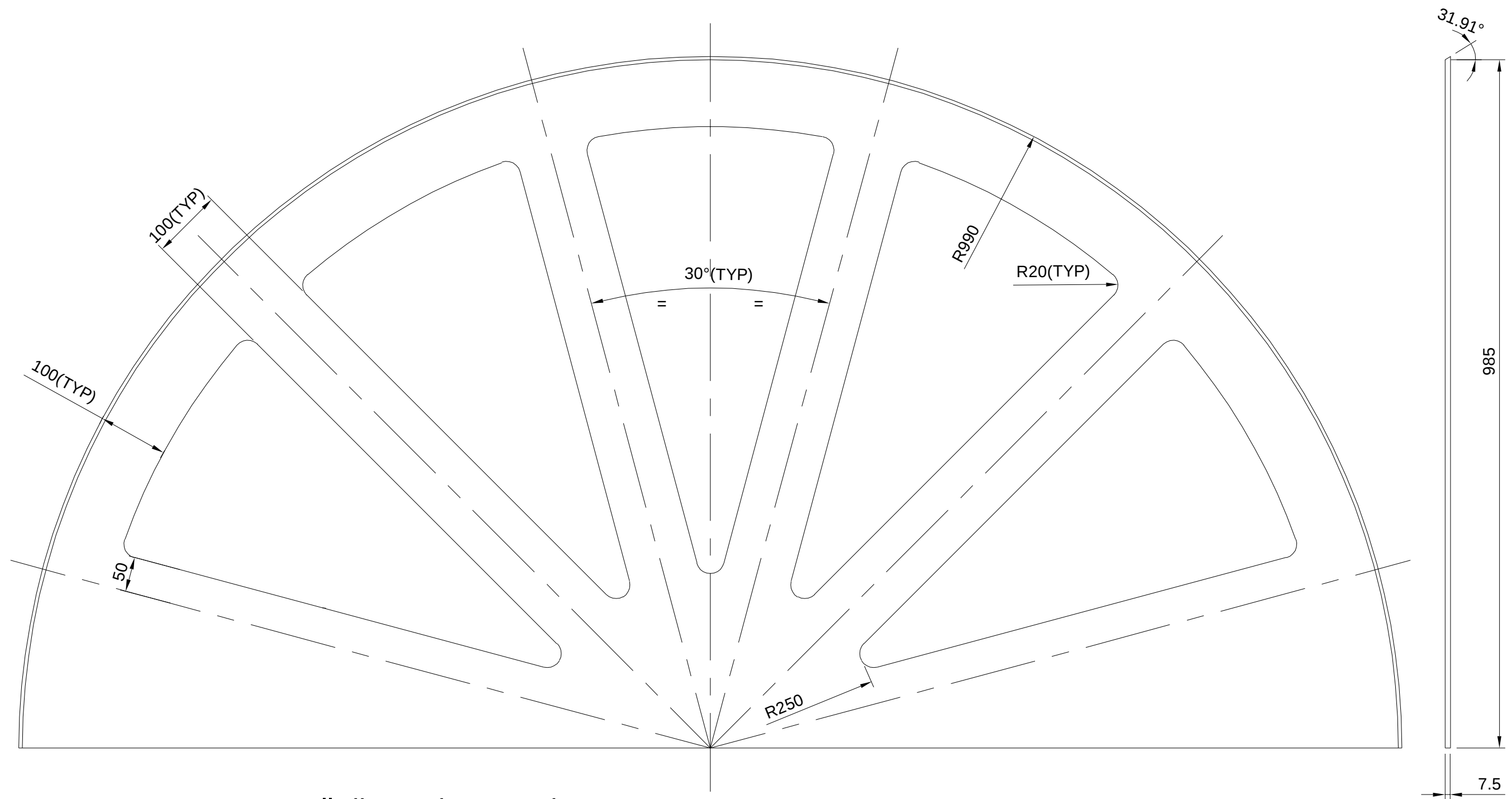
Qty : 1

Scale : NTS

Drawing No : P2-CS-2-23-2

PROVISIONAL

FINISH:- ▽



Note : All dimensions are in mm

Name of the Part : CIRCULAR STIFFENER-3

Material: Fe410W B IS2062

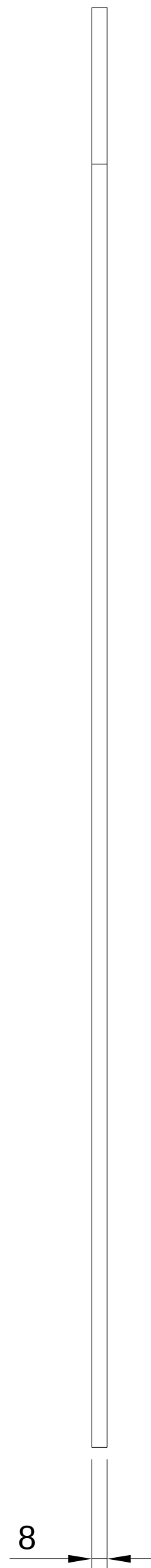
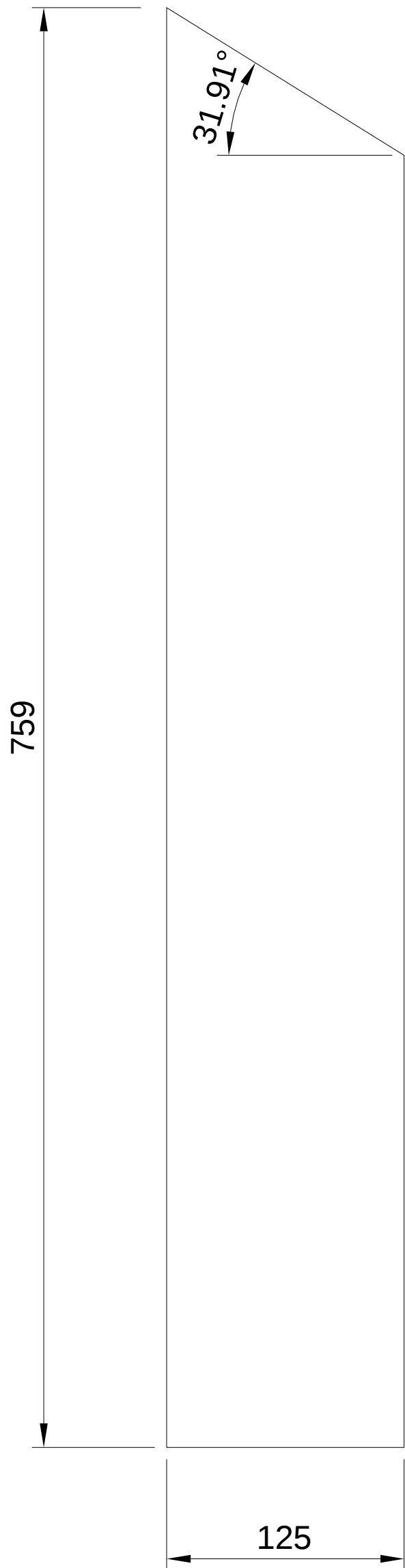
Qty : 1

Scale : NTS

Drawing No : P3-CS-3-23-3

PROVISIONAL

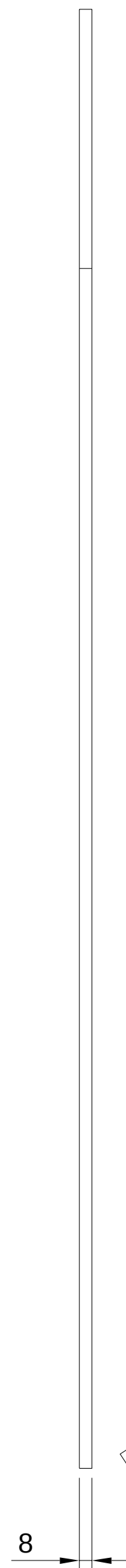
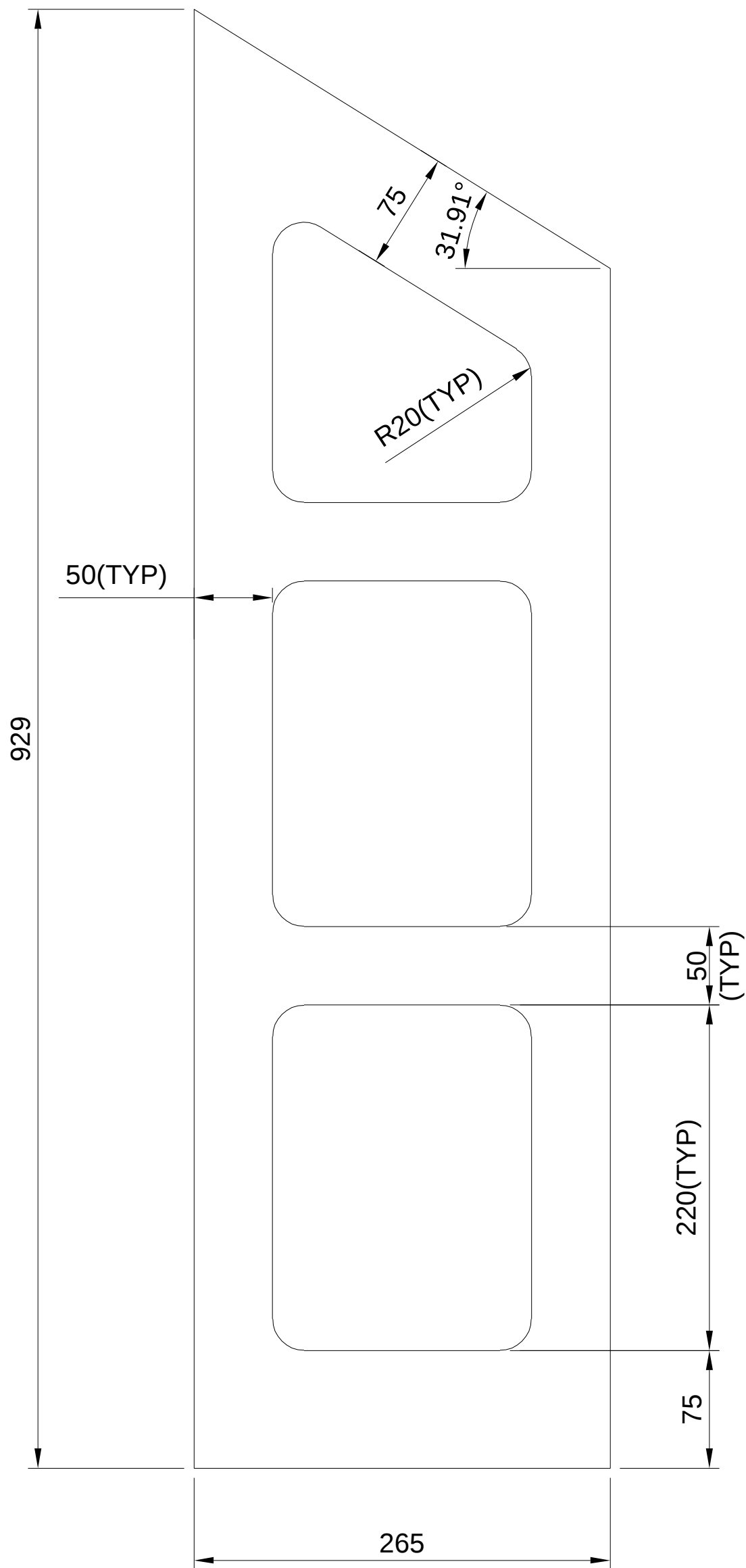
FINISH:-



