### **DISCLAIMER**

The details like name of project, name of fabricator, etc. are indicative only. These should never be referred for any WPSS related matters. Only the technical details should be referred and followed for the WPSS purpose.

## Model WPSS for Railway BOW STRING GIRDER (with SV Loading and Congestion Factor)

Railway BOW STRING GIRDER
(with SV Loading and Congestion Factor)
60.0m clear span 3 lane
Model WPSS No: RDSO/Infra-II/B&S/ROB/BSG/
WPSS/60.0series (41 Nos)

# WELDING PROCEDURE SPECIFICATION SHEET (WORKSHOP)

#### 60 MTR CLEAR SPAN (BOW STRING STEEL GIRDER) RDSO DRAWING NO:RDSO/B-10427 (SERIES)

Name of work: Construction of 2 lane ROB and its approaches in KM 158(old KM 153) on NH-104 at Jaynagar Bypass in the state of Bihar on EPC mode for the year 2021-22(job No.-104(New NH-227)-BR-2021-22-47).

Agreement No- 01/EPC/2022-23 Dated 20.05.2022

Fabricator (Regd. Office & Work Site):

M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.

#### Contractor:

M/s.RamKripal singh Construction Pvt.Ltd.

#### CLIENT:

NATIONAL HIGHWAYS AUTHORITY OF INDIA(NHAI)

# W.P.S.S. INDEX SHEET 60 MTR SPAN BOW STRING STEEL GIRDER RDSO/B/10427 (SERIES)

(): (): (): (): ()

くせいい

Cr

61

WPSS NO	DESCRIPTION	WELD SIZE	PAGE NO.	REMARKS
SRMBS/RKSCPL/SHOP/WPS/60M/01	Bottom Long Beam, Arch & Top Tle Beam	10 mm	01-02	SAW
SRMBS/RKSCPL/SHOP/WPS/60M/02	Hanger Beam & Top Diagonal Tie Beam	10 mm	03-04	SAW
SRMBS/RKSCPL/SHOP/WPS/60M/03	End Bottom Cross beam	14 mm	05-06	SAW
SRMBS/RKSCPL/SHOP/WPS/60M/04	Intermediate Bottom Cross Beam	10 mm	07-08	SAW
SRMBS/RKSCPL/SHOP/WPS/60M/05	DP1 & DP2 at Bottom Long Beam	10 mm	09-10	FCAW
SRMBS/RKSCPL/SHOP/WPS/60M/06	DP at Arch Beam	10 mm	11-12	FCAW
SRMBS/RKSCPL/SHOP/WPS/60M/07	DP1 at Hanger	10 mm	13-14	FCAW
SRMBS/RKSCPL/SHOP/WPS/60M/08	DP at Top Tie Beam & Top Diagonal Tie Beam	10 mm	15-16	FCAW
SRMBS/RKSCPL/SHOP/WPS/60M/09	Web Splice at Intermediate Bottom Cross Beam	14 mm	17-18	FCAW
SRMBS/RKSCPL/SHOP/WPS/60M/10	Top Splice at Intermediate Bottom Cross Beam	14 mm	19-20	FCAW
SRMBS/RKSCPL/SHOP/WPS/60M/11	Bottom Splice at Intermediate Bottom Cross Beam	22 mm	21-22	FCAW
SRMBS/RKSCPL/SHOP/WPS/60M/12	Top & Bottom Splice at End Bottom Cross Beam	25 mm	23-24	FCAW
SRMBS/RKSCPL/SHOP/WPS/60M/13	Web Splice at End Bottom Cross Beam	20 mm	25-26	FCAW
SRMBS/RKSCPL/SHOP/WPS/60M/14	Stiffener at End & Intermediate Bottom Cross Beam	8 mm	27-28	FCAW
SRMBS/RKSCPL/SHOP/WPS/60M/15	Stud Welding of End Bottom Cross beam & Int. Bottom cross beam	7 mm	29-30	Arc stud with ferrule
SRMBS/RKSCPL/SHOP/WPS/60M/16	Tack Weld of all Component	5 mm	33-34	FCAW

Name	and address of Fabricator	18	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.				
Weldir	Procedure specification No.	-	SRMBS/RKSCPL/SHOP/WPS/60M/01				
01.	RDSO Drawing No.	1	RDSO/B-10427/1				
02,	Welding Joint Description,		Fillet 10 mm - Bottom Long Beam, Arch & Top Tie Beam				
03.	Base Metal.		25mmx25mm, 32mmx32mm, 25mmx25mm, IS: 2062 - 2011, Gr. : E350 B				
04.	Welding Process		S.A.W.				
05,	Welding Position.						
06.	Welding Consumable.	-					
6.1	Electrode/Wire  Class Dia Type Drying Method  Flux  Class Type		W2 of IRS: M-39-2020. 4 mm Copper Coated Mild Steel Wire. N.A.				
6.2			F2 OF IRS M 39 – 2020 Agglomerated.				
-	Drying Method	1	Recommended as per manufacturer,				
6.3	3 Shielding Gas		NA				
07.	Base Metal Preparation	4	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, and Mill scale, Grease, Paint and Rust etc., which may affect weld quality.				
8	Joint design Details		(Sketch showing arrangements of parts, weld bead details, weld passes & the sequence etc.)  (Web with flange)				
7.1	800 10 A ON A COMM	L FO	ON ALL FOUR CORNERS  3667  ON ALL FOUR CORNERS  2567  ON ALL FOUR CORNERS  257  258  257  258  258  258  258  258				
•	825 (BOTTOM LONG BEAM)	961	DP 10 THK. PLATE  10 A. A.10  825  (TOP THE BEAM)				
	্যক্ষত প্রায়		बादु एवं रमान (ARCH) o Officen/McC				
7.2	Joint preparation	74	As Per YS: 4353 - 1995, IS: 7215 & Welded Bridge Code.				
277.5	Welding Current	100	MARKA, DESIGNE				
08.	Туре	:	DC				
	Polarity   Welder qualification	:	Reverse				
09.			As per IS: 7310/7307 (Part-I) – 2019				

0			90					Page 02
1	Weld quence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
6	1+1	4	490 - 550	28 - 32	2.0 - 2.5	0.30 - 0.50	15 - 20	N.A.

	0.2 Welding Sequence and technique	:	N.A.
			4 1
			10mm ( )
			) 10mm
			\     /
	*		71 [4
100			2 3
-			
11	Provision of run-on / run-off tabs	:	Yes
12	Complete of the state of the st	:	
-	Geaning of weld bead before laying next weld bead	+	N.A.
12	Cleaning of weld bead before laying next weld bead  Root preparation before welding other side of groove weld	1:	N.A.
13	Cleaning of weld bead before laying next weld bead  Root preparation before welding other side of groove weld  Preheating and inter pass temperature	:	N.A.
13	Cleaning of weld bead before laying next weld bead  Root preparation before welding other side of groove weld  Preheating and inter pass temperature  Peening	:	N.A.  N.A.  Preheat TempMin.150°C & Interpass Temp250°C Max.
13	Cleaning of weld bead before laying next weld bead  Root preparation before welding other side of groove weld  Preheating and inter pass temperature  Peening  Post Weld treatment	:	N.A.  Preheat TempMin.150°C & Interpass Temp250°C Max.  N.A.
13 13 14 15	Cleaning of weld bead before laying next weld bead  Root preparation before welding other side of groove weld  Preheating and inter pass temperature  Peening  Post Weld treatment  Rectification of weld defect	:	N.A.  Preheat TempMin.150°C & Interpass Temp250°C Max.  N.A.  N.A.  By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cornel Wire (Class Lef.)

.

WELDING PROCEDURE SPECIFICATION SHEET FOR 60 MCLEAR SPAN BOW STRING GIRDER Page 03 Name and address of Fabricator M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001. Welding Procedure specification No. : SRMBS/RKSCPL/SHOP/WPS/60M/02 01. RDSO Drawing No. RDSO/B-10427/1 02 Welding Joint Description. Fillet 10 mm - Hanger Beam & Top Diagonal Tie Beam 5 20mm at both 80 ands of Hanger 03. Base Metal. 32mmx25mm, 28mmX28mm IS: 2062 - 2011, Gr. : E350 B0 04. Welding Process S.A.W. 05. Welding Position. 1F 06. Welding Consumable. Electrode/Wire Class W2 of IRS: M-39-2020. 5.1 Dia 4 mm Type Copper Coated Mild Steel Wire. Drying Method N.A. Flux Class : F2 OF IRS:M-39 - 2001 6.2 Type : Agglomerated. Drying Method Recommended as per manufacturer. 6.3 Shielding Gas : 07. Base Metal Preparation Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, ÷ Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality. Joint design Details à 570 ON ALL FOUR (Sketch showing arrangements of ON ALL FOUR CORNERS 28 CORNERS parts, weld bead details, weld passes 44 50 28 989 825 25 25 & their sequence etc.) 310 (Web with flange) (TOP DIAGONAL TIE BEAM) 600 (HANGER), ALS 20mm of extended at of As Per IS: 4353 - 1995, IS: 7215 & Welded Bridge Scott 7.2 Joint preparation Welding Current : Type 08. DC Polarity : Reverse As per IS: 7310/7307 (Part-I) - 2019 09. Welder qualification : सक्अ० अधि० / बातु एवं रसाः 10. Welding Parameters and technique : Asst. Research Officer/M&C ₹0.1 Welding Parameters 1 रेल मंत्रालय/Ministry of Railways

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1+3	4	490 - 550	28 - 32	2.0 - 2.5	0.30 - 0.50	15 - 20	N.A.

200

0.2 Welding Sequence and technique	N.A.
	10mm 1
	10mm
	2 3

11.	Provision of run-on / run-off tabs	:	Yes
12.	Cleaning of weld bead before laying next weld bead	:	N.A.
13,	Root preparation before welding other side of groove weld	:	N,A,
14.	Preheating and inter pass temperature	:	Preheat TempMin,150°C & Interpass Temp,-250°C Max.
15.	Peening		N.A.
16.	Post Weld treatment	:	N.A.
17.	Rectification of weld defect		By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
18.	Inspection of Weld	:	Visual, D.P., MPT & Macro etching Test.
19.	Any other relevant Details	1:	

. .

- Contract	WELDING PROCEDURE SPECIFI and address of Fabricator	*	M/s. Struc-Rite Metal Building Systems, Unit-II, Boral, Durg-491001.				
veldi	ng Procedure specification No.		SRMBS/RKSCPL/SHOP/WPS/60M/03				
	RDSO Drawing No.	1	RDSO/B-10427/1				
02.	Welding Joint Description.		Fillet 14 mm – End Bottom Cross bearn				
03.	Base Metal.						
04,	Welding Process	-	25mmx25mm & 18mmx18mm 15: 2062 - 2011, Gr. : E350 B0				
05.	Welding Position.	-	S.A.W.				
06.	Welding Consumable.		1F				
	Electrode/Wire						
6.1	Class Dia Type Diving Method		W2 of IRS: M-39-2020. 4 mm Copper Coated Mild Steel Wire. N.A.				
	Rux						
	Class	1	F2 OF IRS:M-39 - 2001				
6.2			100001 HADDING 020				
	Type	1	Agglomerated.				
	0.000		The state of the s				
6.3	Drying Method	1	Recommended as per manufacturer,				
0.3	Shielding Gas	40	NA .				
07.	Base Metal Preparation	1	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.				
	Joint design Details	1	Trace low, 1 in Jours, Groupey Parist and Posts Georg Princes 1 in Justice 1 in Jus				
7.1	(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  (Web with flange)		ON ALL FOUR CORNERS  25 25  OP 10 THK. PLATE  FIND BOTTOM CROSS BEAM				
7.2	Joint preparation	1	As Per IS: 4353 – 1995, IS: 7215 & Welded Bridge Code.				
	Wolding Current	:					
00	Type	1	DC OC				
28.		+	The state of the s				
	Polarity		Reverse				
b9.	Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019 COSIO 2020				
	Welding Parameters and technique		Asst Research Of the care				
10.	Welding Parameters and technique		A STATE OF THE PARTY OF THE PAR				

	Page 06
44.0	Flow

Weld	Electrodes	702/19/55	Company of the Compan		1		Pag
Sequence No.	wire dia. (mm)	(Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out	Gas Flow (I/min.)
1	4	490 - 550	28 - 32	2.0 - 2.5	0.30 - 0.50	(mm)	3500000
_ 2	4	490 - 550	20 22			15 – 20	N.A.
		120 330	28 - 32	2.0 - 2.5	0.30 - 0.50	15 - 20	N.A.

796

4.790

10.2	Welding Sequence and technique	:	N.A.
			4
			/1/\
			14mm \ 14mm
			, 3

•	11,	Provision of run-on / run-off tabs	1	Yes
•	12,	Cleaning of weld bead before laying next weld bead	1	N.A.
6	13.	Root preparation before welding other side of groove weld	1:	N.A.
0	14.	Preheating and inter pass temperature	1	Proheat TempMin.150°C & Interpass Temp250°C Max.
0	15,	Peening	1	NA.
0	16.	Post Weld treatment	1	N.A.
0	17.	Rectification of weld defect	:	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32,2 of 15 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
	18.	Inspection of Weld	10	Visual, D.P., MPT & Macro etching Test.
6	19.	Any other relevant Details	1:	3 (14)
			-	

ame	and address of Fabricator	1	M/s. Struc-Rite Metal Building Systems, Unit-II,Borai, Durg-491001.
Veldin	g Procedure specification No.		
01,	RDSO Drawing No.	-	SRMBS/RKSCPL/SHOP/WPS/60M/04
02.	Welding Joint Description.	-	RDSO/B-10427/1
03.	Base Metal.	-	Fillet 10 mm – Intermediate Bottom Cross Beam
04.	Welding Process	H	16mmx20/28mm IS: 2062 – 2011, Gr.: E350 B0
05.	Welding Position.	:	S.A.W.
06,	Welding Consumable,	- 6	Flat
	Electrode/Wire		
6.1	Class Dia Type Drying Method		W2 of IRS: M-39-2020. 4 mm Copper Coated Mild Steel Wire. N.A.
6.2	Class	:	F2 OF IRS:M-39-2001 Agglomerated.
	Project Manual		TO STOCKED CONTR.
6.3	Shielding Gas	3	Recommended as per manufacturer.
	- Thomas Gas	:	NA .
07,	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Craci Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld
	Joint design Details	:	quality.
7.1	(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  Intermediate Bottom cross beam		20. 10mm
7.2	Joint preparation	907	a.
2.5%	Welding Current	:	As Per IS: 4353 - 1995, IS: 7215 & Welded Bridge Code.
255		:	
08.	Туре		DC An
	Polarity	1	Reverse
09.	Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019
10,	Welding Parameters and technique	:	MASSI NESCRICE OFFICE AND ACCOUNT OF THE PROPERTY OF THE PROPE
10.1	Welding Parameters	-	एत भंजालय / Ministry of Reliable

LINE BLUE

Weld	Electrodes	_			_		Pag
Sequence No.	Wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out	Gas Flow (1/min.)
-	4	490 - 550	28 - 32	7000		(mm)	(.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
100			20-32	2.0 - 2.5	0.30 - 0.50	15 - 20	N.A.

200

- · · · · ·

-	10.2	Welding Sequence and technique	:	N.A.
				1 10mm 2 3
	11.	Provision of run-on / run-off tabs	1	
	12.	Cleaning of weld bead before laying next weld bead	:	Yes N.A.
	13.	Root preparation before welding other side of groove weld	1:	N.A.
-	14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
L	15.	Peening	+	
L	16.	Post Weld treatment	+:	N.A.
	17.	Rectification of weld defect	:	N.A.  By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conduction DR Text
-	19			IRS M 46) after conducting DP Test
1	18.	Inspection of Weld  Any other relevant Details		IRS M 46) after conducting DP Test.  Visual, D.P., MPT & Macro etching Test.

			ATION SHEET FOR 60 MCLEAR SPAN BOW STRING GIRDER
Weld	ling Procedure specification No.	+	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
-	RDSO Drawing No.	+	SRMBS/RKSCPL/SHOP/WPS/60M/05
02,	Welding Joint Description.	+	RDSO/B-10427/4 & RDSO/B-10427/5
03,	Base Metal.	13	Fillet 10 mm - DP1 & DP2 at Bottom Long Beam
04.	Welding Process	1	18MX25MM, 25mmx25mm, IS: 2062 - 2011, Gr. : F350 R0
05,	Welding Position.	13	F.C.A.W. (Flux core Arc Welding)
06,	Welding Consumable.	1:	Horizontal /Vertical
	Electrode/Wire	1	
6.1	Class Dia Type	1	Class 1 of IRS M 46-2013 (AWS A5.20-10/ E71T-12). 1.2 mm Flux Cored Filler Wire. N.A.
	Flux Styling Hebida	+	N.A.
	Class	1:	N.A.
6.2			100
6	Туре	1:	N.A.
	Drying Method		N.A.
6.3	Shielding Gas	1	NA .
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks,
	Joint design Details	:	Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
7.1	(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  Diaphragm Plate with Arch, Bottom long beam, Top Tie Beam & Top Lateral Beam& (18MX25MM,18mmx32mm,18mmx32mm & 18mmx32mm)		SOU ALL FOUR COMMENS  SUPPLIES ON THESE SUPPLIES
7.2	Joint preparation	:	As Per IS: 10178 – 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
3	Welding Current	:	
08.	Туре	;	DC M
	Polarity	:	Reverse
09.	Welder qualification	:	As per IS: 7310/7307 (Part-I) – 2019 सञ्ज्ञा अधि० / घातु एवं रसा०
	Control of the Contro	-	संख्या जानक नाम देव रहाक
10.	Welding Parameters and technique		Asstt. Research Officer/M&C रेस मंत्रालय/Ministry of Railways

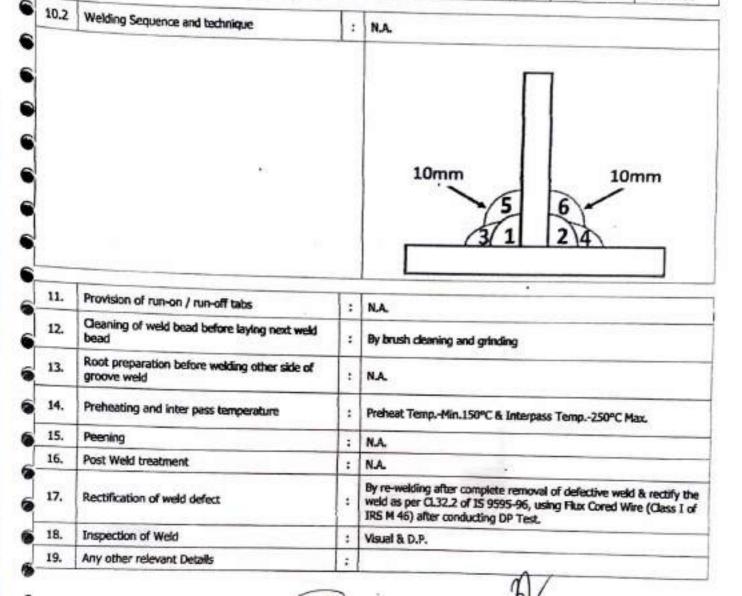
Weld Pass No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
(Root pass)	1.2	200 - 240	24 – 26	4-6	N.A.	13 - 18	13 - 16
3,4	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
5,6	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16