PROVISIONAL

Note : All dimensions are in mm
Name of the Part : WEB-1
Material: Fe410W B IS2062
Qty : 6 Nos [LH-1 to 3 and RH-1 to 3]
Scale : NTS
Drawing No : P4-W-1-23-4

FINISH:- ▽



PROVISIONAL

Note : All dimensions are in mm

Name of the Part : WEB-2

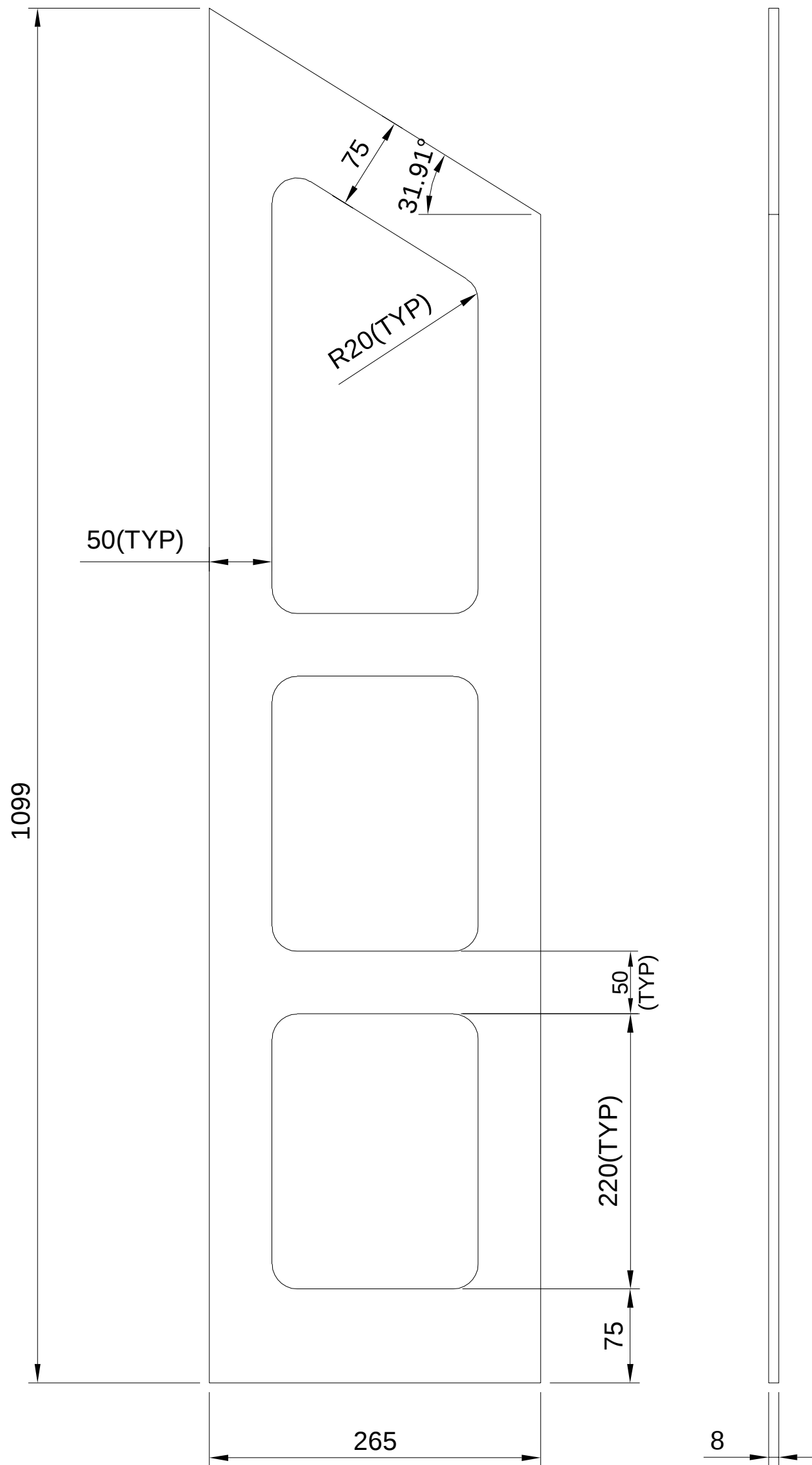
Material: Fe410W B IS2062

Qty : 6 Nos [LH-1 to 3 and RH-1 to 3]

Scale : NTS

Drawing No : P5-W-2-23-5

FINISH:- ▽



PROVISIONAL

Note : All dimensions are in mm

FINISH:- ▽

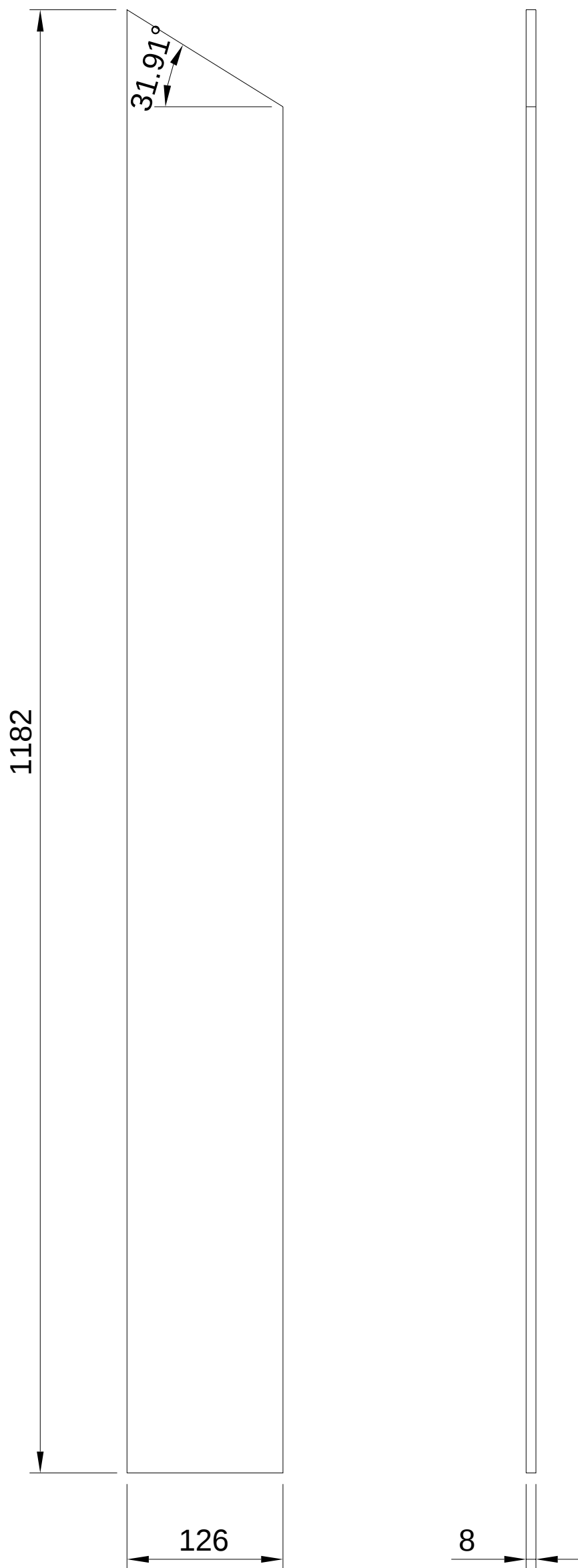
Name of the Part : WEB-3

Material: Fe410W B IS2062

Qty : 6 Nos [LH-1 to 3 and RH-1 to 3]

Scale : NTS

Drawing No : P6-W-3-23-6



PROVISIONAL

Note : All dimensions are in mm

Name of the Part : WEB-4

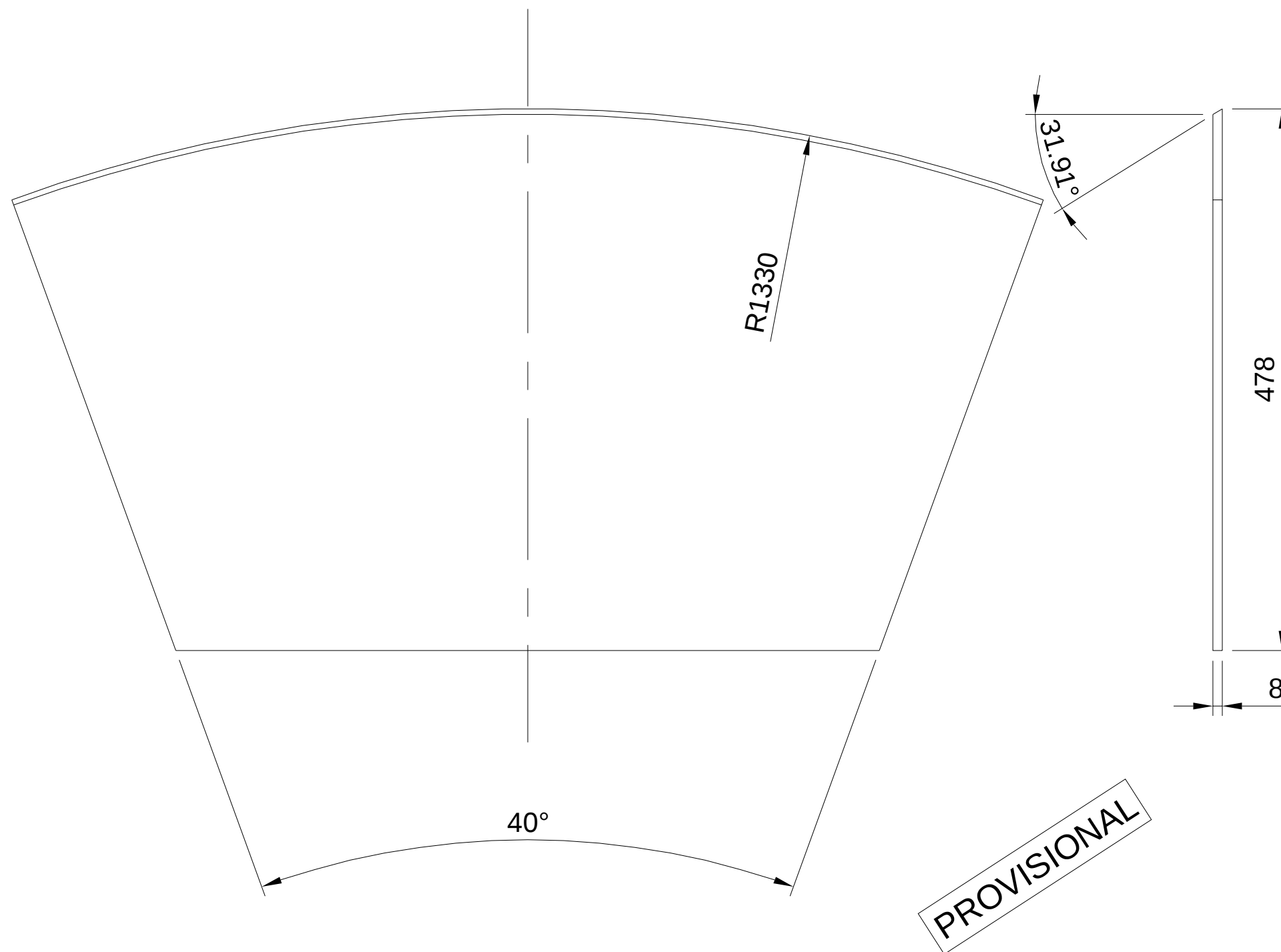
Material: Fe410W B IS2062

Qty : 6 Nos [LH-1 to 3 and RH-1 to 3]