(6) (6)

10.2	Welding Sequence and technique	1	N.A.
			10mm 10mm 5 6 2 4
11.	Provision of run-on / run-off tabs	1:	N.A.
12,	Cleaning of weld bead before laying next weld bead		By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	3	N.A.
14.	Preheating and inter pass temperature	;	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening	1	N.A.
16.	Post Weld treatment	1:	N.A.
17.	Rectification of weld defect	:	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
18.	Inspection of Weld	1	Visual & D.P.

ame	and address of Fabricator	:	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.			
Veld	ng Procedure specification No.	-				
01.	RDSO Drawing No.	-	SRMBS/RKSCPL/SHOP/WPS/60M/06			
32.	NOSO DISWING NO.	1	RDSO/B-10427/4, RDSO/B-10427/9 Fillet 10 mm – DP at Arch			
03.	Welding Joint Description, Base Metal,	:				
34.	Welding Process	:	25mmx32mm IS: 2062 – 2011, Gr. : E350 B0			
05.	Welding Position,	1	F.C.A.W. (Flux core Arc Welding)			
26.	Welding Consumable,	:	Horizontal /Vertical			
	Electrode/Wire	-				
6.1	Class Dia Type Drying Method		Class I of IRS M 46-2020 (AWS A5.20-10/ E71T-12).  1.2 mm  Rux Cored Filler Wire.  N.A.			
	Flux	Ė				
•	Class	:	N.A.			
6.2		1	VAN			
•	Type	:	N.A.			
	Description (etc.)		N977			
6.3	Drying Method	:	N.A.			
200	Shielding Ges	:	NA			
⊋7.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality			
-	Joint design Details	:				
•			DVAPHRAGM (DP) 25MM THICK WELDED ON THREE SIDES WITH 10MM FILLET WELD AS SHOWN			
7.1	(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  DP at Arch		10MM FILLET WELD AS SHOWN  825			
	weld bead details, weld passes & their sequence etc.)  DP at Arch	**	32			
7.1	weld bead details, weld passes & their sequence etc.)  DP at Arch  Joint preparation	**	32 825			
P.2	weld bead details, weld passes & their sequence etc.)  DP at Arch	***	32 825			
P 2	weld bead details, weld passes & their sequence etc.)  DP at Arch  Joint preparation  Welding Current	**	As Per IS: 10178 – 1995, IS: 7215 & Weided Bridge Code. Fillet Joint.  DC Reverse			
6 6 6 7.2 68.	weld bead details, weld passes & their sequence etc.)  DP at Arch  Joint preparation  Welding Current  Type	: : : : : : : : : : : : : : : : : : : :	As Per IS: 10178 – 1995, IS: 7215 & Weided Bridge Code. Fillet Joint.  DC Reverse			
	weld bead details, weld passes & their sequence etc.)  DP at Arch  Joint preparation  Welding Current  Type Polarity	: : : : : : : : : : : : : : : : : : : :	As Per IS: 10178 – 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.  DC Reverse			

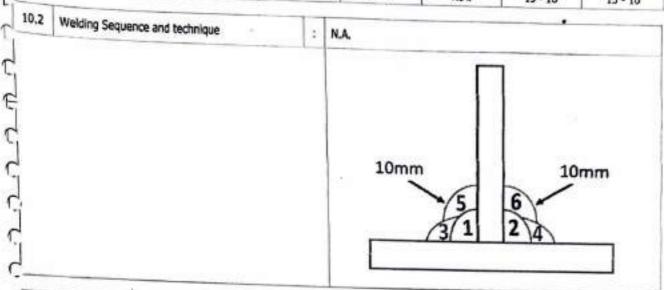
Maria	Electrodes	5525 AV					Pag
Weld Pass No.	wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
(Root pass)	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
3,4	1.2	200 - 240	24-26	4-6	N.A.	13 - 18	
5,6	1.2	200 - 240	24 - 26	4-6	NA.	13 - 18	13 - 16



me a	nd address of Fabricator	:	M/s. Struc-Rite Metal Building Systems, Unit-II,Borai, Durg-491001.
_	Procedure specification No.	:	SRMBS/RKSCPL/SHOP/WPS/60M/07
	RDSO Drawing No.	;	RDSO/B-10425/9
	Welding Joint Description.	÷	Fillet 10 mm – DP1 at Hanger
_	Base Metal.	:	18mmx25/32mm IS: 2062 - 2011, Gr. : E350 B0
	Welding Process	:	F.C.A.W. (Flux core Arc Welding)
	Welding Position.	:	Horizontal /Vertical
06,	Welding Consumable.		
6.1	Electrode/Wire Class Dia Type Orying Method		Class I of IRS M 46-2020 (AWS A5.20-10/ E71T-12). 1.2 mm Flux Cored Filler Wire. N.A.
6.2	Flux Class Type Drying Method	: : :	N.A
6.3	Shielding Gas	÷	NA NA
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
ST = 1	Joint design Details	:	
-7.1 -7.1	(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  Diaphragm Plate with Hanger. (18mmx25/32MM )		S S LI 15 MM 4507 MANGER
7.2	Joint preparation	â	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
=	Welding Current	1	(3.6)
-,08.	, Type	;	DC (0/
	Polarity	:	Reverse
09.	Welder qualification		As per IS: 7310/7307 (Part-I) - 2019 स०अ० अधि० / धातु एवं एसा० Asset, Research Officer/M&C
10.	Welding Parameters and technique	;	रेल मंत्रालय / Ministry of Railways
10.1	Welding Parameters	. :	Зюзюнюню, напа / R.D.S O., Lucknow

-	-				
- 1	r.,	-	*	- 1	-
- 1	ra	o	c.	-1	-
	- 86		•		- 7

Weld Pass No.		Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed	Travel Speed	Electrodes Stick out	Pa Gas Flow
1,2	(mm)		(1000)	(m/min)	(m/min)	(mm)	(I/min.)
(Root pass)	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
3,4	1.2	200 - 240	24 - 26	4-6			0.000
5,6	1.2	200 - 240	24 - 26		N.A.	13 - 18	13 - 16
		200 210	24 - 20	4-6	N.A.	13 - 18	13 - 16



11.	Provision of run-on / run-off tabs	1	N.A.
12.	Cleaning of weld bead before laying next weld bead	1	By brush cleaning and grinding
13,	Root preparation before welding other side of groove weld	:	N.A.
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening	1:	NA.
16,	Post Weld treatment	1	N.A.
17.	Rectification of weld defect	:	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Plux Cored Wire (Class I of IRS M 46) after conducting DP Test.
18.	Inspection of Weld	1	Visual & D.P.
19.	Any other relevant Details	1	A

WELDING PROCEDURE SPECIFICATION SHEET FOR 60 MCLEAR SPAN BOW STRING GIRDER Name and address of Fabricator Page 15 M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001. Welding Procedure specification No. 01. SRMBS/RKSCPL/SHOP/WPS/60M/08 RDSO Drawing No. 02. Welding Joint Description. ROSO/B-10427/3 03. Fillet 10 mm - DP at Top Tie Beam & Top Diagonal Tie Beam Base Metal. 04. 10mmx25mm, 12mmx28mm, IS: 2062 - 2011, Gr. : E350 B0 Welding Process 05. F.C.A.W. (Flux core Arc Welding) Welding Position. 06. Horizontal /Vertical Welding Consumable. Electrode/Wire 6.1 Class Class I of IRS M 46-2020 (AWS AS.20-10/ E71T-12). Dia 1.2 mm Type Flux Cored Piller Wire. Drying Method N.A. Flux Class N.A. 6.2 Type N.A. Drying Method N.A. 6.3 Shielding Gas NA 07. Base Metal Preparation Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality. (Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.) е Joint design Details 0 Diaphragm Plate with Arch Beam and Bottom long beam. (32 MMX25MM & 32MMX32MM) 0 285 C 25 7.1 25 28 e 28 28 256 C 444 25 DIAPHRAGM (DP) 10 MM THICK WELDED ON DIAPHRAGM (DP) 10 MM C THICK WELDED ON THREE SIDES WITH 10MM FILLET WELD THREE SIDES WITH C AS SHOWN TOMM FILLET WELD AS, SHOWN 125 390 310 TOP THE BEAM DE TOP DIAGONAL TIE BEAM Œ 7.2 As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code, Fillet Joint, Joint preparation 0 Welding Current Type 88. : DC Polarity : Reverse स०अ० अधि / धातु एवं रसा० O. Welder qualification Asstt. Research Officer/M&C As per IS: 7310/7307 (Part-I) - 2019 ÷ रेल मंत्रालय/Ministry of Railways te. Welding Parameters and technique 4 अ०अ०मा०सं०, तखनक/R.D.S O., Lucknuw 10.1 Welding Parameters

5C-10,23

ACTUR.

70

	Page 16	
200	1.0	
èas	Flow	

Water	Electrodes	12/1 22		140			Pag
Weld Pass No.	wire dia. (mm)	(Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out	Gas Flow (I/min.)
(Root pass)	1.2	200 - 240	24-26	4-6	N.A.	(mm) 13 - 18	12.16
3,4	1.2	200 - 240	24 – 26	4-6	NA.	11000000	13 - 16
5,6	1.2	200 - 240	24-26	4-6	NA.	13 - 18	13 - 16 13 - 16

10.2 Welding Sequence and technique	NA.
	10mm 10mm
	5 6
	3(1) 24

	11.	Provision of run-on / run-off tabs	1:	N.A.
6	12,	Cleaning of weld bead before laying next weld bead	;	By brush cleaning and grinding
0	13.	Root preparation before welding other side of groove weld	1	N.A.
c	14.	Preheating and inter pass temperature	:	Preheat Temp,-Min,150°C & Interpass Temp,-250°C Max.
6	15.	Peening	:	N.A.
6	16.	Post Weld treatment	:	N.A.
C	17.	Rectification of weld defect	:	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
c	18.	Inspection of Weld	;	Visual & D.P.
-	19.	Any other relevant Details	1	20/
GF				O/

Vame	WELDING PROCEDURE SPI	CI	FICATION SHEET FOR 60 MCLEAR SPAN BOW STRING GIRDER					
Weldi 01. 02. 03. 04. 05. 06.	e and address of Fabricator  Ing Procedure specification No.  RDSO Drawing No.  Welding Joint Description.  Base Metal.  Welding Process  Welding Position.  Welding Consumable.  Electrode/Wire  Class Dia Type Drying Method		M/s. Struc-Rite Metal Building Systems, Unit-II, Boral, Durg-491001.  SRMBS/RICSCPL/SHOP/WPS/60M/09  RDSO/B-10425/6  Fillet 14 mm — Web Splice at Intermediate Bottom Cross Ream 16mmx16mm IS: 2062 – 2011, Gr. : E350 B0  P.C.A.W. (Flux core Arc Welding)  Horizontal /Vertical  Class I of IRS M 46-2020 (AWS A5,20-10/ F71T-12). 1.2 mm Flux Cored Filler Wire. N.A.					
6.2	Flux Class Type Drying Method Shielding Gas		N.A. N.A.					
07.	Base Metal Preparation	3	Surjey Saray and adversal authors are despendent made from from Conta					
	Joint design Details	:	The state of the s					
7.1	(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  Web Splice at Intermediate Bottom Cross Beam (16MM X 16MM )		WEB SPLICE PLATE AT INTERMEDIATE BOTTOM CROSS BEAM SP1 & SP2					
7.2	Joint preparation	;	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.					
	Welding Current	1	m/					
88.	Туре	:	DC '6V					
	Polarity	2	Reverse सञ्ज्ञ अधि० / धातु एवं रसा० Assit. Research Officer/M&C					
79.	Welder qualification	:	As per IS: 7310/7307 (Port-1) - 2019 tot 431817 / Ministry of Radways					
	Welding Parameters and technique	;	жонононо, нать/R D.S O., Lucknow					
6.1	Welding Parameters	1	CO -					
	THE STATE OF THE S		6c10/23					

•								rage i
6	Weld Pass No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
6	(Root pass)	1.2	200 - 240	24 – 26	4-6	N.A.	13 - 18	13 - 16
6	3,4	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
1	5,6	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
6	7,8	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16

0.2	Welding Sequence and technique	:	N.A.	
				11
			14mm	14mm

11.	Provision of run-on / run-off tabs	1:	N.A.
12.	Cleaning of weld bead before laying next weld bead	:	By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A. स०अ० अधि० / धातु एवं रसा०
14.	Preheating and inter pass temperature	:	Asstt. Research Officer/M&S Preheat TempMin.150°C & Interpatan स्थान्क / R.D.S.O. Luckneys
15.	Peening	:	N.A.
16.	Post Weld treatment	:	N.A.
17.	Rectification of weld defect	:	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
16.	Inspection of Weld	1	Visual & D.P.
19.	Any other relevant Details	4	

-		40
Mr.	0.00	14
4 6	ige	12

me	and address of Fabricator	:	CATION SHEET FOR 60 MCLEAR SPAN BOW STRING GIRDER  M/s. Struc-Rite Metal Building Statemen Lies V. B				
eldir	9 Procedure specification No.		M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.				
	RDSO Drawing No.	:	SRMBS/RKSCPL/SHOP/WPS/60M/10				
2.	Wolding No.	:	RDSO/B-10427/6				
03.	Welding Joint Description.	;	Fillet 14 mm – Top Splice at Intermediate Bottom Cross Beam				
04.	Base Metal.	:					
05.	Welding Process	:	F.C.A.W. (Flux core Arc Welding)				
-	Welding Position.	:	Horizontal /Vertical				
06.	Welding Consumable.		The state of the s				
5.1	Electrode/Wire Class Dia Type Drying Method		Class I of IRS M 46-2020 (AWS A5.20-10/ E71T-12). 1.2 mm Flux Cored Filler Wire.				
	Flux Orynig Method	-	N.A.				
6.2	Class	:	N.A.				
			25070				
5.3	Drying Method	:	N.A.				
	Shielding Gas	:	NA.				
07. Base Metal Preparation		:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.				
	Joint design Details	:					
7.1	(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  Top Splice at Intermediate Bottom Cross Beam (20MM X 25MM )		TOP SPLICE PLATE AT INTERMEDIATE BOTTOM CROSS BEAM SP1 & SP2				
7.2	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code, Fillet Joint.				
-	Welding Current		The state of the s				
08.	Type	:	DC an				
	Polarity	:	Reverse				
		-	As not 15: 7310/7307 (Part D 3010				
119.	Welder qualification		Pa DEI 13. /310//30/ [FDICT] - 2013				
10.	Welder qualification Welding Parameters and technique	:	As per is: /310/30/ (Part-I) - 2019 राज्य अधि० / शातु एवं रसा० Assit. Research Officer/M&C				

Weld n	Electrodes	( managed	The second second	University of	T		Pa
Weld Pass No.	wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out	Gas Flow (I/min.)
(Root pass)	1.2	200 - 240	24 - 26	4-6		(mm)	A STATE OF
3,4	1.2	200 - 240	24 - 26	111372	N.A.	13 - 18	13 - 16
5,6	1.2	-		4-6	N.A.	13 - 18	13 - 16
7,8		200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16

10.2	Welding Sequence and technique	1.	N.A.
			14mm

11.	Provision of run-on / run-off tabs	1:	N.A.
12.	Cleaning of weld bead before laying next weld bead	:	By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening	:	N.A.
16.	Post Weld treatment	:	N.A.
17.	Rectification of weld defect	1	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Plux Cored Wire (Class I of IRS M 46) after conducting DP Test.
18.	Inspection of Weld	:	Visual & D.P.
19.	Any other relevant Details	+	स०अ० अधि०/धातु एवं रसाव

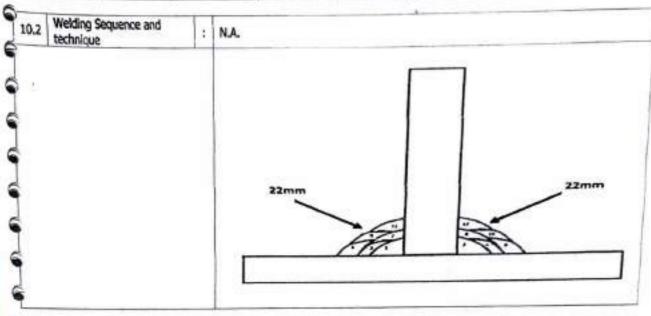
-10003

Asstt. Research Officer/MAC

WELDING PROCEDURE SPE	CIFI	Page . CATION SHEET FOR 60 MCLEAR SPAN BOW STRING GIRDER
Name and address of Fabricator	-1	M/s. Struc-Rite Metal Building Systems, Unit-11,Boral, Durg-491001.
Welding Procedure specification No.	7	SRMBS/RKSCPL/SHOP/WPS/60MJ11
01. RDSO Drawing No.	-	RDSO/B-1042576 104276 Syptim
02. Welding Joint Description.		Fillet 22 mm – Bottom Splice at Intermediate Bottom Cross Beam
03. Base Metal.	-	36mmx28mm IS: 2062 - 2011, Gr. : E350 B0
04. Welding Process	-	10 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
05. Welding Position.	-	F.C.A.W. (Flux core Arc Welding)
06. Welding Consumable.	-	Horizontal /Vertical
Electrode/Wire		
Gass Dia Type Drying Method	: : : :	Class I of IRS M 46-2020 (AWS A5.20-10/ E71T-12). 1.2 mm Flux Cored Filler Wire. N.A.
Rux	i i	
Class	:	NA.
5.2 Type	1	NA.
and the second s	ľ.	AND THE RESERVE OF THE PERSON
Drying Method	1	NA.
5.3 Shielding Gas	1	NA .
07. Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
Joint design Details	:	
(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  Bottom Splice at Intermediate Bottom Cross Beam (36MM X 28MM)		BOTTOM SPLICE PLATE AT INTERMEDIATE BOTTOM CROSS BEAM SP1 & SP2
7.2 Joint preparation	1	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code, Fillet Joint.
Welding Current	\$	D/
08. Type	:	DC प्राप्त अधिक / शास पर्य रसाव
Polarity	:	Reverse Assil Research Officer/M&C
us. Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019 रेल मंत्रालय/Ministry of Railways
10. Weiding Parameters and technique	1	
	-	M 22

varne and	address of Fabricator	:	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
Welding P	rocedure specification No.	4	SRMBS/RKSCPL/SHOP/WPS/60Mil11
01. RI	OSO Drawing No.	:	RDSO/B-10425/6 104276 Syply
	elding Joint Description.	4	Fillet 22 mm - Bottom Splice at Intermediate Bottom Cross Beam
	ise Metal.	:	36mmx28mm IS: 2062 - 2011, Gr. : E350 B0
04. W	elding Process	:	F.C.A.W. (Flux core Arc Welding)
	elding Position.		Horizontal /Vertical
	leiding Consumable.		
6.1	ectrode/Wire Class Dia Type Drying Method	*******	Class I of IRS M 46-2020 (AWS A5.20-10/ E71T-12). 1.2 mm Flux Cored Filler Wire. N.A.
R	ux	-	no.
6.2	Class	:	N.A.
	Drying Method	-	N.A.
6.3 S	hielding Gas	:	NA .
07. B	ase Metal Preparation	:	Fusion Faces and adjacent surfaces are deaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
- 3	oint design Details	:	
7.1 p	Sketich showing arrangements of arts, weld bead details, weld asses & their sequence etc.) ottom Splice at Intermediate lottom Cross Beam (36MM X 8MM)		BOTTOM SPLICE PLATE AT INTERMEDIATE BOTTOM CROSS BEAM SP1 & SP2
7.2 3	oint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code, Fillet Joint.
V	Velding Current	:	·
08.	Type	:	oc 0
E -	Polarity	,	Reverse स०अ० अधि० / घातु एवं रसा० Assit, Research Officer/M&C
09. V	Velder qualification	:	As ner IS: 7310/7307 (Part-I) = 2019 रेल मंत्रालय/Ministry of Railways
200	Velding Parameters and technique	:	अव्यवमावसेव, लखनऊ /R.D.S.O., Lucknow
		-	10 m

0								
٦	Weld Pass No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
9	1,2 (Root pass)	1.2	200 - 240	24 – 26	4-6	N.A.	13 - 18	13 - 16
9		1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
٦	5,6	1,2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
6	7,8	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
	9.10	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
6	11,12	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
				1				



11.	Provision of run-on / run-off tabs	1:	N.A.
12.	Cleaning of weld bead before laying next weld bead		By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld		N.A.
14.	Preheating and inter pass temperature	ŧ	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening	1	N.A.
16.	Post Wold treatment	:	N.A.
17.	Rectification of weld defect.	,	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Plux Cored Wire (Class I of IRS M 46) after conducting DP Test.
18.	Inspection of Weld	1	Visual & D.P.
19.	Any other relevant Details	1	सठअ० अधि० / धातु एवं रसा०

		1:	FICATION SHEET FOR 60 MCLEAR SPAN BOW STRING GIRDER
Weldin	9 Procedure specification No. RDSO Drawing No.	1	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
01.	RDSO Drawing No.		SRMBS/RKSCPL/SHOP/WPS/60M/12
UZ.	Weldling No.	1	RDSO/B-10427/6
03.	Welding Joint Description.	1:	Fillet 25 mm - Top & Bottom Splice at End Bottom Cross Beam
04.	- ASC MINISTER	15	45mmx36mm IS: 2062 - 2011, Gr. ; E350 B0
05.	Welding Process	+:	F.C.A.W. (Flux core Arc Welding)
The second second	Welding Position	+	THE RESERVE AND ALL AND ALL AND ADDRESS OF THE PARTY OF T
06.	Welding Consumable.	1:	Horizontal /Vertical
	Electrode/Wire	1	
6.1	Class Dia Type	1	Class I of IRS M 46-2020 (AWS A5.20-10/ E71T-12). 1.2 mm Flux Cored Filler Wire. N.A.
	Flux Styling Hediod	÷	N.A.
6.2	Class	**	N.A.
6.3	Drying Method	1:	N.A.
0.3	Shielding Gas	1:	NA .
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notche Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	1.	Pill Scale, Greate, Park and Nos stay, Pills
	(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  Top & Bottom Splice at Intermediate Bottom Cross Beam (45MM X 36MM)		ON ALL FOUR CORNERS 25 25 25 25 25 25 25 25 25 25 25 25 25
7.2	Joint preparation •	:	As Per IS: 10178 – 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
_			m/
	Welding Current	-	/H/
08.	Туре	:	DC Year V
-	Polarity	:	Reverse सञ्ज्ञ अधि०/धातु एवं रसाठ
-	uniter auslification	:	Assit, Research Officer/MRC
-	Welder qualification		As per IS: 7310/7307 (Part-I) – 2019 रेल मंत्रालय / Ministry of Railways अव्यवसावस्त्र, लखनक / R.D.S.O., Lucktown
	Welding Parameters and technique	+	A PART OF LIGHT W
	Welding Parameters	: 1	

				*.			Pa
Weld Pass No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
(Root pass)	1.2	200 - 240	24 – 26	4-6	N.A.	13 - 18	13 - 16
3,4	1.2	200 - 240	24 – 26	4-6	N.A.	13 - 18	13 - 16
5,6	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
7,8	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
9,10	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16
11,12	1.2	200 - 240	24 - 26	4-6	N.A.	13 - 18	13 - 16

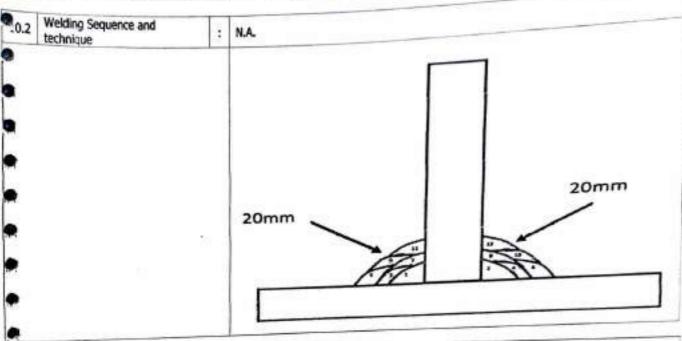
.2	Welding Sequence and technique	:	N.A.
	recanique	1	
			1 1
			1 1
			25mm
			25mm

11.	Provision of run-on / run-off tabs	1	N.A.
12.	Cleaning of weld bead before laying next weld bead	:	By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A. स०अ० अधि० / धातु एवं रसा०
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Therapart Fino250°C Mar.
15.	Peening .	:	N.A. अञ्चलकार्मक, लखनक/R.D.S.O., Lucknow
16.	Post Weld treatment	:	N.A.
17.	Rectification of weld defect	:	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
18.	Inspection of Weld	:	Visual & D.P.
19.	Any other relevant Details	+5	

Alex	and address of Fabricator	:	ICATION SHEET FOR 60 MCLEAR SPAN BOW STRING GIRDER  M/s. Struc-Rite Metal Building Systems, Unit-11, Borai, Durg-491001.
weld	Procedum as to	4	
01.	RDSO Drawing No.	1:	SRMBS/RKSCPL/SHDP/WPS/60N/13 RDSO/B-1012579 (OV 7 + 9) 5-4-20M
ve.	Welding Joint Description.	1:	
03,	Base Metal.	:	
04.	Welding Process	:	45mmx36mm, 15: 2062 - 2011, Gr. : E350 B0
05.	Welding Process	1	F.C.A.W. (Flux core Arc Welding)
06.	Welding Position,	1	Horizontal /Vertical
	Welding Consumable,		
6,1	Class Dia Type		Class I of IRS M 46-2020 (AWS A5.20-10/ E71T-12). 1.2 mm Flux Cored Filler Wire. N.A.
	Flux Prediction	Ť	7.7
	Class	:	N.A.
6.2		1	
	Type	:	N.A.
		1	
-	Drying Method	3	NA.
6,3	Shielding Gas	:	NA .
07.			
u/.	Base Metal Preparation	1	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notche
	Joint decine Data	-	Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	:	
7.1	(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  Web Splice at End Bottom Cross Beam (45MM X 36MM)		WEB SPLICE PLATE AT END/BOTTOM CROSS BEAM SP3
7.2	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
	Welding Current	:	M c
	Type	:	DC 'O
38.			Vy
38.	Polarity	:	Reverse Hoalo sileo / silei va vare
38. 09.		:	As per IS: 7310/7307 (Part-I) - 2019
	Welder qualification	: :	Reverse 영어리아 제한 / 되면 보다 보다 As per IS: 7310/7307 (Part-I) - 2019 유크리, 프로토웨스아 OFFIGATIMAC - 사이라마 / Ministry of Rannans

						Electrodes	Gas Flow
Weld Sequence	Electrodes wire dia.	Current	Arc Voltage	Wire Feed Speed (m/min)	Travel Speed (m/min)	Stick out (mm)	(I/min.)
No.	(mm)	(Amps)	(Volt)	fustions		15	15 - 25
1,2	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.		15 - 25
(Root pass)	_		20000000	Controlled by current	44.4	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by content	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	41.4	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	44.6	15	15 - 25
9,10	1.2 mm	150 - 250	24-30	Controlled by current		15	13-23
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	ture		

....



	Provision of run-on / run-off tabs	:	N.A.
7.	Geaning of weld bead before laying next weld bead	:	By brush cleaning and grinding
•	Root preparation before welding other side of	:	NA.
-	arrange weld	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
14.	Preheating and inter pass temperature	:	N.A.
ø.	Peening	•	
	Post Weld treatment	:	N.A.
	Rectification of weld defect	:	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IR: M 46) after conducting DP Test.
	E Wold	:	Visual & D.P.
	Inspection of Weld	:	many with the second and
19.	Any other relevant Details	5	राज्याव अधिव / धातु एवं रसाव
	Clu	1	Assti. Research Officer/M&C

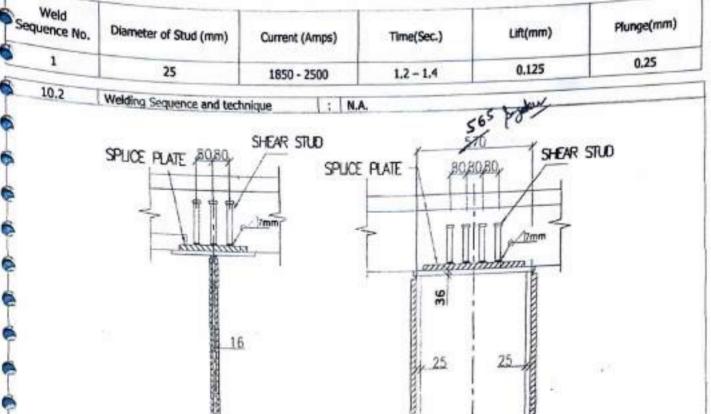
ame	and address of Fabricator	:	M/s. Struc-Rite Metal Building Systems, Unit-II,Boral, Durg-491001.		
/eldi	ng Procedure specification No.		M/s. Struc-Rite Metal Building Systems, Unit-II, Boral, Durg-491001.  SRMBS/RKSCPL/SHOP/WPS/60M/14  RDSO/B-10425/1 & RDSO/B-10425/6 10425/6 10425/6		
1.	Procedure specification No.	:	SRMBS/RKSCPL/SHOP/WPS/60M/14 10112-11		
12.	No.	:	RDSO/B-19325/1 & RDSO/B-10425/6 1047-11		
13.	Welding Joint Description.	:	Fillet 8 mm – Stiffener at End & Intermediate Bottom Cross Beam		
14.	Base Metal.	:	12mmx16/20/28mm & 12mmx25/36mm, IS: 2062 - 2011, Gr. : E350 B0		
-	Welding Process	:	F.C.A.W. (Flux core Arc Welding)		
)5.	Welding Position,		Horizontal /Vertical		
)6.	Welding Consumable.	-	100000000000000000000000000000000000000		
.1	Electrode/Wire Class Dia Type Drying Method		Class I of IRS M 46-2020 (AWS A5.20-10/ E71T-12). 1.2 mm Flux Cored Filler Wire. N.A.		
.2	Flux Class Type	:	N.A.		
	Drying Method	:	N.A.		
.3	Shielding Gas	:	NA .		
7.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.		
	Joint design Details	:			
.1	(Sketch showing arrangements of parts, weld bead details, weld passes & their sequence etc.)  (12mmx16/20/28mm & 12mmx25/36mm)		65mm WEARING COAT		
2	Joint preparation	:	As Per IS: 10178 – 1995, IS: 7215 & Welded Bridge Code, Fillet Joint.		
	Welding Current	:	·W		
	Туре	:	DC स०अ० अधि०/घातु एवं रसाञ		
3.	Polarity	1	Asstt. Research Officer/M&C		
		:	Reverse रेल मंत्रालय / Ministry of Railways खाळाज्मारुसंग्, लखनऊ / R.D.S.O., Lucknow		
9.	Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019		
1.	Welching a granter and a				
	TAL BUILDINGS	23	क्ट्रीश्रवेसन इजीनियर मुख्य कारखाना प्रदू		

eld 1. 2.		1.2	(mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed	Travel Speed	Electrodes Stick out	Gas Flow
	(Ro	ot pass)	1.2	200 - 240		(m/min) 4 – 6	(m/min) N.A.	(mm) 13 - 18	(I/min.) 13 – 16
03, 04. 05.	68	3,4			24 - 26				
	W 10.2	Welding :		200 - 240	24 - 26	4-6	N.A.	13 - 18	13 16

\* ---

1	154 155		8mm 4
11.	Desiration of the same of the	_	1 2
11.	Transmit a full only for on cacs.	1	N.A.
12.	Cleaning of weld bead before laying next weld bead	:	By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A. सञ्ज्ञ आर्थि / घातु एवं रसा Asstt. Research Officer/M&C
4.	Preheating and inter pass temperature	:	रेल मंत्रालय/Ministry of Railway Preheat TempMin.150°C & Integrate Temp. व्यक्ति अस.D.S O., Luci
5.	Peening	1	N.A.
6.	Post Weld treatment	:	N.A.
	Rectification of weld defect	:	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Plux Cored Wire (Class I of IRS M 46) after conducting DP Test.
7.	NCCDINGSON OF		
7. 8.	Inspection of Weld	,	Visual & D,P.

Page 30 Plunge(mm)



11.	Provision of run-on / run-off tabs	:	N.A.
12.	Cleaning of weld bead before laying next weld bead		NA B
13.	Root preparation before welding other side of groove weld		N.A. स०अ० अधि० / घात् एवं रसा०
14.	Preheating and inter pass temperature	:	N.A. Asstt. Research Officer/M&C ऐस मंत्रालय / Ministry of Railways
15.	Peening	:	N.A. ৠ৹য়৹দা৹য়৹, লম্ভনক / R.D.S'O., Luckno
16.	Post Weld treatment	13	N.A.
17.	Rectification of weld defect	:	Remove of defective stud & new stud weld after proper grinding of surface (As per RDSO BS: 115) Latest Revision
18.	Inspection of Weld	:	Visual, Ring Test, Bend Test, Verticality & Burn off length, Weld size,
19.	Any other relevant Details	D:	

09. Welder qualification रल मंत्रालय / Ministry of Railway			Page 31
Sambs,RissCort,ShoPAMP, (South of Sambs, RissCort, ShoPAMP, (South of Sambs, RissCort, RissCort, RissCort, ShoPAMP, (South of Sambs, RissCort, RissCor	WELDING PROCEDURE SPECIFICATION	ON	SHEET FOR 60 MCLEAR SPAN BOW STRUCKS SHEET FOR 6
Positive	Websie - 2		M/s. Struc-lute Metal building Systems
Positive	O1 Procedure specification No.	;	SRMBS/RKSCPL/SHOP/WPS/60M/16
1   152	Cast Diawing No.	:	50 00 m 10/137 (CCD1EC)
1   15.2 doi: 2   2011 E350/L203	Trading Joint Description.	:	Fillet 5 mm Tack Weld - Tack Weld of all Components
Description	03. Base Metal,	:	TS: 2062 - 2011 E350/E250
Decirodary   Class   Flux   Flu	Training Process	:	FCAW (Flux core Arc Welding)
Sectrode/Wire  Class: Type: N.A.  Drying Method: N.A.  Type: N.A.  Class: N.A.  Type: N.A.  Drying Method: N.A.  Drying Method: N.A.  Type: N.A.  Shielding Gas  Coo.  Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint, Rust etc., which may affected weld quality.  N.A.  (Sketch showing arrangements of parts, Weld bead details, Weld passes & their sequence etc.  Length of track Weld 50mm Gap between two track Weld appr. 300mm Weld Size  As Per IS: 10178 – 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.  Type: DC  Polarity: Reverse Young on Sizio / Etig Val Tym.	Training Position.	:	Flat
Class   Class   Class   Class   Class   Class   Class   Class   Class   Cored Filler Wire.   Cored Fil	Cong Consumable.		
Class : N.A. Type : N.A. Drying Method : N.A.  Shielding Gas  6.3 Shielding Gas  6.4 CO  6.5 CO  6.5 Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint, Rust etc., which may affected weld quality.  7.1 Joint design Details  6.3 Shielding Gas  6.4 CO  6.5 CO  6.5 Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint, Rust etc., which may affected weld quality.  7.1 Joint design Details  6.3 Shielding Gas  6.4 CO  7.2 Solid design Details  7.3 Length of track Weld 50mm Gap between two track Weld appr.300mm Weld Size  7.4 Ser IS: 10178 – 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.  7.2 Joint preparation  7.3 Ser IS: 10178 – 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.  7.4 Ser IS: 7310/7307 (Part-I) – 2019 Asstt. Research Officer/MSC (Fir Hairety / Ministry of Railway 3003010016), Regress / R.D.S.O., Luci	6.1 Class		1.2 mm Flux Cored Filler Wire.
Type : N.A.  Drying Method : N.A.  CO  Shielding Gas : CO  Base Metal Preparation : Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint, Rust etc., which may affected weld quality.  N.A.  (Sketch showing arrangements of parts, Weld bead details, Weld passes & their sequence etc.  Length of track Weld 50mm Gap between two track Weld appr.300mm Weld Size   **REPLATE**  **REPLATE**  **REPLATE**  **POP IS: 10178 – 1995, IS: 7215 & Welded Bridge Code, Fillet Joint.  **Reverse**  *	200 A C C C C C C C C C C C C C C C C C C		
Shielding Gas   COo	Туре		N.A.
Shelding Gas  Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint, Rust etc., which may affected weld quality.  I Joint design Details  (Sketch showing arrangements of parts, Weld bead details, Weld passes & their sequence etc.  Length of track Weld 50mm Gap between two track Weld appr. 300mm Weld Size  As Per IS: 10178 – 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.  Welding Current  Type: DC  Polarity: Reverse  Welder qualification  Welder qualification  As per IS: 7310/7307 (Part-I) – 2019 Assit. Research Officer/M&C  To Hardy / Ministry of Railway  10. Welding Parameters and technique  Welding Parameters and technique  Welding Parameters and technique	Drying Method	1	1000
Part	6.3 Shielding Gas	1	COs
Sketch showing arrangements of parts, Weld bead details, Weld passes & their sequence etc.   Length of track Weld 50mm   Gap between two track Weld appr.300mm   Weld Size   Welder qualification   As Per IS: 10178 – 1995, IS: 7215 & Welded Bridge Code, Fillet Joint,	07. Base Metal Preparation	:	Cracks, Notches, Mill Scale, Greater, Paint, Task
(Sketch showing arrangements of parts, Weld bead details, Weld passes & their sequence etc.  Length of track Weld 50mm Gap between two track Weld appr.300mm Weld Size  As Per IS: 10178 – 1995, IS: 7215 & Welded Bridge Code, Fillet Joint.  7.2 Joint preparation  Welding Current  Type: DC  Polarity: Reverse  Reverse  Rosso Silio / धातु एवं रसाः  As per IS: 7310/7307 (Part-I) – 2019 Asstt. Research Officer/M&C  Reverse  Welding Parameters and technique  Welding Parameters and technique  Welding Parameters and technique	7.1 Joint design Details	:	
7.2 Joint preparation :  08. Welding Current  Type : DC  Polarity : Reverse	bead details, Weld passes & their sequence etc.  Length of track Weld 50mm  Gap between two track Weld  appr.300mm		WEB PLATE  → 500 → 500 →
99. Welding Parameters and technique  Type : DC  Polarity : Reverse প্ৰত্যত প্ৰভিত / আবু एব ব্যায়  As per IS: 7310/7307 (Part-1) – 2019 Asstt. Research Officer/M&C  প্ৰত্যত প্ৰভাৱ প্ৰান্ত প্ৰান্ত প্ৰত্যত	a a loint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code, Fillet Joint.
Polarity : Reverse सञ्ज्ञ अधि / धातु एवं रसाः  Polarity : Reverse सञ्ज्ञ अधि / धातु एवं रसाः  As per IS: 7310/7307 (Part-I) – 2019 Asstt. Research Officer/M&C  रल मंत्रासय / Ministry of Railway  10. Welding Parameters and technique : अ०३००मा०सं०, सखनऊ / R.D.S O., Luci	7.4	:	n /
99. Welder qualification : As per IS: 7310/7307 (Part-1) – 2019 Asstt. Research Officer/M&C रस नंत्रासय / Ministry of Railway 10. Welding Parameters and technique : अ०अ०मा०२२०, सखनक / R.D.S O., Luc	08. Welding Current Type	:	DC '0/
99. Welder qualification : As per IS: 7310/7307 (Part-I) – 2019 Asstt. Research Officer/M&C	Polarity	:	Reverse सठअ० अधि० / घात् एवं रसार
10. Welding Parameters and technique	og. Welder qualification	:	As per IS: 7310/7307 (Part-I) – 2019 Asstt. Research Officer/M&C
· · · · · · · · · · · · · · · · · · ·	to a Possemeters and technique	-	३१०३१०मा <b>०सं</b> ०, <b>लखनऊ / R.D.S</b> O., Luck
		K	