Scale : NTS

Drawing No : P7-W-4-23-7

FINISH:- ▽



Note : All dimensions are in mm

FINISH:- ▽

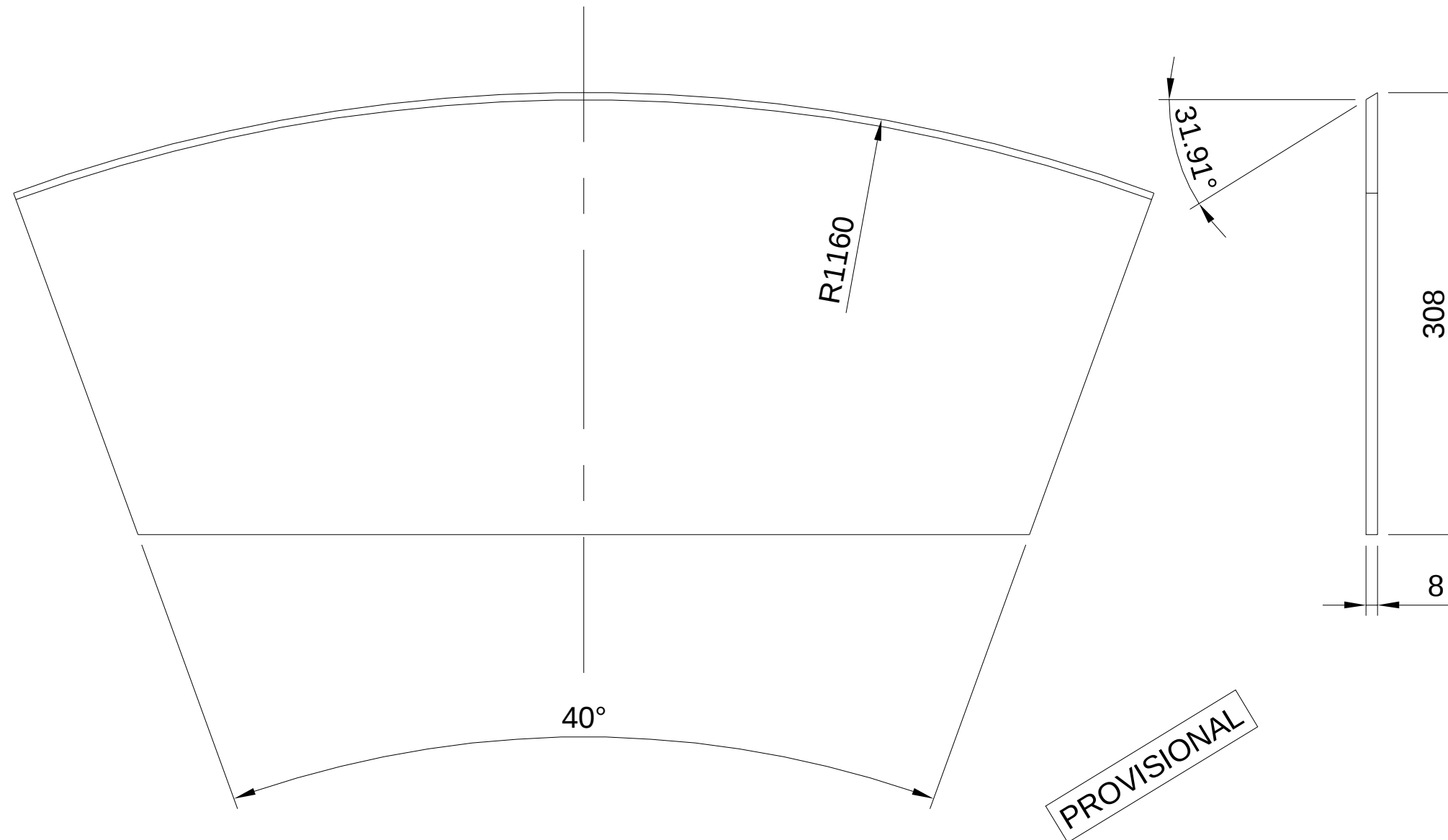
Name of the Part : CIRCULAR STIFFENER-1

Material: Fe410W B IS2062

Qty : 1

Scale : NTS

Drawing No : P1-CS-1-22-1



Note : All dimensions are in mm

FINISH:- 

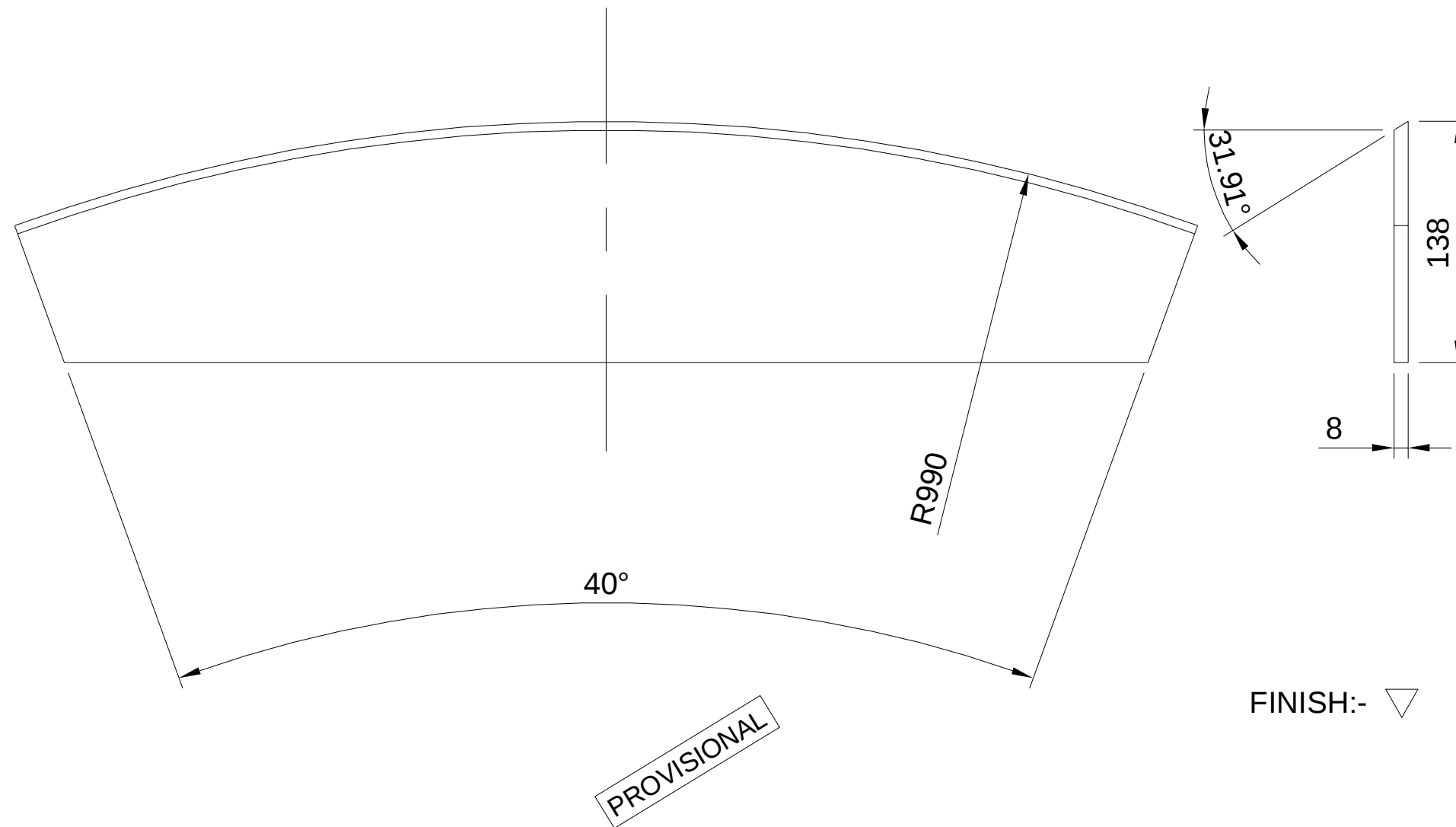
Name of the Part : CIRCULAR STIFFENER-2

Material: Fe410W B IS2062

Qty : 1

Scale : NTS

Drawing No : P2-CS-2-22-2



Note : All dimensions are in mm

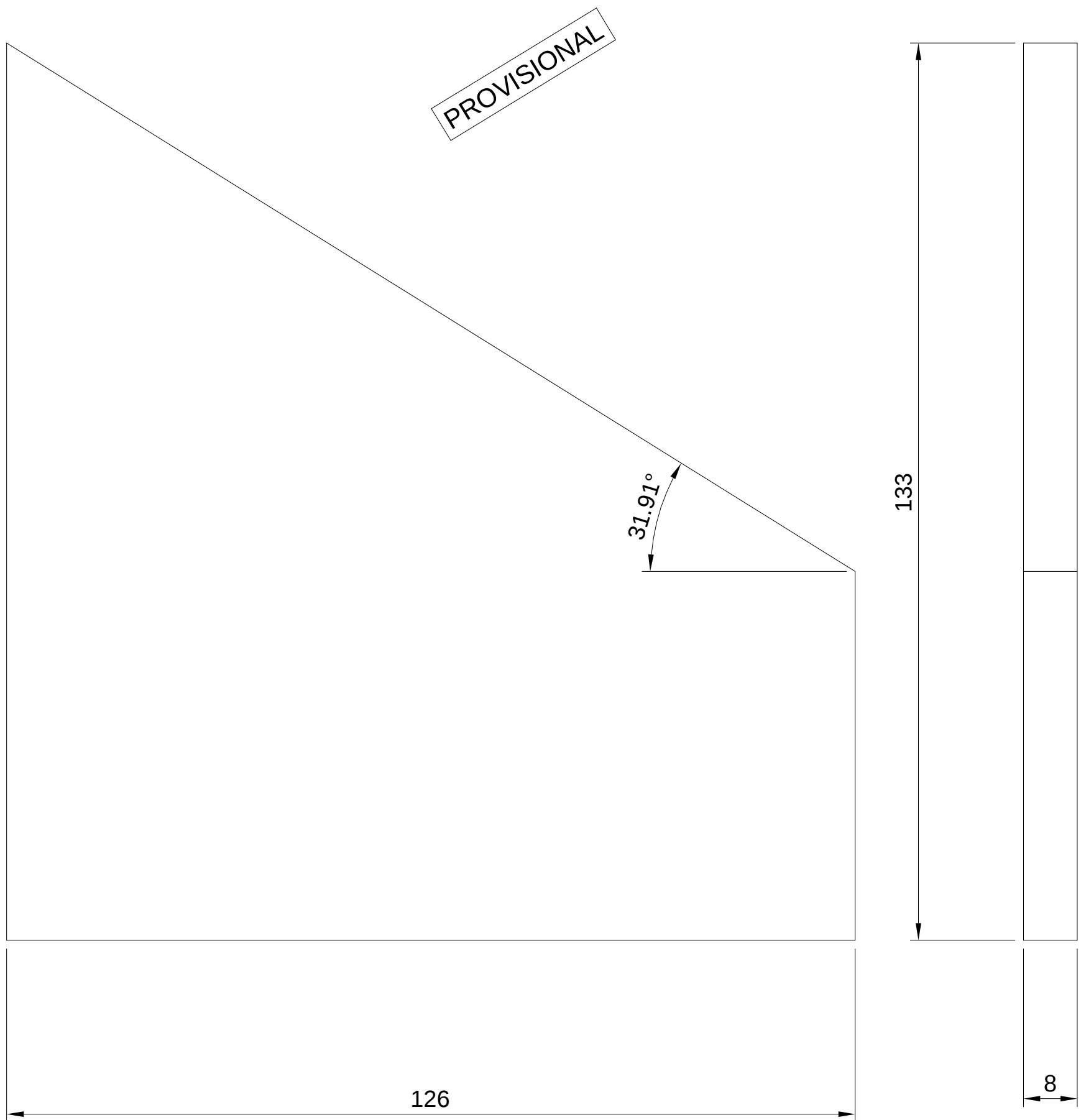
Name of the Part : CIRCULAR STIFFENER-3

Material: Fe410W B IS2062

Qty : 1

Scale : NTS

Drawing No : P3-CS-3-22-3



Note : All dimensions are in mm

FINISH:- ▽

Name of the Part : WEB-1

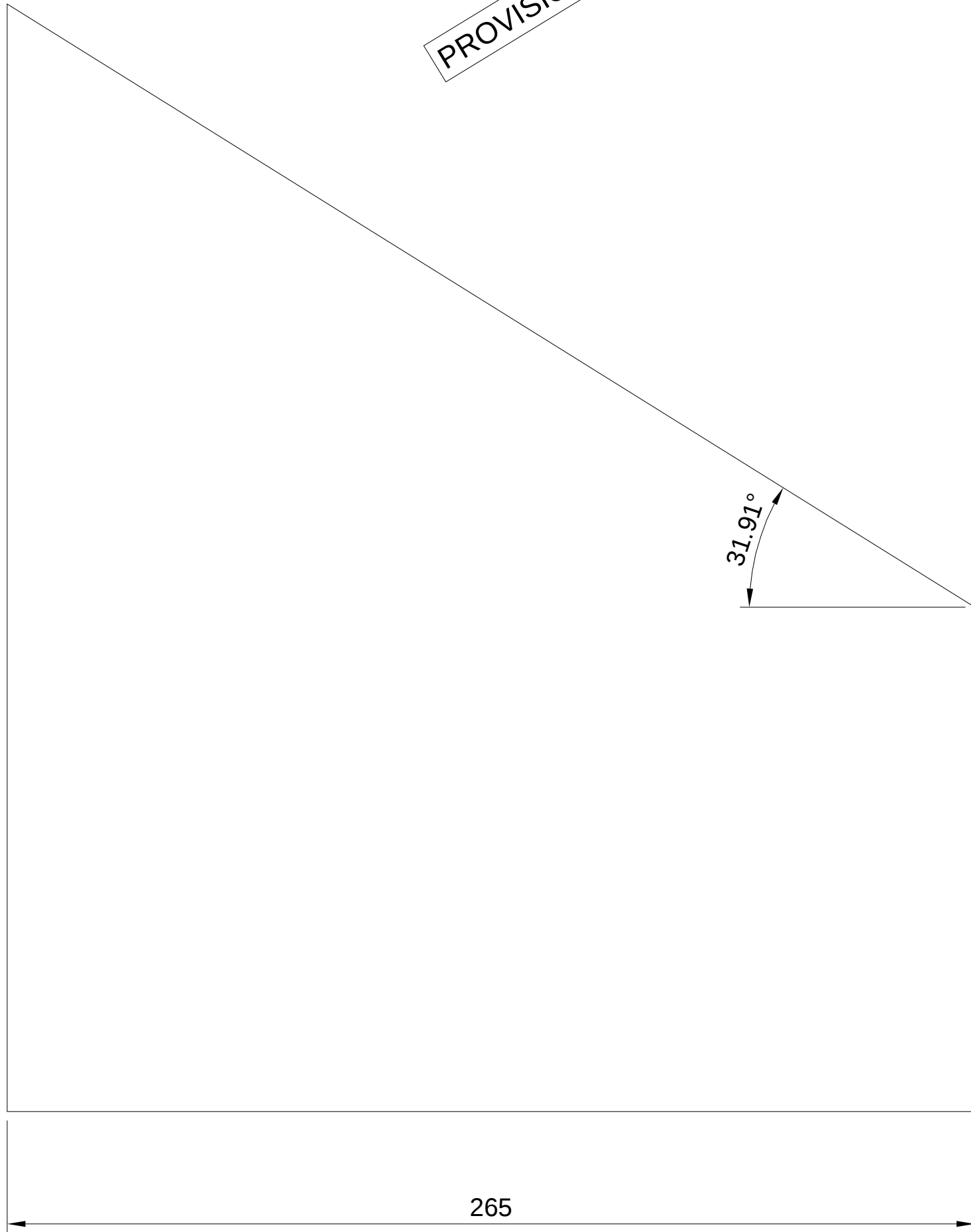
Material: Fe410W B IS2062

Qty : 2 Nos [LH-1 and RH-1]