(mm) (Amps) (Vo		wire dia.	1.0000000000000000000000000000000000000	Arc Voltage (Volt)		Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
		24 - 2	6	3,5 - 5.0	N.A.	13 - 18	13 - 16		
10.2	Welding	Sequence and to	echnique			N.A.			
	Gap bet	ween two track Weld	Weld 50mm k Weld appr,30 Size	0mm		5mi	7,	1 1	у <b>л</b> —
	Gap bet	ween two track	k Weld appr,30	Onum			1 1	1 1	
11	Gap bet	ween two track Weld:	k Weld appr,30 Size		;	Srq.	7,	1 1	
11.	Provision	ween two track Weld:	k Weld appr,30 Size n-off tabs vefore laying next	t weld	;	N.A.	7,	1 1	
12.	Provision Cleaning bead Root pre	ween two track Weld:	k Weld appr,30 Size	t weld	-	N.A. N.A.	7,	1 1	
13.	Provision Cleaning bead Root pre	ween two track Weld:  n of run-on / run of weld bead bearation before	Neld appr,30 Size n-off tabs sefore laying next	t weld	:	N.A. N.A. N.A.	7,	1 1	
12. 13. 14.	Provision Cleaning bead Root pre groove v	ween two track Weld:  n of run-on / run of weld bead be eparation before weld ing and inter pas	Neld appr,30 Size n-off tabs sefore laying next	t weld	3 3 4	N.A. N.A. N.A. N.A.	2 1	1,5	
12. 13. 14.	Provision Cleaning bead Root pre groove v	n of run-on / run of weld bead be eparation before weld	Neld appr,30 Size n-off tabs sefore laying next	t weld	:	N.A. N.A. N.A. N.A. N.A. N.A. N.A.	2 1	1 1	d = per (0.32.2 f
12. 13. 14. 15. 16.	Provision Cleaning bead Root pre groove v Preheati Peening Post We	ween two track Wold:  n of run-on / run of weld bead be eparation before weld ing and inter parallel ing and inter parallel	n-off tabs nefore laying next welding other si	t weld	3 3 4	N.A. N.A. N.A. N.A. N.A. N.A. N.A.	e defective weld 8	1 1	d = per (0.32.2 f
12. 13. 14.	Provision Cleaning bead Root pre groove v Preheati Peening Post We	n of run-on / run of weld bead be eparation before weld	n-off tabs nefore laying next welding other si	t weld	:	N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.A.	e defective weld 8	1 1	d = per (0.32.2 f

रेल मंत्रालय/Ministry of Railway

### WELDING PROCEDURE SPECIFICATION SHEET (SITE)

### 60 MTR CLEAR SPAN (BOW STRING STEEL GIRDER) RDSO DRAWING NO:RDSO/B-10427 (SERIES)

Name of work: Construction of 2 lane ROB and its approaches in KM 158(old KM 153) on NH-104 at Jaynagar Bypass in the state of Bihar on EPC mode for the year 2021-22(job No.-104(New NH-227)-BR-2021-22-47).

Agreement No- 01/EPC/2022-23 Dated 20.05.2022

Fabricator (Regd. Office & Work Site):

M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.

### Contractor:

M/s.RamKripal singh Construction Pvt.Ltd.

### CLIENT:

NATIONAL HIGHWAYS AUTHORITY OF INDIA(NHAI)

## W.P.S.S. INDEX SHEET 60 MTR SPAN BOW STRING STEEL GIRDER RDSO/B/10427 (SERIES)

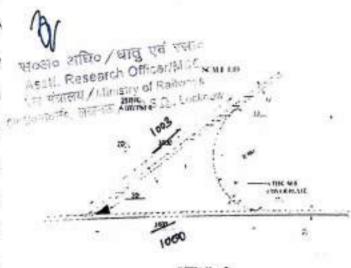
WPSS NO	DESCRIPTION	WELD	PAGE NO.	REMARK
SRMBS/RKSCPL/SITE/WPS/60M/17	Fillet Welding of Bow Arch(32mm) with Bottom Long Beam( 25 mm)	20MM	1-2	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/18	Fiflet welding of Bottom Long Beam(25mm) with Hanger(32mm)	22MM	3-4	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/19	Fillet welding of Arch Beam(32mm) Hanger(32mm)	25MM	5-6	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/20	Fillet welding of Top Tie Beam(25mm) with Hanger(32mm) and Top Diagonal Tie Beam(28mm) with hanger(32mm)/Arch(32mm)	18MM	7-8	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/21	Fillet welding of Channel(ISMC150) with Stiffener of Int.(12mm)& End Bottom Cross Beam(12mm)	6ММ	9-10	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/22	Fillet welding of Top Tie Beam(25mm) with Top Lateral Beam(28mm)	18MM	11-12	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/23	Fillet welding of Int, Bottom Cross Beam (28mm) with Hanger (32mm).	12MM	13-14	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/24	Fillet welding of Int. Bottom Cross Beam (28mm) with Bottom Long Beam(25mm).	12MM	15-16	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/25	Fillet welding of Cover Plate(30mm) with End Bottom Cross Beam (36mm).	12MM	17-18	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/26	Fillet welding of Cover Plate (30mm) with Arch (32mm) & Cover Plate (30mm) with Bottom Long Beam (25mm).	22MM	19-20	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/27	Fillet welding of Stiffener(25mm) with Arch(32mm) & Bottom Long Beam(25mm)	20MM	21-22	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/28	Fillet welding of Stiffener(25mm) with Hanger(25mm) & Bottom Long Beam(25mm)	20MM	23-24	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/29	Fillet welding of Stiffener(25mm) with Bottom Long Beam(25mm) & Int. Bottom Cross Beam(28mm)	20MM	25-26	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/30	Fillet welding of Stiffener(25mm) with End Bottom Cross Beam(36mm) with Cover Plate(30mm)	20MM	27-28	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/31	Fillet welding of Stiffener(25mm) with Int. Bottom Cross Beam(28mm) with Hanger(32mm)	20MM	29-30	FCAW

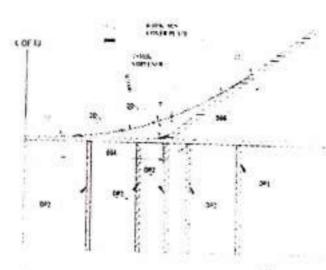
# W.P.S.S. INDEX SHEET 60 MTR SPAN BOW STRING STEEL GIRDER RDSO/B/10427 (SERIES)

WPSS NO	DESCRIPTION	SIZE	PAGE NO.	REMARKS
SRMBS/RKSCPL/SITE/WPS/60M/32	Fillet welding of Stiffener(25mm) with Arch(32mm) & Hanger(25mm) and Stiffener(25mm) with Bottom Long Beam(25mm) & Hanger(25mm)	20MM	31-32	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/33	Fillet welding of Stiffener(32mm) with Top Diagonal Tie Beam(28mm) & Arch(32mm) and Top Diagonal Tie Beam(28mm) & Hanger(32mm)	22MM	33-34	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/34	Fillet welding of Stiffener (25mm) with Top Tie Beam (25mm) & Hanger (32mm).	22MM	35-36	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/35	Fillet Welding of Angle(150x150x15) with Int. Bottom Cross Beam(16mm) & Bottom Long Beam(25mm) and Angle(150x150x15) with Int. Bottom Cross Beam(16mm) & Hanger(32mm)	12MM	37-38	FCAW .
SRMBS/RKSCPL/SITE/WPS/60M/36	Fillet Welding of Angle(150x150x15) with Cover Plate(30mm) & End Bottom Cross Beam(25mm)	12MM	39-40	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/37	Fillet Welding of Web Splice Plate(32mm) with Bottom Long Beam(25mm)	22MM	41-42	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/38	Fillet Welding of Top & Bottom Splice Plate(32mm) with Bottom Long Beam(25mm)	20MM	43-44	
SRMBS/RKSCPL/SITE/WPS/60M/39	Fillet welding of Splice Plate(40mm) of Arch(32mm).	28MM	45-46	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/40	Fillet welding of Cover plate (6mm) with Arch (32mm) and Bottom Long Beam(25mm).	6ММ	47-48	FCAW
SRMBS/RKSCPL/SITE/WPS/60M/41	Tack weld.	5ММ	49-50	FCAW

Page 01

Name ar	nd address of Fabricator	1:	M/s. Struc-Rite Metal Building Systems, Unit-II, Boral, Durg-491001.
Welding	Procedure specification No.		
01.	RDSO Drawing No	1	SRMBS/RKSCPL/SITE/WPS/60M/17
02.	Welding Joint Description.	1	RDSO/8-10427/4
03, E	Base Metal.	1:	Fillet 20 mm – Fillet Welding of Bow Arch with Bottom Long Beam
B .	Welding Process	:	32mmx25mm IS: 2062 – 2011, Gr. : E350 80
	Welding Position,	:	FCAW
	Velding Consumable.	:	2F,3F,4F
6.1	Class Dia Drying Method		Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Class Type Drying Method	: ::	N.A. N.A.
5.3 SI	hielding Gas	:	CO2
07. Ba	ase Metal Preparation	81	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality
Jo	int design Details	1	
. Jo	int design Details	: ld bea	Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld on the scale of the scal





DETAIL-3

DETAIL- 2

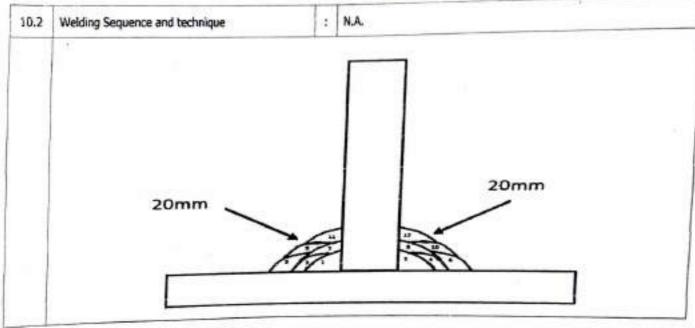
मुख्य कारखाना प्रवधक / बीव्हल्पूर

TAL RUE

10

72		1	The second secon
1.2	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
	Welding Current	:	
08,	Type	:	DC
	Polarity	1	REVERSE
09.	Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique	1.	
10.1	Welding Parameters	:	

Weld Sequence No.	wine rita		Arc Voltage (Volt)			Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 – 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



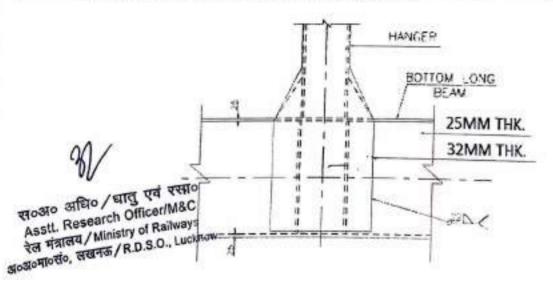
. . . . . . . . . . . . . . . .

e e

11.	Provision of run-on / run-off tabs	1:	N. A.
12.	Cleaning of weld bead before laying next weld	:	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A. =
_	Preheating and inter pass temperature	1	Preheat TempMin.150°C & Interpass Temp250°C Max.
14.	Pegning	:	N.A.
16.	Post Weld treatment	1	N.A.
7.	Rectification of weld defect	ं ए	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of TRS M 46) after conducting DP Test.
TAL	Average relevant Details ASSIL. Research Office	MAN	Monal & D. D.
9.	176456501	Sec. 2011	6005
-	And a per pelevant Details Assit. No. S	,0.,	Chief Workshop Manage In

D		-	•	n
- 12	а	57	e	u

- and 90	dress of Fabricator	1	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
Welding Proce	edure specification No.	1	SRMBS/RKSCPL/SITE/WPS/60M/18
V4.	RDSO Drawing No.	1	RDSO/B-10427/5 & RDSO/B-10427/9
02.	Welding Joint Description.	1	Fillet 22 mm – Fillet welding of Bottom Long Beam with Hanger
03.	Base Metal.	1	25mmx32mm, IS: 2062 – 2011, Gr. : E350 B0
04.	Welding Process		FCAW
	Welding Position.		2F, 4F
	Welding Consumable.		67, 47
6.1	Electrode/Wire Class Dia Drying Method	::::	Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Class Type Drying Method	:	N.A. N.A.
6.3	Shielding Gas		COZ
07. B	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, and Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
)	oint design Details	3	
	Sketch showing arrangements of parts, w		ad details, weld passes & their sequence etc.)

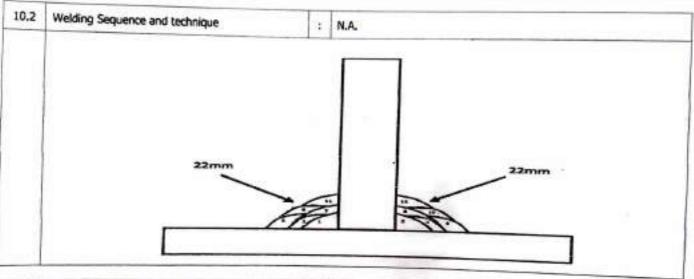


(D)

	^	
Page	ш	4
A SUPPLY	~	

7.2	Joint preparation		As Des 15, 10120, 1005 to make a wall to de Code Stat Saint
ne	Welding Current	1	As Per IS: 10178 – 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
08,	Type		DC .
09.	Polarity	:	REVERSE
-	Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique		
10.1	Welding Parameters	·	

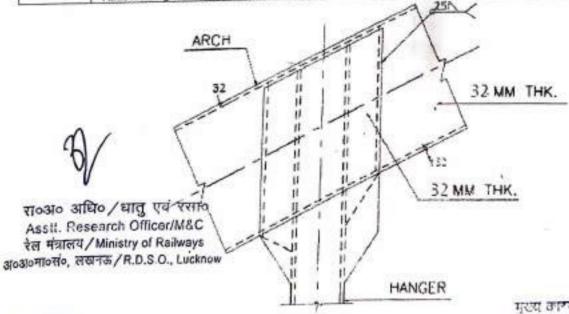
Weld Sequence No. ,	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out	Gas Flow (I/min.)
1,2	1.2 mm	150 000	120/120			(mm)	
(Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.		The world have
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25 15 - 25



11.	Provision of run-on / run-off tabs	1:	N. A.
12.	Cleaning of weld bead before laying next weld bead		Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
14,	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening	1	N.A.
16.	Post Weld treatment	:	N.A.
17.	Rectification of weld defect	:	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
8.	Inspection of Weld 710317 2007 7513	1. 1.	The state of the s
19.	Any other relevant Details all 1. 2.25 and Office of Any other relevant Details all 1. 2.25 and 1.	Total.	NIL

	- CO C. V.
	Dane
	raor
- 4	

-curie guic	address of Fabricator		M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-191001.	
Welding P	Procedure specification No.	:		_
01,	RDSO Drawing No.		SRMBS/RKSCPL/SITE/WPS/60M/19	-
02.	Weiding Joint Description.		RDSO/B-10427/2 & RDSO/B-10427/9 Fillet 25 mm – Fillet Wel:Cing of Arch Beam with Hanger	
03.	Base Metal.		32mmx32mm, 15: 2062 – 2011, Gr. : E350 B0	
04.	Welding Process	-	FCAW	
05.	Welding Position.		2F, 4F	
06.	Welding Consumable.	,	67,71	
6.1	Electrode/Wire Class Dia Drying Method		Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.	
6.2	Flux Class Type Drying Method	:	N.A. N.A.	
6.3	Shielding Gas	:	CO2	
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, and Mill scale, Grease, Paint and Rust etc., which magnifect weld quality.	
	Joint design Details	;		



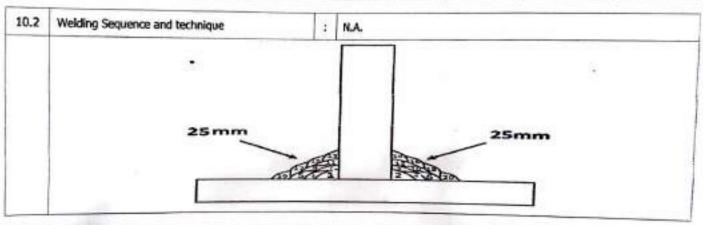
WETAL BURD

मुख्य कारणाना प्रवधक / गी**०डब्स्यू०** पूर्व १८३४ े १, ५३ दोन्यपाल उपाध्याय

Chail to analop ManageriBW

72	·		Page 0
112-	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
08.	Welding Current	:	Transport of the state of the s
00.	Туре	:	DC
09.	Polarity		REVERSE
-	Welder qualification	1	As per IS: 7310/7307 (Part-I) - 2019
10,	Welding Parameters and technique		
10.1	Welding Parameters	•	

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 – 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	. 15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
13,14	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
15,16	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
17,18	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
19,20	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25

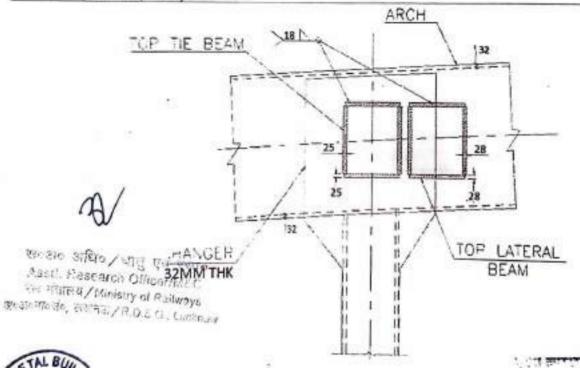


11.	Provision of run-on / run-off tabs	:	N.A.
12.	Cleaning of weld bead before laying next weld bead	:	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
14.	Preheating and inter pass temperature	:	Preheat Temp,-Min.150°C & Interpass Temp,-250°C Max.
15.	Peening Post Weld treatment ব্যত্তৰত প্ৰভিত প্ৰান্ত ব্য	R	TIGA,
16.	Post Weld treatment TONO STELO	c/M	BGA.
17.			###Pre-welding after complete removal of defective weld & rectify the weld by per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
18.	Inspection of Weil	3	Visual & D.P.
HGA I	BUY other relevant Details	:	NIL 00

मृत्य कार्यामा जन्यक । श्रीव्यस्युव

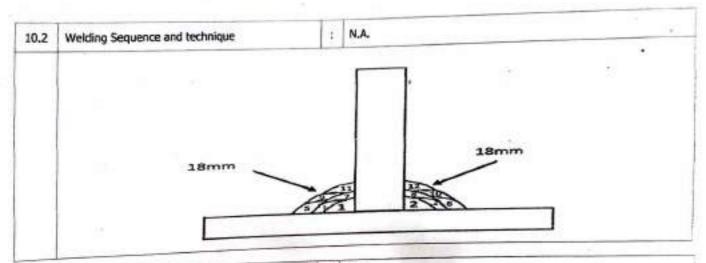
ण्यांधक / वीवहरूप्

	aggress of Fabricator	1	SHEET FOR 60 M CLEAR SPAN BOW STRING GIRDER
Velding P	rocedure specification No.	100	M/s. Struc-Rite Metal Building Systems, Unit-II, Boral, Durg-491001.
01.	RDSO Drawing No.	:	SRMBS/RKSCPL/SITE/WPS/60M/20
00		:	RDSO/8-10427/3
02.	Welding Joint Description.	:	Fillet 18 mm - Fillet welding of Top Tie Beam with Hanger and Top Diagonal Tie Beam with hanger/Arch
The second second	Base Metal,	:	25mmx32mm & 28mmx32/32mm, IS: 2062 - 2011, Gr. : E350 B0
04.	Welding Process		FCAW
05.	Welding Position,	1	2F/3F/4F
06,	Welding Consumable.	-	2/3//4
6.1	Electrode/Wire Class Dia Drying Method	:	Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type Drying Method	:	N.A
6.3	Shielding Gas	+	CO2
07.	Base Metal Preparation	3	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	:	
7.1	The same and the same of the s		bead details, weld passes & their sequence etc.) and Top Diagonal Tie Beam with hanger/Arch ( 25mmx32mm and



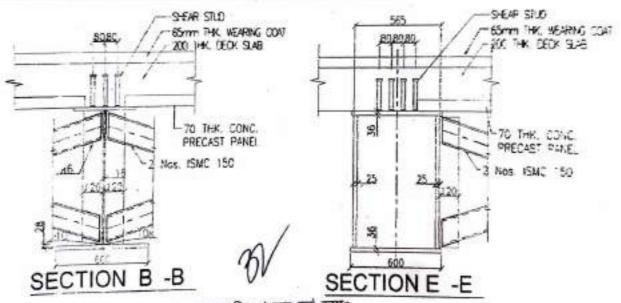
-			
7.2	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
	Welding Current	:	
08.	Турс	:	DC
_	Polarity		REVERSE
09.	Welder qualification	1	As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique	\$	
10.1	Welding Parameters	1	

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
	100000000000000000000000000000000000000		-	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	The state of the s	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current		14/10/10/10	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



	i am off tabs	:	N. A.
11.	Provision of run-on / run-off tabs		Yes, in case of multi layer. By brush deaning and grinding
12.	Cleaning of weld bead before laying next weld bead	:	Yes, in case or multi layer. By oresh deaning and grinding
	Root preparation before welding other side of	:	N.A.
13.	groove weld	1	Preheat TempMin.150°C & Interpass Temp250°C Max.
14.	Preheating and inter pass temperature	:	N.A.
15.	Peening	:	N.A.
16.	Post Weld treatment	रर	TBy re-welding after complete removal of defective weld & rectify the
17.	Rectification of weld defect. Research Officer	M8	Oveld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
	Inspection of Weld अ०अ०मा०स०, लखनऊ / R.D.S O	. Su	Misual & D.P
18.	Inspection of Wello down in the		NIL (0)
EXAL	other relevant Details	-	. भूग कारणमा गरायक / बीवड

and address of Fabricator	-2	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
g Procedure specification No.		SRMBS/RKSCPL/SITE/WPS/60M/21
RDSO Drawing No.	-	RDSO/B-10427/1, RDSO/B-10427/6
Welding Joint Description.	:	Fillet 6 mm - Fillet welding of Channel(ISMC150) with Stiffener of Int.& End Bottom Cross Beam
Base Metal.	•	ISMC150x12mm 15: 2062 - 2011, Gr. : E350 B0
Welding Process		FCAW
Welding Position	-	2F/3F/4F
Welding Consumable	•	H150.1
Electrode/Wire Class Dia	: : :	Class I OF IRS: M-46-2009, Flux cored MS wire.  1.2 mm  N.A.
Flux Class Type		N.A.
Shielding Gas	:	CO2
Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
Joint design Details	:	
	g Procedure specification No.  RDSO Drawing No.  Welding Joint Description.  Base Metal. Welding Process Welding Position.  Welding Consumable. Electrode/Wire  Class Dia  Drying Method  Flux  Class Type  Drying Method  Shielding Gas  Base Metal Preparation	g Procedure specification No.  RDSO Drawing No.  Welding Joint Description.  Base Metal.  Welding Process  Welding Position.  Welding Position.  Welding Consumable.  Electrode/Wire  Class  Drying Method  Flux  Class  Type  Drying Method :  Shielding Gas



स०अ० अधि०/घातु एवं रसा० Asstt. Research Officer/M&C रेल मंत्रालय/Ministry of Railways अ०अ०मा०सं०, लखनऊ/R.D.S.O., Lucknow

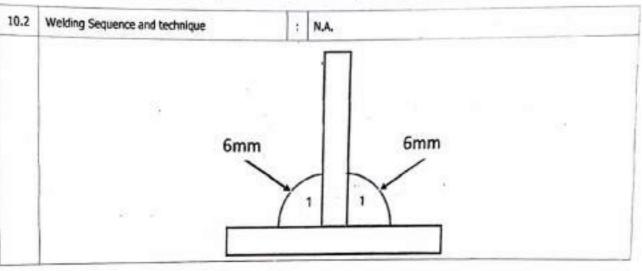
ा साराज्य गराधक **। बी**ण्डलसूर्

WETAL BU

-		
Da	na	10
$r_{4}$	200	· rv

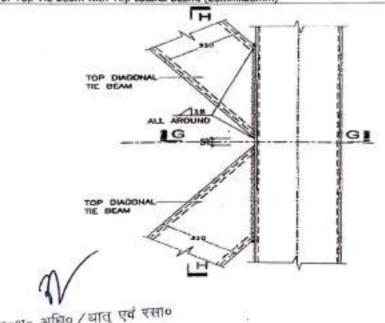
		Page
Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
Welding Current		
Type	:	DC
Polarity	:	REVERSE
Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019
Welding Parameters and technique	:	1.70
	:	
	Welding Current Type Polarity	Welding Current :  Type : Polarity : Welder qualification : Welding Parameters and technique :

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/mln)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



11.	Provision of run-on / run-off tabs	:	N. A.
12.	Cleaning of weld bead before laying next weld bead	:	NA.
13.	Root preparation before welding other side of groove weld	:	N.A.
14.	Preheating and inter pass temperature	1:	Preheat TempMin.150°C & Interpass Temp250°C Max.
-		1:	N.A.
15.	Peening		N.A.
16.	Post Weld treatment	1	By re-welding after complete removal of defective weld & rectify the
17.	Rectification of weld defect	:	weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
-	a continue of World	1:	Visual & D.P.
18,	Inspection of Weld		Fillet size connecting top lateral bracing and arch not mentioned in a
19.	Any other relevant Details	:	drawing considered 25mm fillet with reference to connection between top tie beam and hanger.

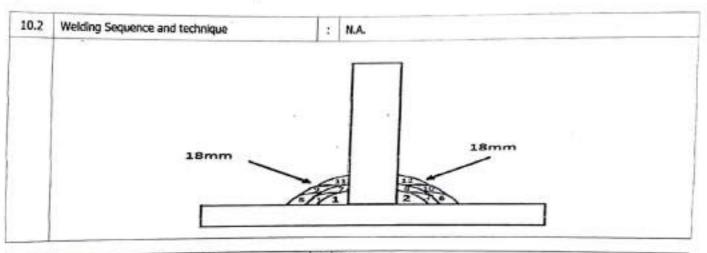
Name	and address of Fabricator		M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
Weldi	ng Procedure specification No.	-	
01,	RDSO brawing No.	-	SRMBS/RKSCPL/SITE/WPS/60M/22
02.	Welding Joint Description.	-	RDSO/B-10427/3
03.	Base Metal.	-:	Fillet 18 mm - Fillet welding of Top Tie Beam with Top Lateral Beam
04.	Welding Process		25mmx28mm IS: 2062 – 2011, Gr. : E350 B0
05.	Welding Position.	-	FCAW PEOPLE
06.	Welding Consumable.	<u>.</u>	2F/3F/4F
6.1	Electrode/Wire Class Dia Drying Method Flux Class Type Drying Method		Class I OF IRS: M-46-2003; Flux cored MS wire.  1.2 mm  N.A.  N.A.  N.A.
6.3	Shielding Gas	1	CO2
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality
	Joint design Details	:	
7.1	(Sketch showing arrangements of parts, we		ead details, weld passes & their sequence etc.)



Page 12

T		Fage
Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
Welding Current	:	
Туре	:	DC
Polarity	:	REVERSE
Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019
The state of the s		
Welding Parameters	:	
	Type Polarity Welder qualification Welding Parameters and technique	Welding Current :  Type : Polarity : Welder qualification : Welding Parameters and technique :

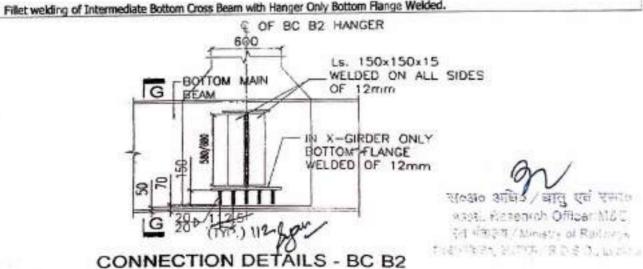
Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1,2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



11.	Provision of run-on / run-off tabs	1:	N. A.
12.	Cleaning of weld bead before laying next weld bead	;	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
14.	Preheating and inter pass temperature	1:	Preheat TempMin.150°C & Interpass Temp250°C Max.
-		1 :	N.A.
15.	Peening	1:	N.A.
16.	Post Weld treatment	1	By re-welding after complete removal of defective weld & rectify the
17.	Rectification of weld defect	:	weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
	Inspection of Weld	1	Visual & D.P
18.	Inspection of view	1 :	
19.	Any other relevant Details	सं उर	ALO .

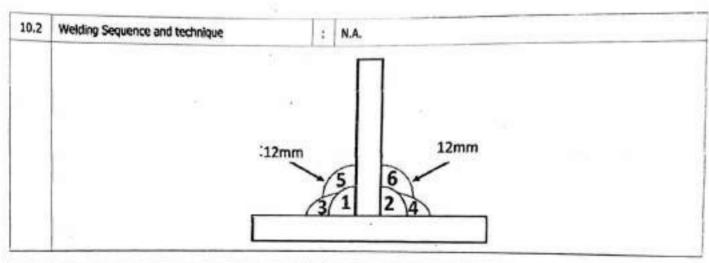
WELDING PROCEDURE SPECIFICATION SHEET FOR 60 M CLEAR SPAN BOW STRING O	IRDER
WELDING PROCEDURE SPECIFICATION SHEET TO	120012

Name a	and address of Fabricator	:	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
The second lives	9 Procedure specification No.	:	SRMBS/RKSCPL/SITE/WPS/60M/23
01.	RDSO Drawing No.	:	RDSO/B-10427/6 Sees Ream (28mm) with Hanger
02.	Welding Joint Description.	:	RDSD/B-10427/6  Fillet 12 mm – Fillet welding of Int. Bottom Cross Beam (28mm) with Hanger (32mm).
03.	Base Metal.	1	28mmx32mm IS: 2062 - 2011, Gr. : E350 B0
04,	Welding Process	:	FCAW
05.	Welding Position.	:	2F/3F/4F
06,	Welding Consumable.		
6.1	Electrode/Wire Class Dia Drying Method	: :	Class T OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type Drying Method		N.A. N.A.
6.3	Shielding Gas	:	CO2
07.	Base Metal Preparation		Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, and Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	1	



7.2 Joint preparation		1	As Per IS: 10178 – 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
08. Welding Current			
08.	Type :	C	X
	Polarity :	R	REVERSE
<ol> <li>Welder qualification</li> </ol>	:	A	As per 15: 7310/7307 (Part-I) – 2019
10. Welding Parameters and to	echnique :	T	¥(14)€
10.1 Welding Parameters	1:	8	

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm .	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by	N.A.	15	15 – 25



11.	Provision of run-on / run-off tabs	0	N. A.
12.	Cleaning of weld bead before laying next weld bead	4	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	;	N.A.
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening	:	N.A.
16.	Post Weld treatment सoअo अधिo / धातु	nici	NA.
17.	Rectification of weld defect Asstt. Research Off ऐल मंत्रालय / Ministry o	r Ra	Weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of
18.	Inspection of Weld প্রতর্গতদাত স্বত, লক্ষণক / R.D.	S,O	NRSHI W.D.P
19.	Any other relevant Details	8	NIL

STAL DE

. . . . . . . . . . . . . .

6)

6

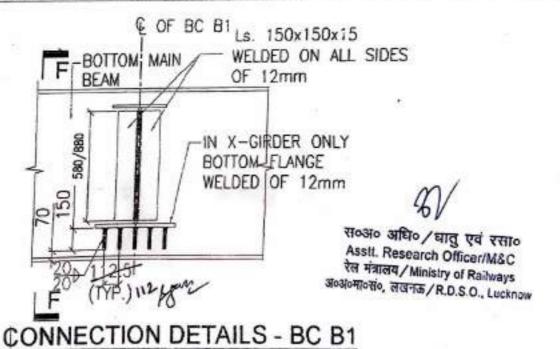
6

â

6

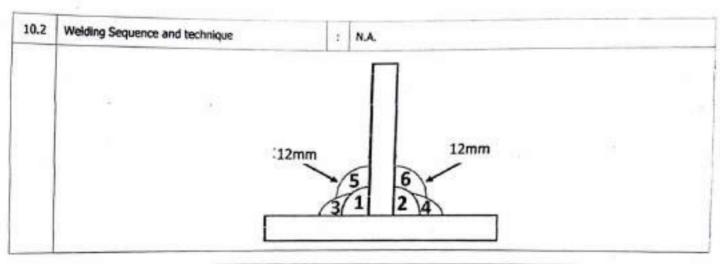
11.23

Name	and address of Fabricator	:	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
Weld	ing Procedure specification No.	1 :	SRMBS/RKSCPL/SITE/WPS/60M/24
44.	RDSO Drawing No.	1:	PDCO/B 10437/6
02.	Welding Joint Description.		Fillet 12mm - Fillet welding of Int. Bottom Cross Beam with Bottom Long Bea
03.	Base Metal.		28mmx25mm, IS: 2062 - 2011, Gr. : E350 80
04.	Welding Process	:	FCAW
05.	Welding Position.	1	2F/3F/4F
06,	Welding Consumable.	in the same of	
6.1	Electrode/Wire Class Dia Drying Method		Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type Drying Method	: :	N.A. N.A.
6,3	Shielding Gas		CO2
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	:	
7.1	(Sketch showing arrangements of parts, well Fillet welding of Bottom Cross Beam with Bo		ad details, weld passes & their sequence etc.)