Scale : NTS

Drawing No : P4-W-1-22-4

PROVISIONAL



303

265

8

Note : All dimensions are in mm

Name of the Part : WEB-2

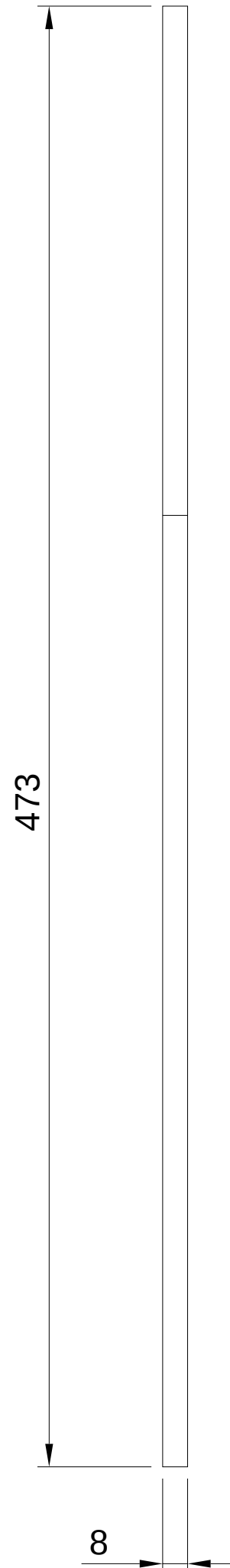
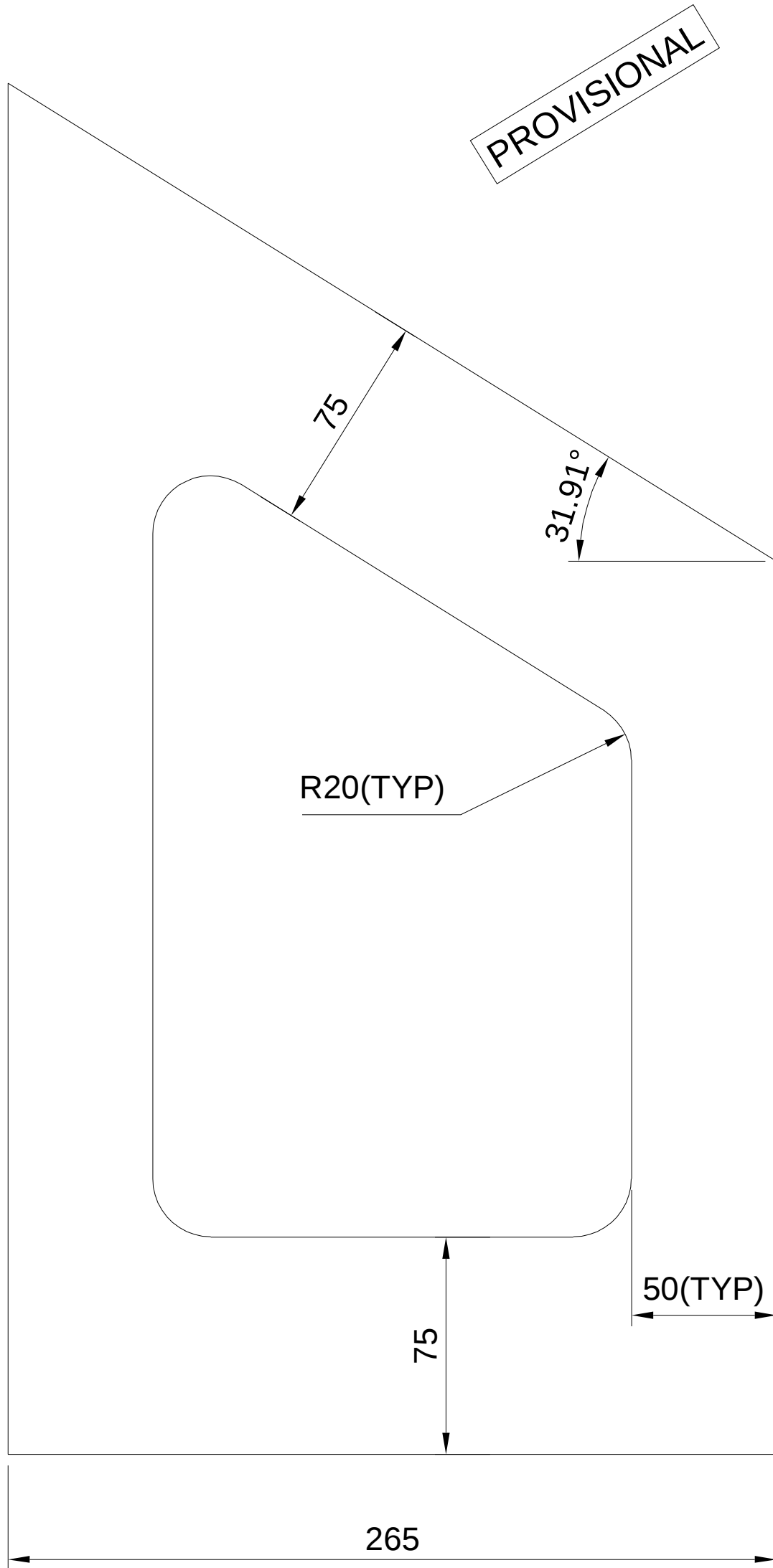
Material: Fe410W B IS2062

Qty : 2 Nos [LH-1 and RH-1]

Scale : NTS

Drawing No : P5-W-2-22-5

FINISH:- ▽



FINISH:- ▽

Note : All dimensions are in mm

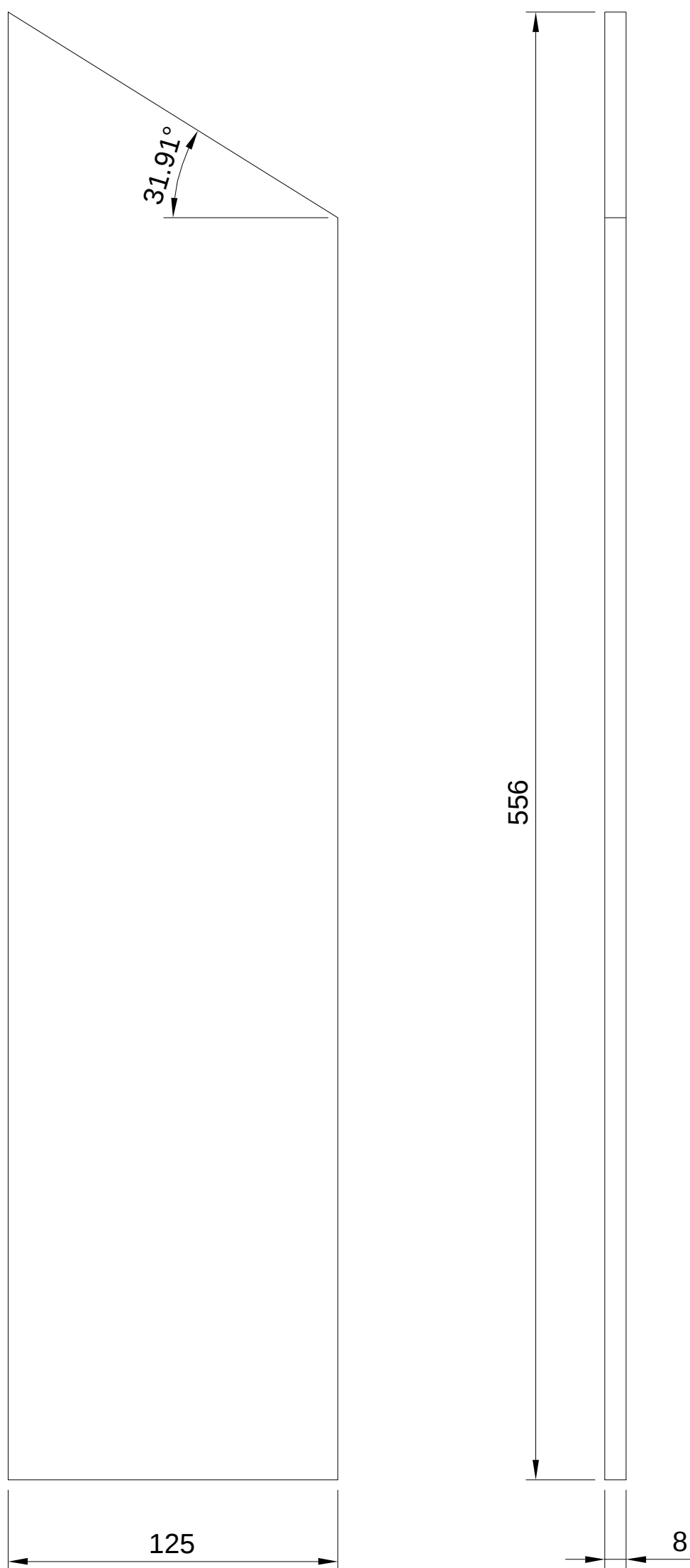
Name of the Part : WEB-3

Material: Fe410W B IS2062

Qty : 2 Nos [LH-1 and RH-1]