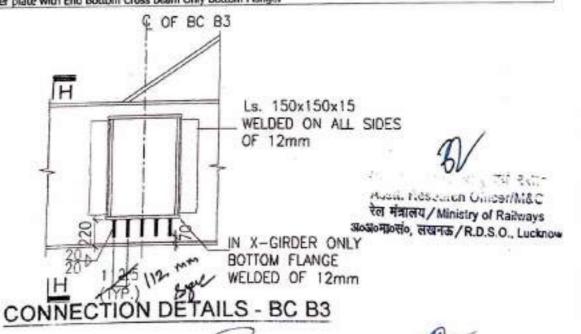
7.2	201.1		Page 16
-	some preparation	1	As Per 1S: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
08.	Welding Current	:	
	- Type	. :	DC .
09.	Polarity		REVERSE
-	Welder qualification		As per IS: 7310/7307 (Part-I) - 2019
10,	Welding Parameters and technique	60	
	Welding Parameters		

	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6,	1.2 mm	150 - 250	24 - 30	Controlled by	N.A.	15	15 - 25



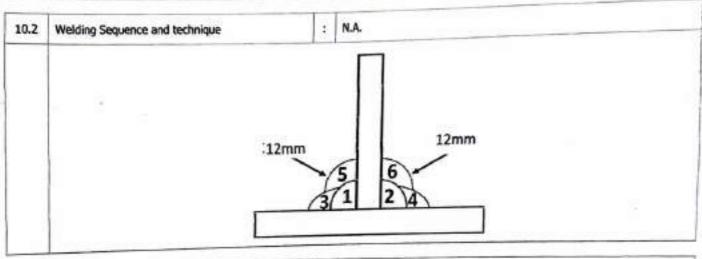
11.	Provision of run-on / run-off tabs	:	N. A.
12.	Cleaning of weld bead before laying next weld bead	1	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening	:	N.A.
6.	Post Weld treatment	7	NA.
7.	- with the of world defect on Railey Ministry	DESC	By re-welding after complete removal of defective weld & rectify the Weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRSOWWE) after conducting DP Test.
8.	Inspection of Weld	:	Visual & D.P
	Any other relevant Details	1	NIL O

nd address of Fabricator		M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
Procedure specification No	-	SRMBS/RKSCPL/SITE/WPS/60M/25
RDSO Drawing No.		RDSO/8-10427/6
		Fillet 12 mm - welding Cover plate with End Bottom Cross Beam
Case Metal,		30mmx36mm 15: 2062 - 2011, Gr. : E350 B0
Welding Process		FCAW
		2F/3F/4F
Class	:::	Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
Plux Class Type Drying Method	:	N.A. N.A.
Shielding Gas	*	COZ
Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
loint design Details	:	
E V V V E	RDSO Drawing No. Welding Joint Description. Dase Metal, Welding Process Welding Position. Welding Consumable. Electrode/Wire Class Dia Drying Method Class Type Drying Method Shielding Gas	RDSO Drawing No.  Welding Joint Description.  Dase Metal,  Welding Process  Welding Position.  Welding Consumable.  Electrode/Wire  Class  Dia  Drying Method  Tux  Class  Type  Drying Method  Shielding Gas  Lase Metal Preparation  Electrode State Metal Preparation  Class  Cl



7.2 Joint preparation	;	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint
Welding Current		
C8.	Type :	DC .
, P	Polarity :	REVERSE
09. Welder qualification	1	As per 1S: 7310/7307 (Part-I) - 2019
10. Welding Parameters and technique	:	# The state of the
10.1 Welding Parameters		

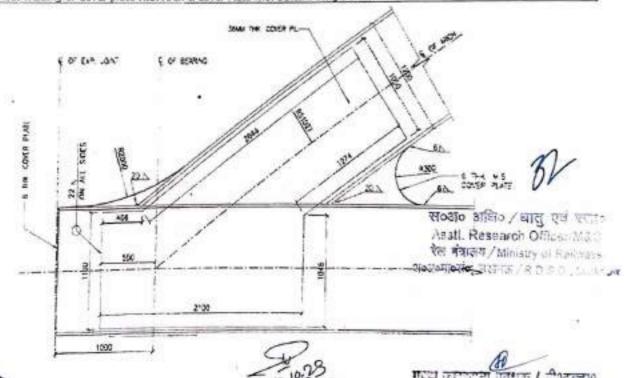
Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2	1,2 mm	180 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
(Root pass)				Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30			15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	



11.	Provision of run-on / run-off tabs	:	N.A.
12.	Cleaning of weld bead before laying next weld	;	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	;	N.A.
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening	:	N.A.
16.	Post Weld treatment	10	
17.	Rectification of weld defect	Off of	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
-	Inspection of Weld	:	Visual & D.P.
18.	Inspector of reco	:	NIL
19.	Any other relevant Details	-	St a

क्रा कराज्या प्रविधक / दीवडब्स्यूव

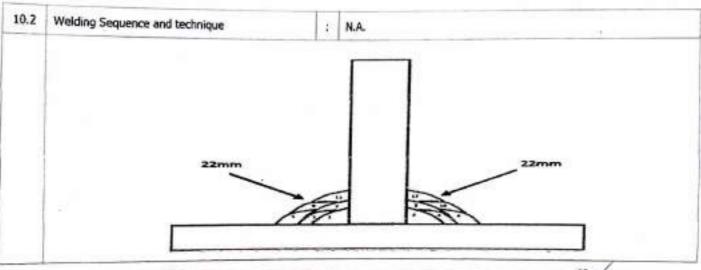
d address of Fabricator	9	M/s. Struc-Rite Metal Building Systems, Unit-II, Boral, Durg-491001.
Procedure consideration No.	-	
DSO Drawing No.	+	SRMBS/RKSCPL/STTE/WPS/60M/25
	1	RDSO/B-10427/4 Fillet 22 mm - Fillet welding of Cover plate with Arch & Cover Plate with Bottom Long Beam
ise Metal.	-	30mmx32mm, 30mmx25mm, 15: 2062 – 2011, Gr. : E350 B0
felding Process		FCAW
elding Position	+	2F/3F/4F
elding Consumable	-	er/sr/4r
Class		Class I OF IRS:M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
Class Type Drying Method		N.A. N.A.
vielding Gas	:	COZ
se Metal Preparation	*	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, and Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
int design Details	:	
	Dia  Drying Method  Ux  Class Type	Procedure specification No. : DSO Drawing No. : DSO Drawing No. : Delding Joint Description. : Dase Metal. : Delding Process : Delding Position. : Delding Consumable. : Dia : Drying Method :



THE REPORT OF THE PARTY OF THE

.2 Joint preparation	"	
Welding Current	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
8, Current	:	
Type	:	DC
9. Wolder to Polarity	1	REVERSE
Weider qualification	:	As per IS: 7310/7307 (Part-I) - 2019
Welding Parameters and technique	:	
0.1 Welding Parameters		11

Weld Sequence No.	Electrodes wire dia, (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	(mm) 15	15 - 25
3,4	1,2 mm	150 - 250	24 - 30		10,20,27	1 1/175	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current Controlled by current	N.A.	15 15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



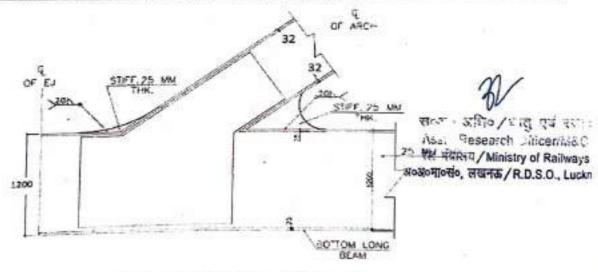
. . . . . . . . . . . .

11.	Provision of run-on / run-off tabs	:	N.A.
12.	Cleaning of weld bead before laying next weld bead	:	Yes, in case of multi layer. By brush clear to an extended to the control of the
13.	Root preparation before welding other side of groove weld	;	N.A. Ser viented / Ministry of Railways
-	Preheating and inter pass temperature	1	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening	1:	N.A.
16.	Post Weld treatment	1	N.A.
17.	Rectification of weld defect	:	By re-welding after complete removal of defective weld & rectify the weld as per CI.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
8.	Inspection of Weld	1	Visual & D.P,
-	Buy other relevant Details	1:	NIL 1 200 THE 1 200 THE 1 200 THE

पार्व मध्य देशे. पर

Page 21

and and	address of Fabricator	:	T FOR 60 M CLEAR SPAN BOW STRING GIRDER  M/s. Struc-Rite Metal Building Systems, Unit-II, Boral, Durg- 491001,
01.	ocedure specification No.	:	SRMBS/RKSCPL/SITE/WPS/60M/27
	RDSO Drawing No.	:	RDSO/B-10427/4
02,	Welding Joint Description.	:	Fillet 20 mm - Fillet welding of Stiffener with Arch & Bottom Long Beam
03.	Base Metal.	:	25mmx32mm, 25mmx25mm, 15: 2062 – 2011, Gr. : E350 BC
04.	Welding Process	:	FCAW
05.	Welding Position,	:	2F/3F/4F
06,	Welding Consumable.	-	ar/sr/ar
6.1	Electrode/Wire Class Dia Drying Method	:	Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type Drying Method	:	N.A. N.A.
6.3	Shielding Gas		COZ
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	:	
7.1	(Sketch showing arrangements of parts, weld Fillet welding of Stiffener with Arch & Bottom		



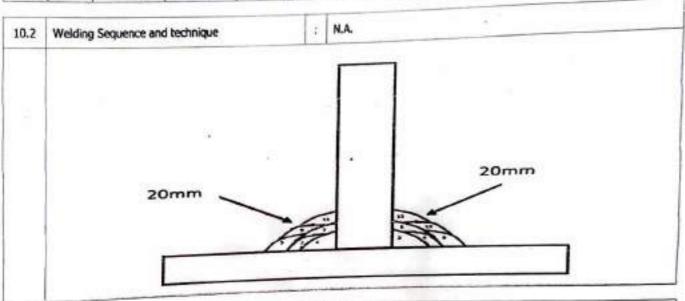
ELEVATION OF JOINT LO

D

-	T	-	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint
7.2	Joint preparation	;	As Per IS: 10178 - 1995, IS: 7215 & Weblet Bridge Const.
4. 4	Welding Current		
08.	Type	1	DC
	Polarity	:	REVERSE
9,	Welder qualification	:	As per IS: 7310/7307 (Part-1) - 2019
10.	Welding Parameters and technique	:	
0.1	Welding Parameters	:	

6.66

Weld Sequence No.	Electrodes wire dia.	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
Contraction of the Contraction o	(mm)	(vinipo)	1.559			15	15 - 25
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
11.12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.		0.5-7



	t are all table	1:	N.A.
11.	Provision of run-on / run-off tabs		A Will Bull of dealers and alleger
12.	Cleaning of weld bead before laying next weld bead	1	Yes, in case of multi layer. By brush cleaning and grinding
3.	Root preparation before welding other side of groove weld	:	N.A.
_		1:	Preheat TempMin.150°C & Interpass Temp250°C Max.
4.	Preheating and inter pass temperature	:	N.A.
15.	Peening 6/	:	N.A.
16.	Post Weld treatment	wier.	By re-welding after complete removal of defective weld & rectify the
17.	Rectification of weld defect of the second o	At a	weld as per Cl,32.2 of IS 9595-96, using Flux Cored Wire (Class I of JRS M 46) after conducting DP Test.
	Inspection of Weld	17.17.7	·Visual & D.P. १८३३ कार दीना प्रबंधक / बीध्डब्स्
18.	A Wobjer relevant Details	1	MIL के पूर्व भ्रष्य रेल, पंज बोनडयाल जाएया
13	PANDLE LEIGHAIT COMP	-	Chief Workshop Manageri RW

	address of Fabricator	1	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg- 491001.
	rocedure specification No.	1	SRMBS/RKSCPL/SITE/WPS/60M/28
01.	RDSO Drawing No.		PDCO/R 10437/5 & PDCO/R-10427/9
02.	Welding Joint Description.	:	Fillet 20 mm - Fillet welding of Stiffener with Hanger & bottom
03.	Base Metal.	1	25mmx25mm, 1S; 2062 - 2011, Gr. : E350 80
04.	Welding Process		FCAW
05.	Welding Position.	1	2F/3F/4F
06,	Welding Consumable.		
6.1	Electrode/Wire Class Dia Drying Method	:	Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type Drying Method	:	N.A. N.A.
6.3	Shielding Gas		COZ
07.	Base Metal Preparation	1	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	:	
7.1	Joint design Details  (Sketch showing arrangements of parts, weld Fillet welding of Stiffener with Hanger & Bott	bead o	

•

0

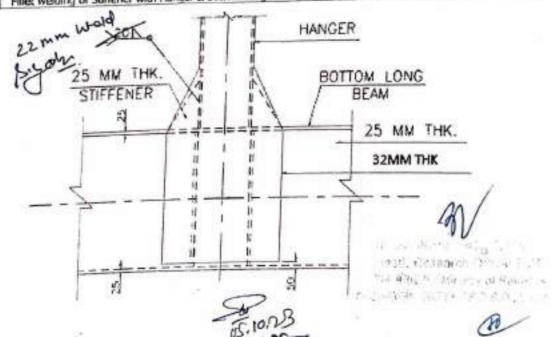
0

P

0

0

. . . . .

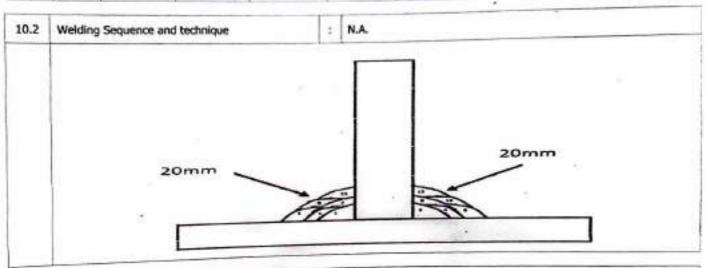


n		21
Рa	qe	ZA

			Page
7.2	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
08.	Welding Current	:	to the tree of the contract of
	Type	;	DC
0.72	Polarity	;	REVERSE
09.	Welder qualification		As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique		
10.1	Welding Parameters		

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 – 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	THE RESERVE AND ADDRESS OF THE PARTY.	the second secon	Controlled by current	N.A.	15	15 - 25
9,10	100000000000000000000000000000000000000	150 - 250	24 - 30	The second secon	N.A.	15	15 - 25
11,12	1,2 mm	150 - 250 150 - 250	24 - 30 24 - 30	Controlled by current Controlled by current	N.A.	15	15 - 25

~

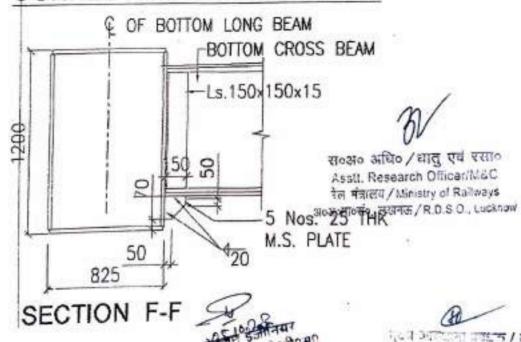


	t sun off tabé	1:	N. A.
11.	Provision of run-on / run-off tabs		
12.	Cleaning of weld bead before laying next weld bead	:	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
14.	Preheating and sites pass temps	:	N.A.
15.	Peening	-	NA.
16.	Post Weld treatment	1	By re-welding after complete removal of defective weld & rectify the
17.	Rectification of weld defect  Rectif	nite align	weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IBS M 46) after conducting DP Test.
	Inspection of Weld (19 19 19 19 19 19 19 19 19 19 19 19 19 1		Visual & D.P.
18.	TAT O CONTRICT	:	MILL I
146	A Boothy relevant Details	-	्रिक्त कारदाना प्राप्तात / त

Page 25

Name ar	nd address of Fabricator	1	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
Welding	Procedure specification No.	:	SRMBS/RKSCPL/SITE/WPS/60M/29
01.	RDSO Drawing No.	:	RDSO/B-10427/6
02.	Welding Joint Description.	1	Fillet 20mm - Fillet welding of Stiffener with Bottom Long Beam & Int. Bottom Cross Beam
03.	Base Metal.	1	25mmx25/28.r.m IS: 2062 2011, Gr. : E350 B0
04,	Welding Process	-	FCAW
05,	Welding Position.	1	2F/3F/4F
06.	Welding Consumable.		aryary n
6.1	Electrode/Wire Class Dia Drying Method	20.00	Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type Drying Method	:	N.A. N.A.
6.3	Shielding Gas	:	CO2
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	:	201000
7.1			ts, weld bead details, weld passes & their sequence etc.)  n Cross Beam & Bottom Long Beam (25mmx25/28mm)

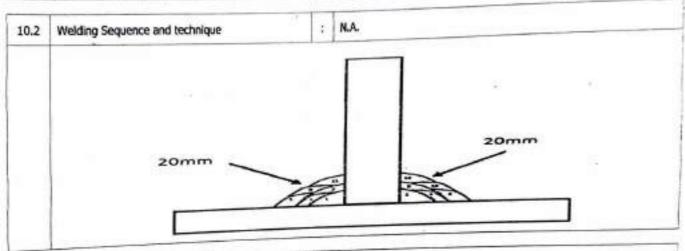
## **CONNECTION DETAILS - BC B1**



CTAL BUIL

_			rage 2
7.2	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
00	Welding Current	:	
.90.	Туре	:	oc
	Polarity	:	REVERSE
09.	Welder qualification		As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique		
10.1	Welding Parameters	1	

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N,A,	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25 15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	13	

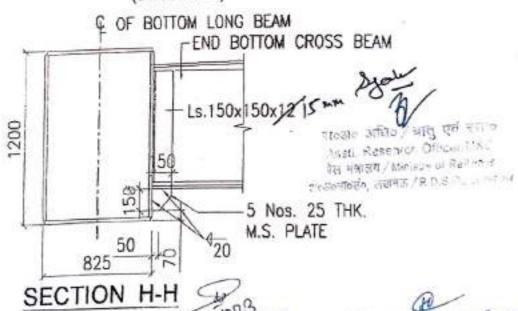


	the state of the	1	N.A.
11.	Provision of run-on / run-off tabs		Yes, in case of multi layer. By brush cleaning and grinding
12.	Cleaning of weld bead before laying next weld bead	3	Yes, in case of multi layer, by brosh occurring and gracery
13.	Root preparation before welding other side of groove weld	;	N.A.
		:	Preheat TempMin.150°C & Interpass Temp250°C Max.
14.	Preheating and inter pass temperature		N.A.
15.	Peening Post Weld treatment सुरुशक अधिक / भारत	लं ५	th8
16.	Post Weld treatment Teste after First	ar/N	ISICre-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of
17.	Asstt. Research Office Rectification of weld defecte পরাল্য / Ministry of	Ráil O.,	IMPCre-welding after complete removal of defective weed at rectify due would as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of JOSE 1996) after conducting DP Test.
1000			Visual & D.P.
18.	Inspection of Weld		NILCO: S
-	Any other relevant Details	:	1 dios

Name and a	address of Fabricator	:	FOR 60 M CLEAR SPAN BOW STRING GIRDER  M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg- 491001.
	Ocadure specification No.		SRMBS/RKSCPL/SITE/WPS/60M/30
01.	RDSO Drawing No.		DOPO III 10427//E
02.	Welding Joint Description.	1	Fillet 20 mm - Fillet welding of Stiffener with End Bottom Close
03.	Base Metal.	:	25mmx36/30mm IS: 2062 – 2011, Gr. : E350 B0
04.	Welding Process	1	FCAW
. 05.	Welding Position.		2F/3F/4F
06.	Welding Consumable.		7.06-2000
6.1	Electrode/Wire Class Dia Drying Method	:	Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class . Type Drying Method	:	N.A. '
6.3	Shielding Gas	4	CO2
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details		
7.1	(Sketch showing arrangements of parts, weld Fillet welding of Stiffener with End Bottom O		