Scale : NTS

Drawing No : P6-W-3-22-6



PROVISIONAL

FINISH:- ▽

Note : All dimensions are in mm

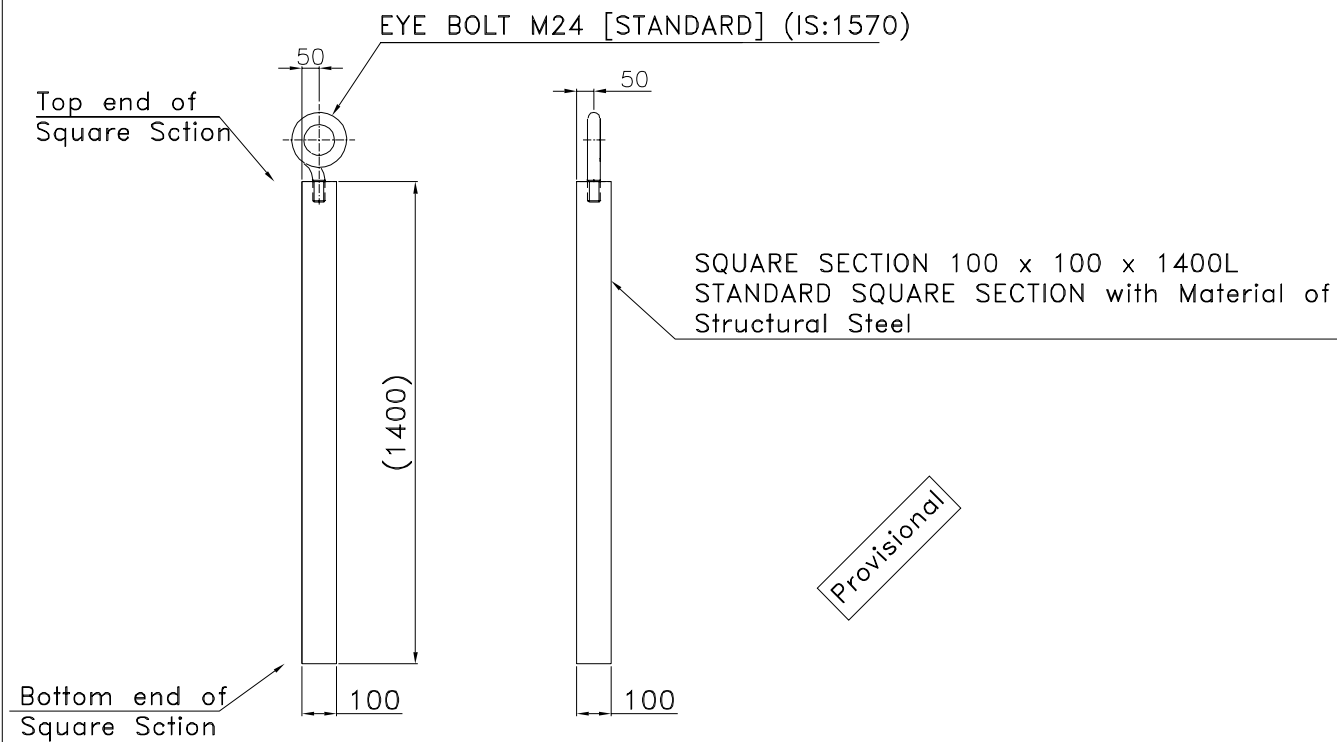
Name of the Part : WEB-4

Material: Fe410W B IS2062

Qty : 2 Nos [LH-1 and RH-1]

Scale : NTS

Drawing No : P7-W-4-22-7



Note:

- 1) All dimensions are in mm.
- 2) At the top end of the Part of Square Section, Internal thread to be made and the part of M24 EYE bolt to be engaged with internal thread on the Square Section
- 3) The bottom end of Square section to be welded with Mould Assembly of
MOULD (P+) FOR PS3 ADAPTOR FOR PSLV /
MOULD (P-) FOR PS3 ADAPTOR FOR PSLV /
MOULD (Y+/Y-) FOR PS3 ADAPTOR FOR PSLV /

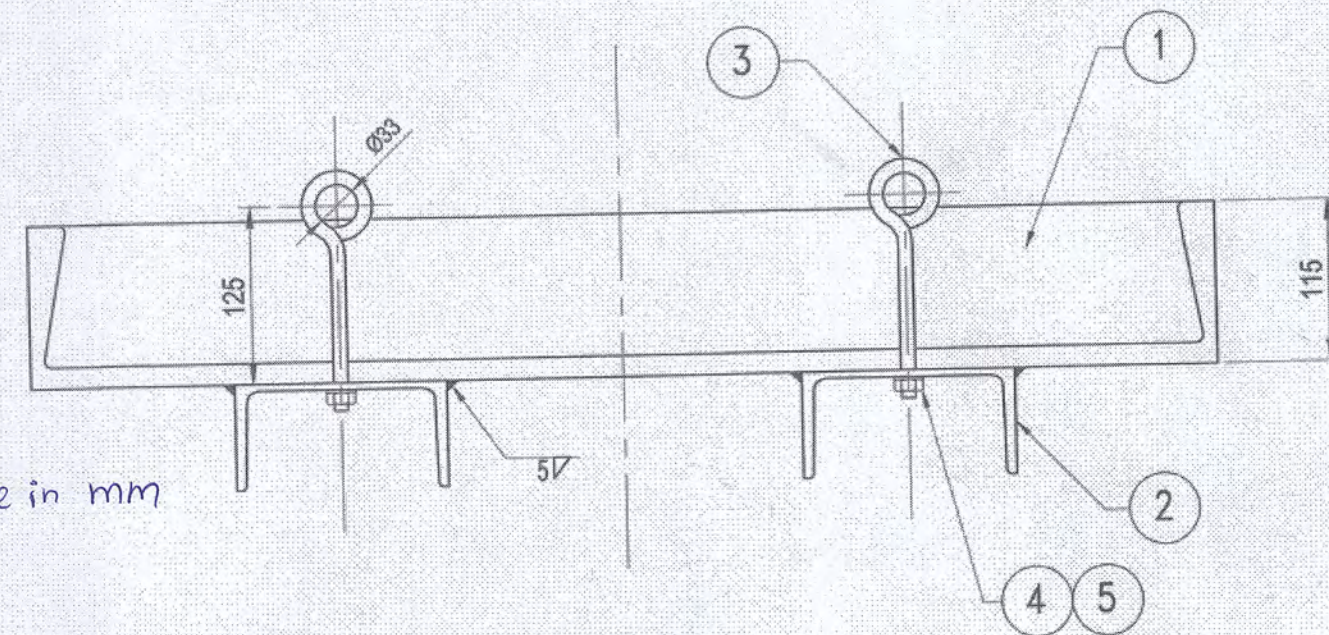
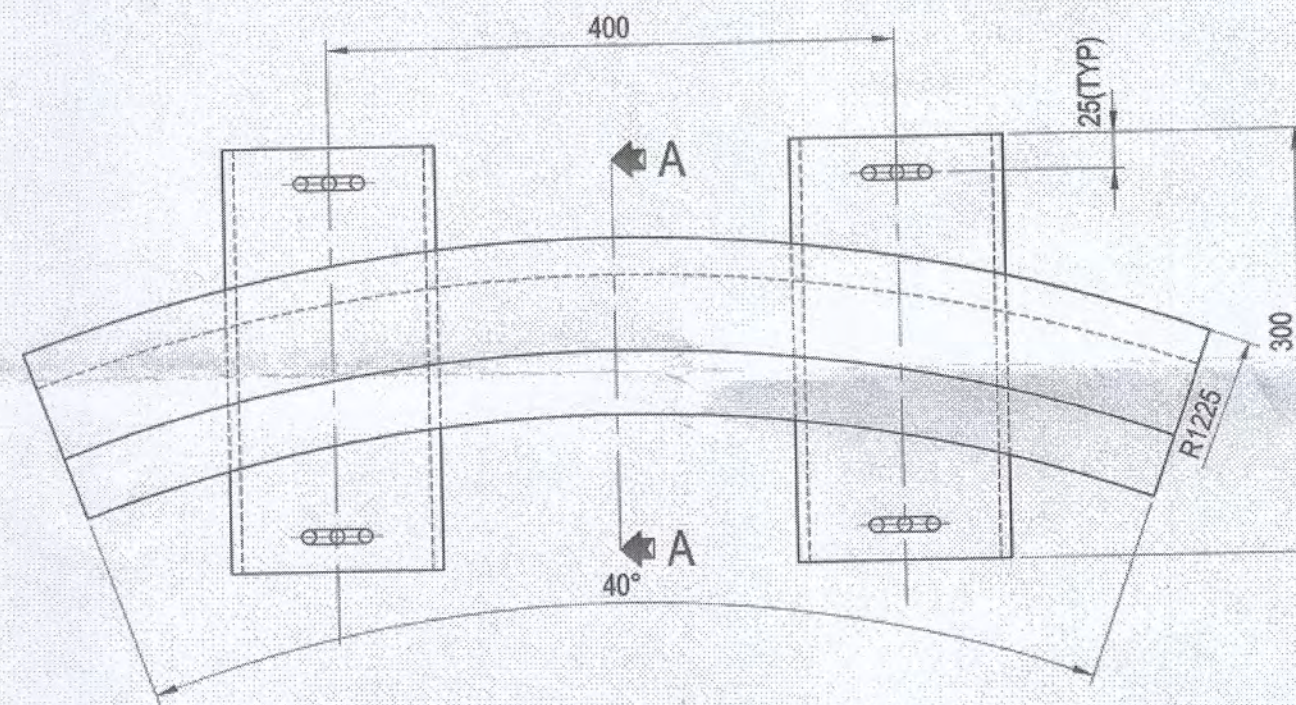
Qty :

- 4 Nos for MOULD (P+) FOR PS3 ADAPTOR FOR PSLV
- 4 Nos for MOULD (P-) FOR PS3 ADAPTOR FOR PSLV
- 4 Nos for MOULD (Y+/Y-) FOR PS3 ADAPTOR FOR PSLV