## CONNECTION DETAILS - BC B3

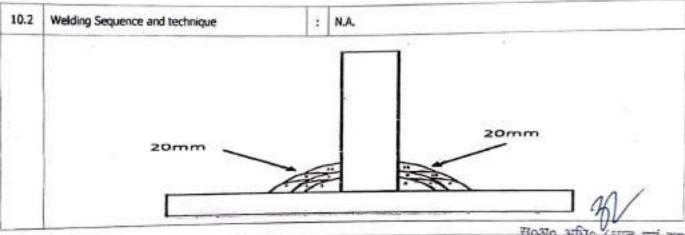
(SCALE 1:25)



। वीउउस्यू

-			Page 28
7.2	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
08.	Welding Current	:-	2 2
-00.	Type	:	DC -
_	Polarity	:	REVERSE
09.	Welder qualification		As per 15: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique		Topic in 1914/197 (1914)
10.1	Welding Parameters	:	

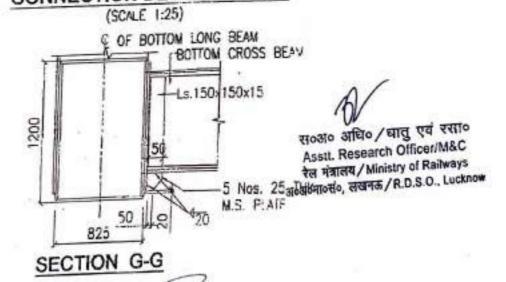
Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



11.	Provision of run-on / run-off tabs	:	N. A. Asstt. Research Officerities
12.	Cleaning of weld bead before laying next weld bead	:	Yes, in case of multi layer. By brush cleaning आक्रपुरांक्टापुर of Railwa श्रेटिकाल स्ट्रांक
13.	Root preparation before welding other side of groove weld	1.5	N.A.
	Preheating and inter pass temperature	1	Preheat TempMin.150°C & Interpass Temp250°C Max.
14.		1:	N.A.
15	Peening	1	N.A.
16.	Post Weld treatment		By re-welding after complete removal of defective weld & rectify the
17.	Rectification of weld defect	:	weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
	Inspection of Weld		Visual & D.P.
18.	Inspection of Weld	1	NIL CLASSICAL STRAINS CONTRACTOR OF THE STRAIN C

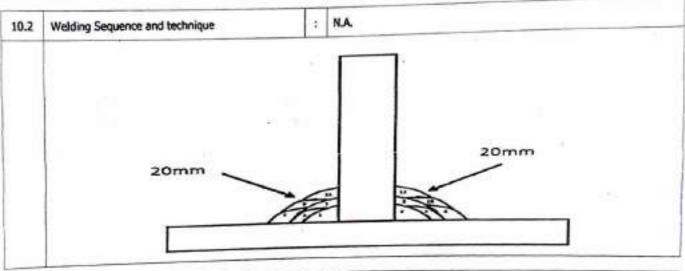
			FOR 60 M CLEAR SPAN BOW STRING GIRDER  M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-
Name and a	address of Fabricator	-3	491001.
Welding Pro	ocedure specification No.	:	SRMBS/RKSCPL/SITE/WPS/60M/31
01.	RDSO Drawing No.	:	DDCO/R-10427/6
02.	Welding Joint Description.	:	Fillet 20 mm - Fillet welding of Stiffener with Int. Bottom Cro Beam with Hanger
03.	Base Metal.		25mmx28/32mm IS: 2062 - 2011, Gr. : E350 B0
04.	Welding Process	:	FCAW
05.	Welding Position.		2F/3F/4F
06.	Welding Consumable.		
6.1	Electrode/Wire Class Dia Drying Method	:	Class I OF IRS:M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type '	: : : : : : : : : : : : : : : : : : : :	N.A. N.A.
6.3	Shielding Gas	:	CO2
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	1.	*
7.1	(Sketch showing arrangements of parts, weld	bead o	details, weld passes & their sequence etc.)  Bottom Cross Beam with Hanger (25mmx28/32mm)

## CONNECTION DETAILS - BC B2



7.2			The same of the sa
1.2	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint
08.	Welding Current	:	
08.	B, Type	:	DC
	Polarity	:	REVERSE
09,	Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019
10,	Welding Parameters and technique	:	
10.1	Welding Parameters		

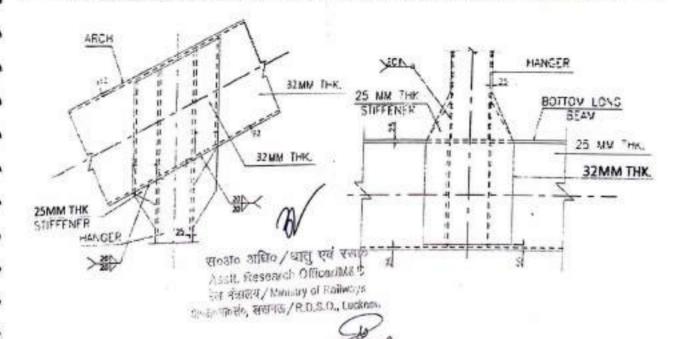
Weld Sequence No.	Electrodes wire dia.	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2	(mm) 1.2 mm	150 - 250	24-30	Controlled by current	N.A.	15	15 - 25
(Root pass)	1.2 1001				N.A.	15	15 - 25
3,4	1,2 mm	150 - 250	24 - 30	Controlled by current	-	15	15 - 25
5,6	1.2 mm	150 - 250	24-30	Controlled by current	N.A.		15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	
9,10	1.2 mm	150 - 250	24-30	Controlled by current	N.A.	15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



	Provision of run-on / run-off tabs	1	N. A.
11.	Cleaning of weld bead before laying next weld	100	Very to seem of multi large Da board closures and extention
12.	head	:	Yes, in case of multi layer. By brush deaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
	Peening	:	N.A.
15.		1	N.A.
16.	Post Weld treatment Hoose Miles Steel	crist.	
17.	Rectification of weld defect a sign of a first	ake	weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
18.	Inspection of Weld	:	Visual & D.P.
SETA	Accepter relevant Details	:	NIL SUPERIOR STATE OF THE STATE

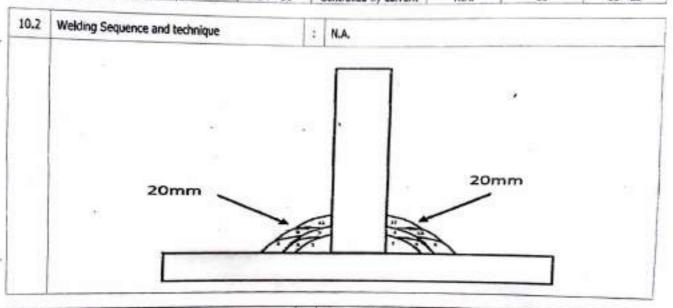
Page 31

vame		:	MAN STREET FOR 60 M CLEAR SPAN BOW STRING GIRDER
Veldi	ng Procedure specification No.	_	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
01.	RDSO Drawing No.	:	
02.		:	The state of the s
	Welding Joint Description.	:	Fillet 20 mm - Fillet welding of Stiffener with Arch & Hanger and Stiffene
03,	Base Metal.	-	with Bottom Long Beam & Hanger.
04.	Welding Process	1:	25mmx32/25mm & 25mmx25/25mm, IS: 2062 – 2011, Gr. : E350 B0
05,	Welding Position,	:	FCAW
06.	Welding Consumable,	1	2F/3F/4F
	Electrode/Wire	_	
6.1	Class Dia Drying Method	: :::	Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class 'Type Drying Method	: :	N.A. N.A.
6.3	'Shielding Gas	:	CO2
07.	Base Metal Preparation	ı	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, and Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	:	
7.1	AND		ead details, weld passes & their sequence etc.)  Bottom Long Beam & Hanger (25mmx32/25mm & 25mmx25/25mm)



7.2	Joint preparation	_	Pa
	Welding C	:	As Per 15: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
08.	Welding Current	:	
	Type	:	DC
09.	Wolden	:	REVERSE
	Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique		
10.1	Welding Parameters	·	

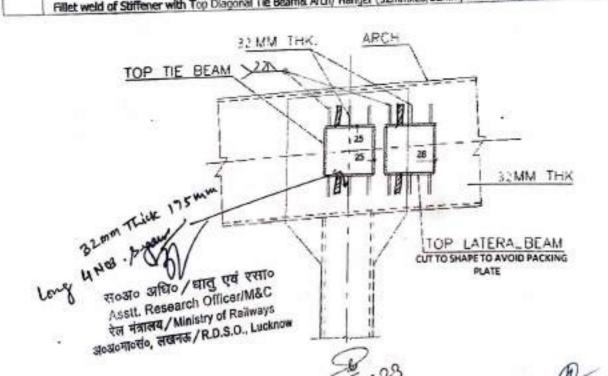
Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out	Gas Flow (I/min.)
1,2	1.2 mm	150 250	1000000		000	(mm)	35.500.000
(Root pass)		150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24-30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



11.	Provision of run-on / run-off tabs	:	N. A.
12.	Cleaning of weld bead before laying next weld bead	;	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening 'OV	. :	N.A.
16.	Post Weld treatment	1.	N.A.
17.	Recrification of Meid detect	000	By Te-welding after complete removal of defective weld & rectify the WWB as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS.M 46) after conducting DP Test.
18.	Inspection of Weld अञ्चल्मार्लिंग्, लखनळ / R.D.	S:0	, Visual SvD.P.
19.	Any other relevant Details	:	NIL

<b>Varne</b>	and address of Fabricator	:	M/s. Struc-Rite Metal Bulkling Systems, Unit-II, Borai, Durg-491001.
	ng Procedure specification No.	:	SRMBS/RKSCPL/SITE/WPS/60M/33
01.	RDSO Drawing No.	1	
02.	Welding Joint Description.	1	RDSO/B-10427/3 Fillet 22 mm - Fillet welding of Stiffener with Top Diagonal Tie Beam& Arch and Top Diagonal Tie Beam& Hanger
03,	Base Metal.	1	and Top Diagonal Tie Beams Hanger 32mmx28/32mm, 32mmx28/32mm IS: 2062 – 2011, Gr. : E350 B0
04.	Welding Process	:	FCAW 25
05.	Welding Position.	:	2F/3F/4F
06.	Welding Consumable.	1,5110	
6.1	Electrode/Wire Class Dia Drying Method	*****	Class J OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
	Flux		200
6.2	Class Type Drying Method		N.A. N.A.
6.3	Shielding Gas	÷	
07.	Base Metal Preparation		CO2 Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	2	

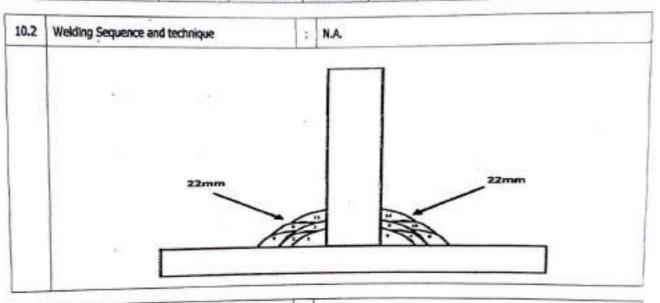
c c c c c c c c c c c c



				4	
g,	96	'n	ρ	3	4
E 1	aa ji	ç,	•	•	۳.

2000			rag
7.2	Joint preparation	1	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
08.	Welding Current	:	
00,	Туре	:	DC
_	Polarity	:	REVERSE
09.	Welder qualification	1	As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique	1	
10.1			

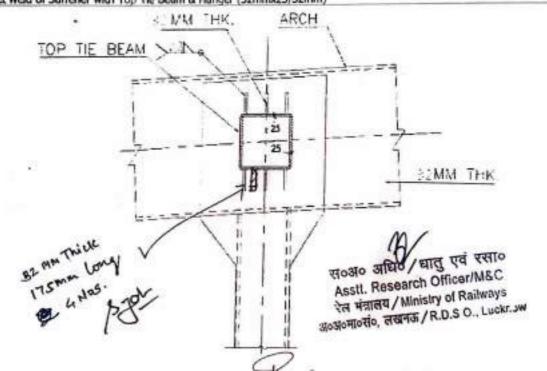
Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8 .	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



.......

11.	Provision of run-on / run-off tabs	:	N. A.
12.	Cleaning of weld bead before laying next weld	:	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
14.	Preheating and Inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening राठअ० अधि० /धातु	एवं	<b>**</b>
16.	Post Weld treatment Assall, Research Off	con	MAC
17.	Rectification of weld defect ऐसे मंत्रालय / Ministry o	H Los	involding your Cl 22 2 of IC OCOE OF vising Charles Many (Class ) at
18.	Inspection of Wold	:	Visual, 8, D.P
100	Am other relevant Details	:	Co a

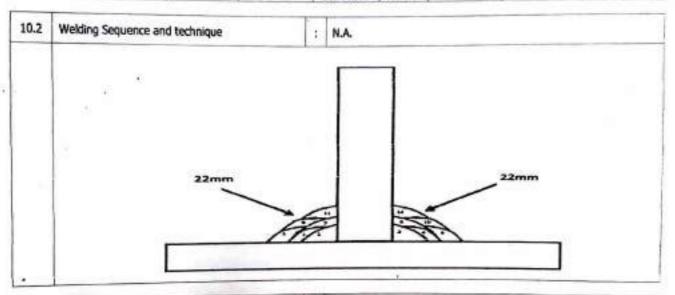
address of Fabricator	:	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
	:	SRMBS/RKSCPL/SITE/WPS/60M/34
OSO Drawing No.		POSO/8-10427/3
elding Joint Description.		Fillet 22 mm - Fillet welding of Stiffener with Top Tie Beam & Hanger
ise Metal.	1111	32mmx25/32mm, 1S; 2062 - 2011, Gr. : E350 B0
	-	FCAW
elding Position.	_	2F/3F/4F
elding Consumable.	·	Clarit ii
Class		Class I OF IRS: M-46-2803, Flux cored MS wire.  1.2 mm  N.A.
IX		The state of the s
Class Type Drying Nethod	:	N.A. N.A.
ielding Gas	1	CO2
ise Metal Preparation		Fusion Faces and adjacent surfaces are cleaned and made free from Cracks Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
int design Details	1	Total State of Control
	Drying Method  leiding Gas  Brying Method  Brying Method  Brying Gas  Brying Method  Brying Method	rocedure specification No.  SSO Drawing No.  elding Joint Description.  se Metal.  elding Process  elding Process  elding Position.  elding Consumable.  ectrode/Wire  Class  Dia  Drying Method  X  Class  Type  Drying Method  elelding Gas  Elelding Gas  Drying Method



	× .			-	
- 1	2	č4	-	- 4	h
.,	a	×	٠.	,,,	ч

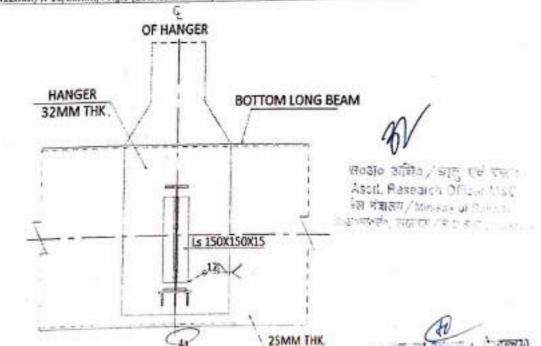
7.2	2.1		Page
-	Joint preparation	:	As Pér 1S: 10178 - 1995, 1S: 7215 & Welded Bridge Code. Fillet Joint.
08.	Welding Current		_
٧٠,	Type	10	DC.
-	Polarity		REVERSE
09.	Welder qualification	1	As per IS: 7310/7307 (Part-I) ~ 2019
10.	Welding Parameters and technique		and the second s
10,1		6	

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



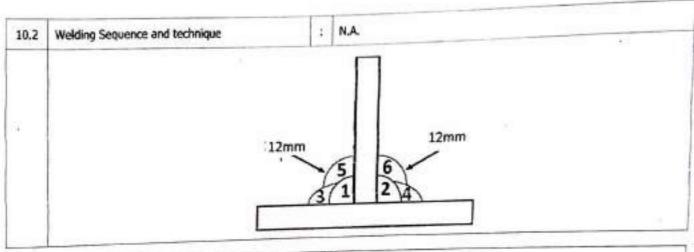
11.	Provision of run-on / run-off tabs	:	N. A.
12.	Cleaning of weld bead before laying next weld	;	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of	:	N.A.
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp,-250°C Max.
15.	Develop 2000 2000 916	4	N.A.
16.	Don't Mield treatment	Cen	N.A.
17.	Rectification of weld defect	i st	By re-weiding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
18.	Inspection of Weld	:	Visual,& D.P
19-1	other relevant Details	:	De la companya della companya della companya de la companya della

	nd address of Fabricator	1	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
Welding	Procedure specification No.	7	SRMBS/RKSCPL/SITE/WPS/60M/35
01.	RDSO Drawing No.	-	RDSO/B-10427/6
02.	Welding Joint Description.	:	Fillet 12 mm - Fillet Welding of Angle with Int. Bottom Cross Beam & Botto
03.	Base Metal.	:	Angle (150X150X12mm) X 16/25mm, Angle (150X150X12mm) X 16/32mm 1S: 2062 – 2011, Gr. : E350 B0 & E250BO
04,	Welding Process	1	FCAW
05,	Welding Position.	:	2F/3F/4F
06.	Welding Consumable.		
6.1	Electrode/Wire Class Dia Drying Method	: :	Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type Drying Method	:	NA. NA.
6.3	Shielding Gas	4	CO2
07.	Base Metal Preparation		Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	1	
7.1		ss Be	bead details, weld passes & their sequence etc.) am & Bottom Long Beam and Angle with Int. Bottom Cross Beam & Hanger 50X150X12mm) X 16/32mm



7.2	Joint preparation	1	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint
3.5	Welding Current	:	400
08.	Type	:	DC
	Polarity	:	REVERSE
09.	Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique	1	
10.1	Welding Parameters	;	

						Electrodes	
Weld Sequence No.	Electrodes wire dia.	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Stick out (mm)	Gas Flow (1/min.)
1,2	(mm)	DOMESTICAL STATE	1000	Controlled by current	N.A.	15	15 - 25
(Root pass)	1.2 mm	150 - 250	24 – 30			15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 250	24 - 30	Controlled by current	N.A.	13	



11.	Provision of run-on / run-off tabs	:	N. A.
12.	Cleaning of weld bead before laying next weld bead	;	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	;	N.A.
14.	Preheating and inter pass temperature	3	Preheat Temp,-Min.150°C & Interpass Temp,-250°C Max.
15.	Peening	:	N.A.
16.	Post Weld treatment अठअठ अघिठ / धारा एव	र्द	N.A.  By re-welding after complete removal of defective weld & rectify the
17.	284 468 (Mid 2 NOTHER V DE 158	STILL STATES	Giveld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of JRS N 46) after conducting DP Test.
18.	Inspection of Weld উ০ঐ০মাতনত, নম্ভদক্ত/R.D.S.O	, ţ.u	Avisual & D.P
19.	Any other relevant Details	:	NIL .