Scale : NTS

Name of the Part: SQUARE SECTION WITH EYE BOLT

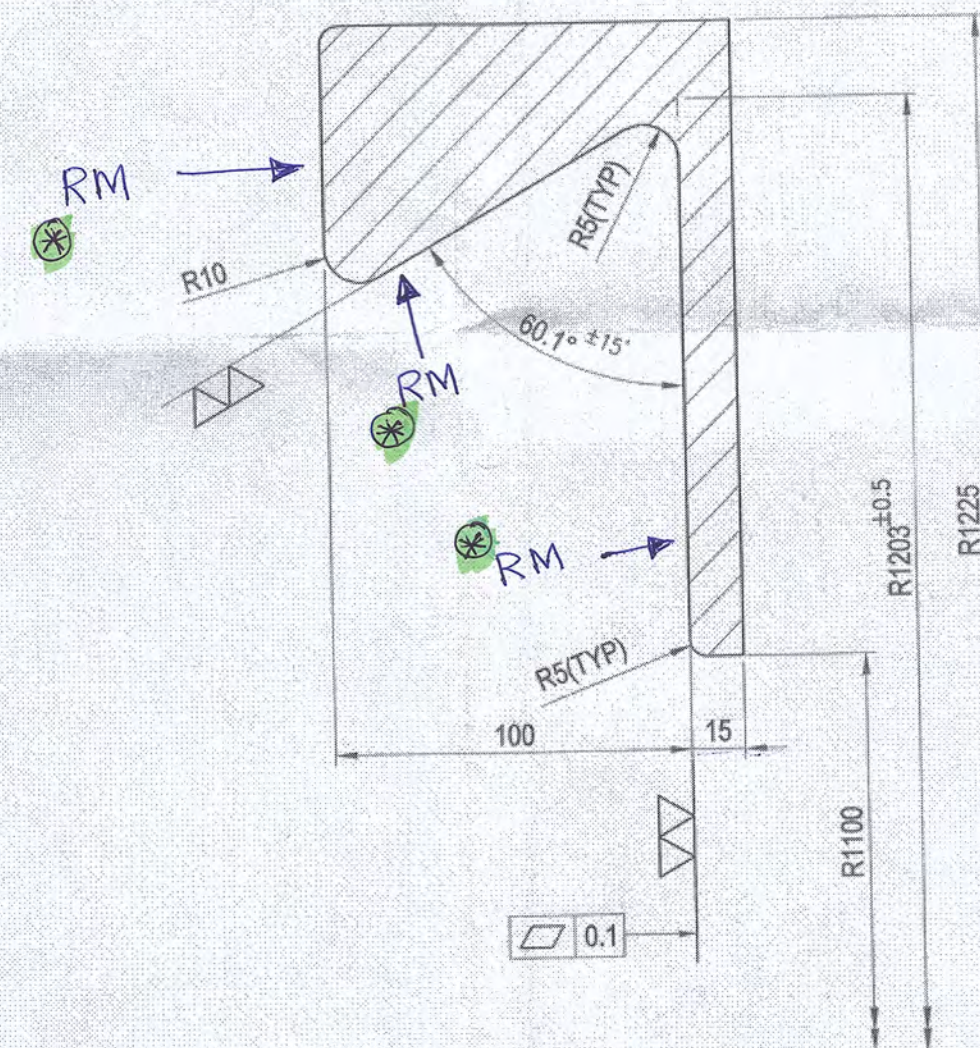
Drawing No : SS-W-EB-1



Note: All dimensions are in mm
Scale: NTS

Name of the mould: MOULD FOR PS3A CIRCULAR ANGULAR BRACKET

Drawing No: Mould-4-Assembly-CAB-09



SECTION - AA
SCALE: NTS

RM: Region of Moulding
(Region of CFRP Composite moulding)

NOTE: ALL JOINTS ARE TO BE WELDED

FINISH: ∇ (∇)

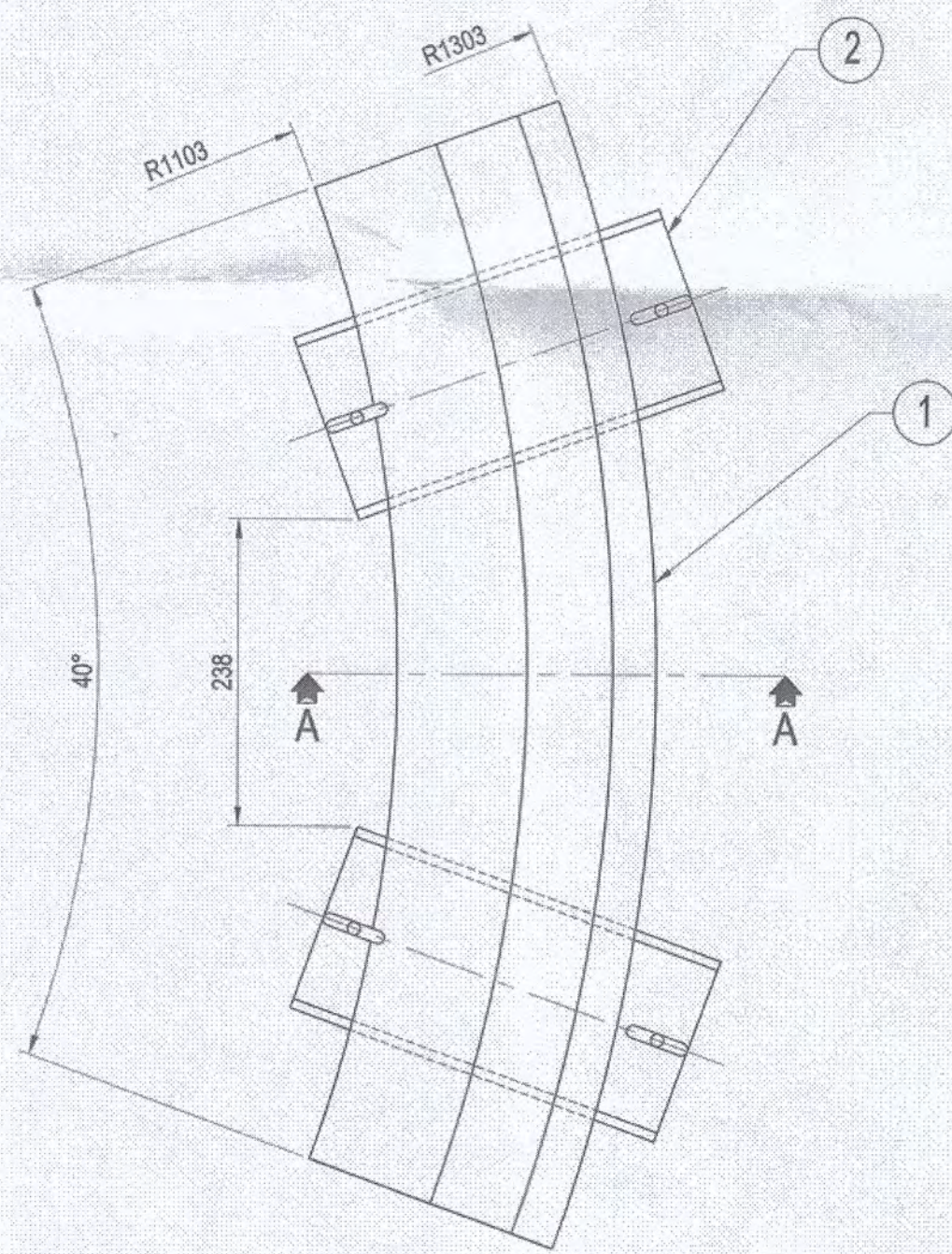
5	PLAIN MACHINED WASHER M12	C 35	4		
4	HEXAGON NUT M12	30NCD16	4		
3	LIFTING EYE BOLT M12 WITH WASHER	STD.	4		
2	ISLC 150x75x300L	IS 808	2		
1	BASIC SHELL	C 15	1		
ITEM NO.	DESCRIPTION	MATERIAL	QTY.	WT.	REMARKS

Region of Moulding.
Region of CFRP Composite

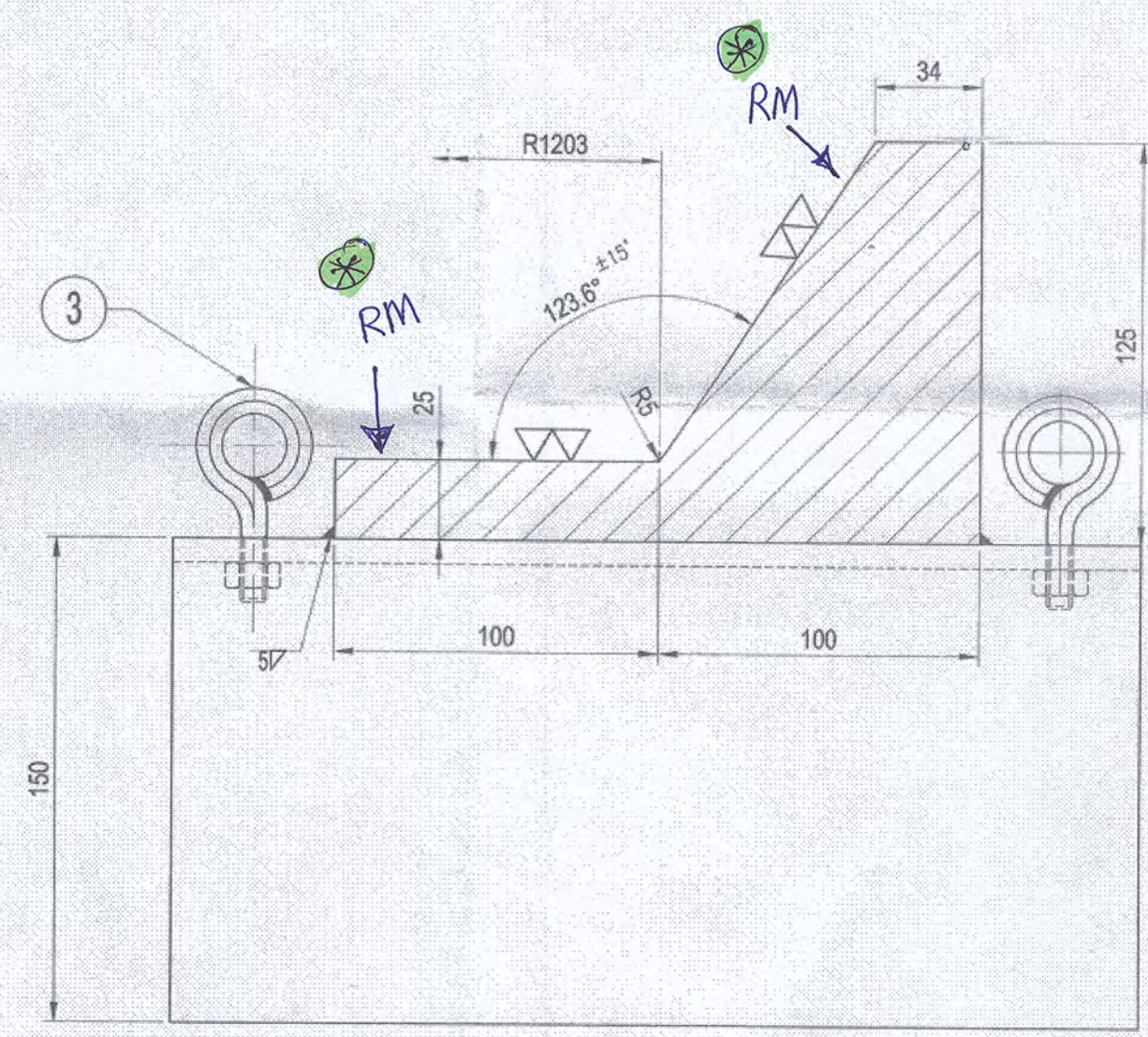
MATERIAL	TITLE	No. OFF	WT. Kg.
	MOULD FOR PS3A CIRCULAR ANGULAR BRACKET.	1	

DO NOT SCALE THE DRAWING
ASK IF IN DOUBT

DEVIATION FOR NONTOLERANCED DIMENSIONS
(IS: 2102-MEDIUM GRADE)



Note: All dimensions are in mm
Scale: NTS



SECTION - AA
SCALE: ~~1/20~~ NTS

 RM: Region of Moulding
(Region of CFRP Composite moulding)

Name of the Mould: Mould for Circular Angular Bracket (Type-II) for PS3 ADAPTOR
Drawing No: Mould-5-Assembly-CAB-04

NOTE: ALL JOINTS ARE TO BE WELDED

FINISH: ▽ (▽▽)

3	LIFTING EYE BOLT M20 WITH WASHER	STD.	4		
2	ISLC 150x75x300L	IS 808	2		
1	BASIC SHELL 	C-15	1		
ITEM NO.	DESCRIPTION	MATERIAL	QTY.	WT.	REMARKS

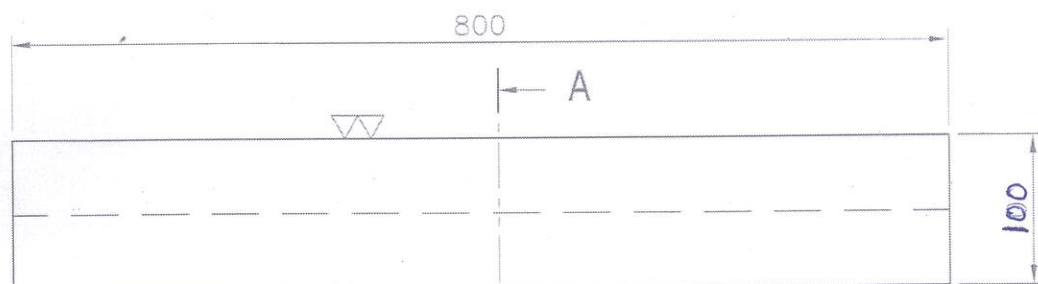
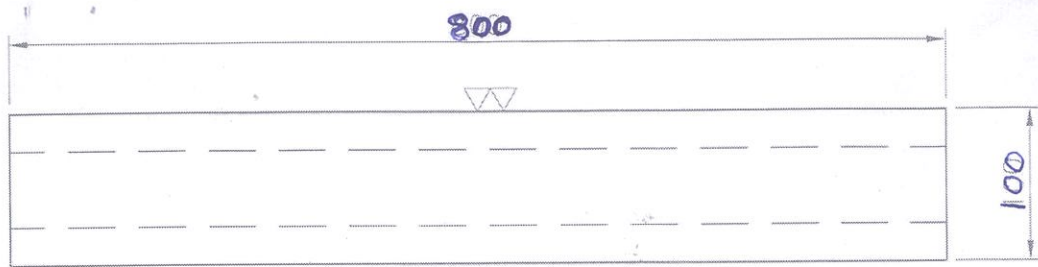
Region of Moulding
Region of CFRP Composite moulding 

DO NOT SCALE THE DRAWING
ASK IF IN DOUBT
UNLESS OTHERWISE SHOWN:-

DEVIATION FOR NONTOLERANCED DIMENSIONS
(IS: 2102-MEDIUM GRADE)

MATERIAL	C-15	TITLE	MOULD FOR CIRCULAR ANGULAR BRACKET (TYPE-II) FOR PS3 ADAPTOR	No. OFF	1	WT. Kg.	
----------	------	-------	--	---------	---	---------	--

Name of the Mould: Mould for CFRP ANGULAR BRACKET FOR PS3 ADAPTOR



⊗ Region of CFRP composite moulding

⊗ Moulding region

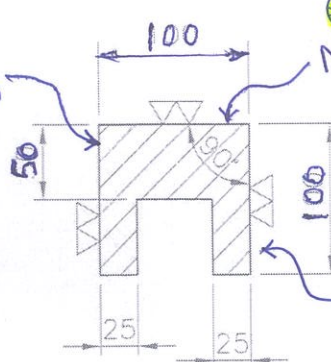
⊗ Moulding region

Note:

All dimensions are in mm.

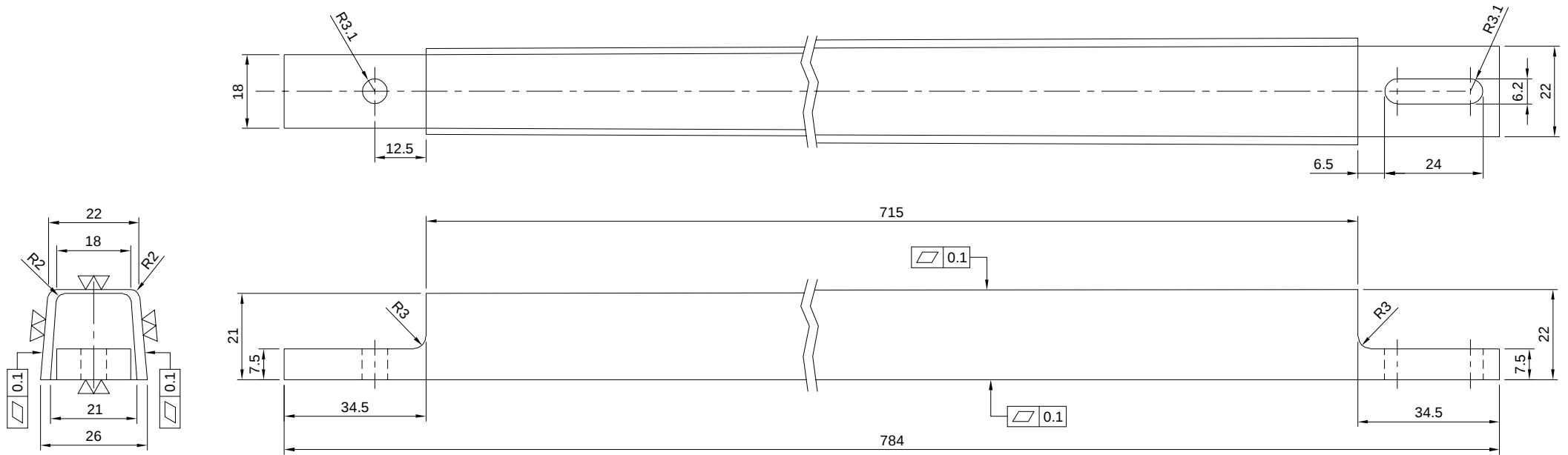
Material: MS (C20)

Scale: NTS



SECTION-AA'

Drawing No: Mould-6-CF-AB-07



NOTE:- R3.1 x 24 LENGTH SLOTS SHOULD BE ON THE AXIS WITHIN AN ALIGNMENT ACCURACY OF 0.1mm.

NOTE:- All dimensions are in mm

▽[▽▽]

Moulding region:

The entire surface
(except 34.5 mm portion at both the ends)
is region of Moulding
(region of CFRP composite Moulding)

Material : Al. ALLOY B51 SWP

Name of the Mould : HAT STIFFENER MOULD FOR PS3 ADAPTER

Qty : 62 Nos

Scale : NTS

Drawing No : Mould-7-HM-10

Region of Moulding on the Mould

Sl. No	Name of the Mould with Drawing No	*Region of Moulding (CFRP Composite moulding)	Remarks
1.	MOULD (P+) FOR PS3 ADAPTOR FOR PSLV [Drg No-Mould-1-Assembly-PP-23]	Outer surface of Conical Shell (Item No-1 as mentioned in the drawing)	Region of Moulding (CFRP Composite moulding are shown in the drawings also
2.	MOULD (P-) FOR PS3 ADAPTOR FOR PSLV [Drg No- Mould-2-Assembly-PM-24]	Outer surface of Conical Shell (Item No-1 as mentioned in the drawing)	
3.	MOULD (Y+/Y-) FOR PS3 ADAPTOR FOR PSLV [Drg No- Mould-3-Assembly-YPM-22]	Outer surface of Conical Shell (Item No-1 as mentioned in the drawing)	
4.	MOULD FOR PS3A CIRCULAR ANGULAR BRACKET [Drg No- Mould-4-Assembly-CAB-09]	Angular faces (by 60.1 deg angle) and top side horizontal faces of “Basic Shell” (Item No-1 as mentioned in the drawing)	
5.	MOULD FOR CIRCULAR ANGULAR BRACKET (TYPE-II) FOR PS3 ADAPTOR [Drg No- Mould-5-Assembly-CAB-04]	Angular faces (by 123.6 deg angle) of “Basic Shell” (Item No-1 as mentioned in the drawing)	
6.	MOULD FOR CFRP ANGULAR BRACKET FOR PS3 ADAPTOR [Drg No- Mould-6-CF-AB-07]	Refer section-AA in the drawing; Outer faces	
7.	HAT STIFFENER MOULD FOR PS3A ADAPTOR [Drg No- Mould-7-HM-10]	All the region, except 34.5 mm portion at both the ends (refer the drawing)	

*Acceptance tests of “Vacuum Integrity Test at room temperature” and “Vacuum Integrity Test at High temperature with 5 bar pressure inside Autoclave” to be done by Vendor at the region of moulding region as mentioned above for each mould.