Name	and address of Fabricator	:	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
Weldin	ng Procedure specification No.	1	SRMBS/RKSCPL/SITE/WPS/60M/36
01.	RDSO Drawing No.	:	RDSO/B-10427/6
02.	Welding Joint Description.	:	Fillet 12 mm- Fillet Welding of Angle with Cover Plate & End Bottom Cross Beam
03.	Base Metal.	:	Angle 150x150x12mmx30/25mm 15: 2062 – 2011, Gr. : E350 Bu & E250BR/BC
04.	Welding Process	:	FCAW
05.	Welding Position.	:	2F/3F/4F
06.	Welding Consumable.		
6.1	Electrode/Wire Class Dia Drylng Method		Class 1 OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type Drying Method		N.A. N.A.
6.3	Shielding Gas	;	CO2
07.	Base Metal Preparation		Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details	:	
7.1			ead details, weld passes & their sequence etc.) stom Cross Beam((150x150x12mm)x30/25mm)

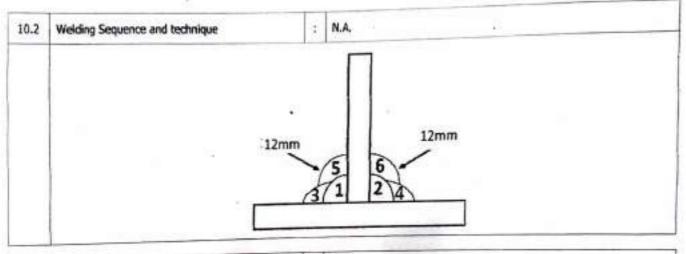


ELEVATION OF JOINT-LO

RO\_

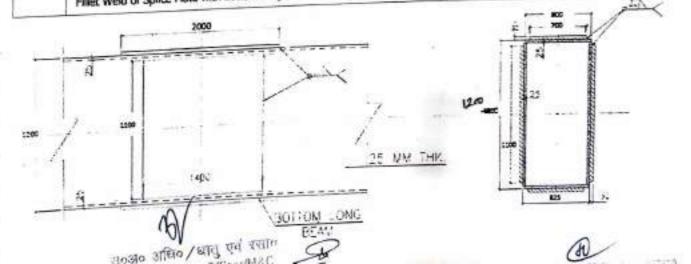
7.2	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint
	Welding Current	:	
08,	Туре	:	OC .
	Polarity	:	REVERSE
09,	Welder qualification •	:	As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique	:	
0,1	Welding Parameters	:	

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N,A.	15	15 - 25
3,4	1.2 mm	150 - 250	. 24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



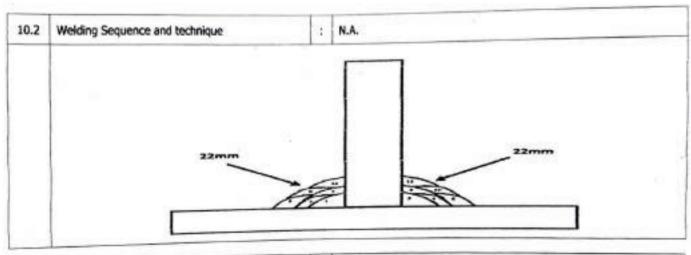
11.	Provision of run-on / run-off tabs	:	N. A.
12.	Cleaning of weld bead before laying next weld bead	2.	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening 76V	:	N.A.
16.	Post Weld treatment	d	N.Ac
17.	Rectification of weld defect Asst., Rassauch Offi		By(re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
18.	Inspection of Weld	:	Visual & D.P
19.	Any other relevant Details	:	NIL 00

lame and address of Fabricator		:	M/s. Struc-Rite Metal Building Systems, Unit-II, Boral, Durg-491001.		
-	Procedure specification No.	:	SRMBS/RKSCPL/SITE/WPS/60M/37		
01.	RDSO Drawing No.	:	RDSO/B-10427/5		
02.	Welding Joint Description.	:	Fillat 22 mm - Fillet Welding of Wct Splice Plate with Bottom Long Beam		
03.	Base Metal.	:	32mm x 25mm, 15: 2062 - 2011, Gr. : E350 B0		
04,	Welding Process		FCAW		
05.	Welding Position.	:	2F/3F/4F		
06.	Welding Consumable.		managed for a		
6.1	Electrode/Wire Class Dia Drying Method		Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.		
6.2	Flux Class Type Drying Method	:	NA.		
6.3	Shielding Gas	4	CO2		
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free from Cracks Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.		
	Joint design Details	:	ead details, weld passes & their sequence etc.)		



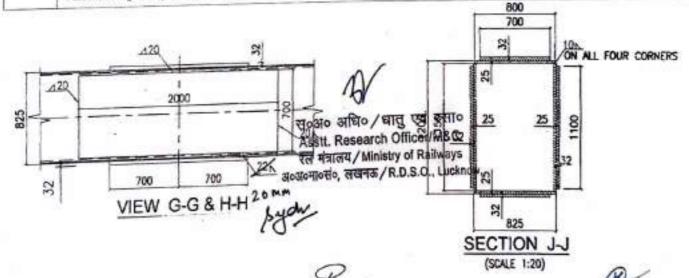
7.2	Joint au		Togo
-	Joint preparation	:	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
08.	Welding Current		
	- Type	1	DC .
1000	Polarity	:	REVERSE .
09,	Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique		•
10.1	Welding Parameters		

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)	
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25	
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25	
5,6	1,2'mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25	
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25	
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	. 15	15 - 25	
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25	



11.	Provision of run-on / run-off tabs	:	N. A.
12.	Cleaning of weld bead before laying next weld bead	:	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	ä	N.A.
14.	Probating and inter pass temperature	1	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Deserted अधिक / धात् ए	F: 1	祝G.
16.	Post Weld treatment Assil. Research Office	Billy	4896 re-welding after complete removal of defective weld & rectify the
17.	Rectification of weld defect floride, तसानक / R.D.S	0.:1	invelovas per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
10	-Tespection of Weld	:	Visual & D.P
TE'	Acorer relevant Details	:	NIL SP

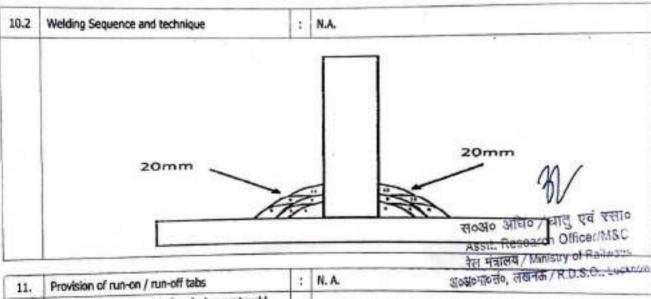
Name ar	nd address of Fabricator	1	M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
Welding	Procedure specification No.	:	SRMBS/RKSCPL/SITE/WPS/60M/38
01.	RDSO Drawing No.	:	RDSO/B-10427/5
02.	Welding Joint Description.		Fillet 20 mm - Fillet Welding of Top & Bottom Splice Plate with Bottom Long Beam
03.	Base Metal,	:	32mm x 25mm, IS: 2062 - 2011, Gr. : E350 B0
04.	Welding Process	20	FCAW
05.	Welding Position.	;	2F/3F/4F
06.	Welding Consumable.		
6.1	Electrode/Wire Class Dia Drying Method	:	Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type Drying Method	:	N.A. N.A.
6.3	Shielding Gas	::	COZ
07.	Base Metal Preparation		Fusion Faces and adjacent surfaces are cleaned and made free from Cracke Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
	Joint design Details		
7.1	(Sketch showing arrangements of parts, w Fillet Welding of Top & Bottom Splice Plat		nead details, weld passes & their sequence etc.)



-					
P	9	0	m	-4	4
	а	ж	•		

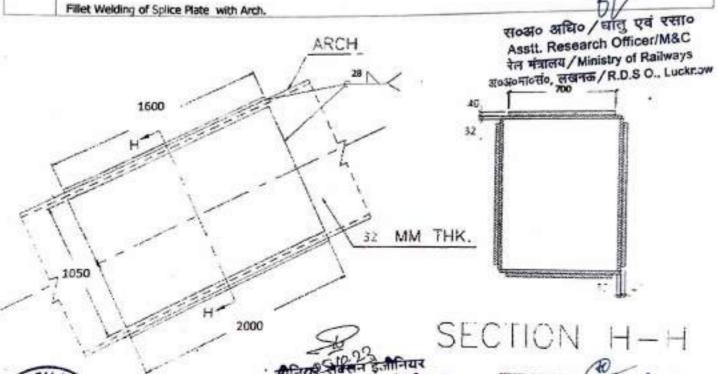
7,2	Joint preparation		As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
	Welding Current	1	
08.	- Type	:	DC
-	Polarity	1	REVERSE
09.	Welder qualification	:	As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique	;	
10.1	Welding Parameters	:	

Weld Sequence No.	Electrodes wire dia. (mm)	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
1,2 (Root pass)	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25



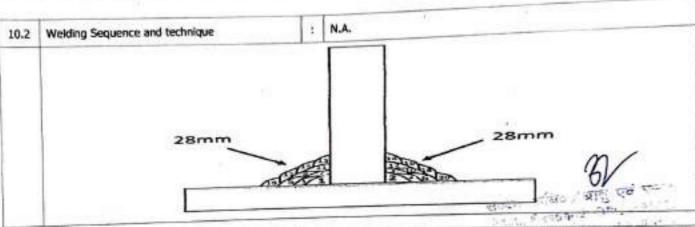
11.	Provision of run-on / run-off tabs	:	N. A. প্রত্যাতন্ত্রত, লক্ষণক / R.U.S.C.
12.	Cleaning of weld bead before laying next weld bead	;	Yes, in case of multi layer. By brush deaning and grinding
13.	Root preparation before welding other side of groove weld	1	N.A.
14.	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
15.	Peening	3	N.A.
16.	Post Weld treatment	1	N.A.
17.	Rectification of weld defect	1	By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
W	Region of Weld	1:	Visual & D.P
4	(C)	1 .	an Cu

d address of Fabricator		M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
Tocedure specification No.		SRMBS/RKSCPL/SITE/WPS/60M/39
RDSO Drawing No.	-	PDSO/B-10437/3
Welding Joint Description		Fillet 28 mm - Fillet Welding of Splice Plate with Arch
Base Metal.	1	40mm x 32mm, IS: 2062 - 2011, Gr. : E350 B0
	ž.	FCiW
Welding Position	+	2F/3F/4F
	-	
Electrode/Wire Class Dia	:	Class 1 OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
Plux Class Type	:	N.A.
Shielding Gas		11000
Base Metal Preparation	10	CO2 Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld quality.
Joint design Details		
	Procedure specification No.  RDSO Drawing No.  Welding Joint Description.  Base Metal, Welding Process Welding Position.  Welding Position.  Welding Consumable, Electrode/Wire  Class  Dia  Drying Method  Hux  Class  Type  Drying Method  Shielding Gas  Base Metal Preparation	Procedure specification No. :  RDSO Drawing No. :  Welding Joint Description. :  Base Metal. :  Welding Process :  Welding Position. :  Welding Consumable. :  Electrode/Wire :  Class :  Dia :  Drying Method :  Shielding Gas :  Drying Method :  Shielding Gas :



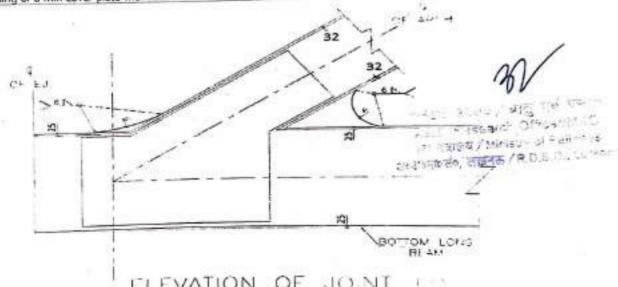
			1005 10: 7315 & Welded Bridge Code, Fillet 101111.
7.2	Joint preparation	;	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Johns.
-	Welding Current	:	DC .
.80	Type Polarity	+	REVERSE
09.	Welder qualification	:	As per IS: 7310/7307 (Part-I) ~ 2019
10.	Welding Parameters and technique	:	
10.1	Welding Parameters	:	

Weld	Electrodes	Ourrent	Arc Voltage	Wire Feed Speed	Travel Speed (m/min)	Stick out (mm)	Gas Flow (I/min.)
Sequence No.	wire dia. (mm)	(Amps)	(Volt)	(m/min)		15	15 - 25
1,2	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
(Root pass)			24 - 30	Controlled by current	N.A.	15	15 - 25
3,4	1.2 mm	150 - 250	CONTRACTOR CONTRACTOR	Controlled by current	N.A.	The second secon	15 - 25
5,6	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
7,8	1.2 mm	150 - 250	24 - 30	Controlled by correct	N.A.	15	15 - 25
9,10	1.2 mm	150 - 250	24 - 30	Controlled by current	41.4	15	
11,12	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
13,14	1.2 mm	150 250	24 - 30	Controlled by current		15	15 - 25
	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
15,16		150 - 250	24 - 30	Controlled by current	N.A.	15	15 - 25
17,18	1.2 mm	150 - 250	24 - 30	Controlled by current	N.A.		



11.	Provision of run-on / run-off tabs	:	N.A. STATE OF STATE OF THE STATE OF THE
12.	Cleaning of weld bead before laying next weld bead	:	Yes, in case of multi layer. By brush cleaning and grinding
13.	Root preparation before welding other side of groove weld	:	N.A.
	Preheating and inter pass temperature	:	Preheat TempMin.150°C & Interpass Temp250°C Max.
		1:	N.A.
15.	Peening	1:	N.A.
17.	Post Weld treatment  Rectification of weld defect		By re-welding after complete removal of defective weld & rectify the weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire Chass I of IRS M 46) after conducting DP Test. Total appropriate productions of the IRS M 46.
WETA	L Bruckon of Weld	:	Visual & D.P पूर्व मध्या रेल. पं0 दीनदयान साम
WETA	Any the relevant Details	1:	Chief Workshop Manageria

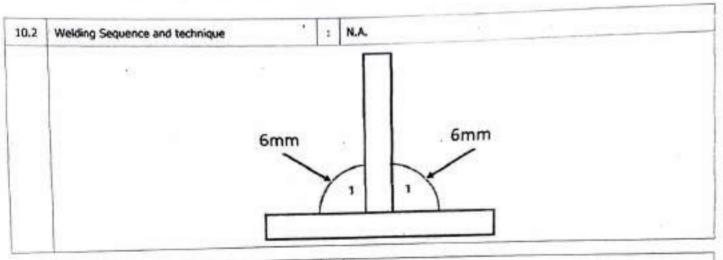
Name a	and address of Fabricator	:	ON SHEET FOR 60 M CLEAR SPAN BOW STRING BEAM  M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
-		:	SRMBS/RKSCPL/STTE/WPS/60M/40
01.	g Procedure specification No. RDSO Drawing No.		RDSO/B-10427/4 Rose of 6 mm cover plate with Arch and Bottom Long
02.	Welding Joint Description.	:	RDSD/B-10427/4 Fillet 6 mm - Fillet Welding of 6 mm cover plate with Arch and Bottom Long Bearn 6 mm X 32/25mm, 1S: 2062 – 2011, Gr. : E350 80
03.	Base Metal.	÷	6 mm X 32/25mm, 15: 2002 - 2012, 5
04.	Welding Process	:	FCAW
05.	Welding Position.	:	2F/3F
05.	Welding Consumable.		- and
6.1	Electrode/Wire Class Dia Drying Method		Class I OF IRS: M-46-2003, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux Class Type Drying Method	:	N.A N.A. N.A.
6.3	Shielding Gas	3	CO2 depend and made free from Cracks,
07.	Base Metal Preparation	:	CO2  Fusion Faces and adjacent surfaces are cleaned and made free from Cracks, Notches, Mill scale, Grease, Paint and Rust etc., which may affect weld qualit
	Joint design Details	1	(A)



ELEVATION OF JOINT

7.2	Joint preparation	1	As Per IS: 10178 - 1995, IS: 7215 & Welded Bridge Code. Fillet Joint.
	Welding Current	1	
08.	Type	:	DC
	Polarity	:	REVERSE
09.	Welder qualification	1.	As per IS: 7310/7307 (Part-I) - 2019
10.	Welding Parameters and technique	1	
10.1	Welding Parameters	:	

Weld Sequence No.	Electrodes wire dia.	Current (Amps)	Arc Voltage (Volt)	Wire Feed Speed (m/min)	Travel Speed (m/min)	Electrodes Stick out (mm)	Gas Flow (I/min.)
sequence no.	(mm)	(compa)	(voit)		100000000000000000000000000000000000000	15	15 - 25
1(Root pass)	1.2 mm	150 - 250	22 - 28	Controlled by current	N.A.		

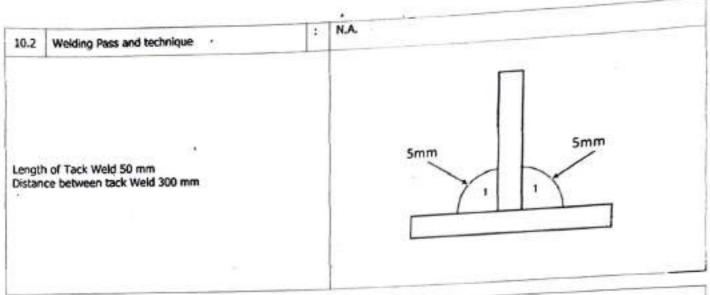


Provision of run-on / run-off tabs	:	N.A.
Cleaning of weld bead before laying next weld	:	NA स्टार अधिक / आहु एतं रूक
Root preparation before welding other side of	:	N.A. Asst. Research Office The
The state of the s	1	Preheat TempMin.150°C.& Interpass Temp258°C. Max.
	:	N.A.
	1.5	N.A.
Post Weld treatment	1	By re-welding after complete removal of defective weld & rectify the
Rectification of weld defect	;	weld as per Cl.32.2 of IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
	1;	Visual & D.P
	1.	NIL
Any other relevant Details	1.5	0
	Root preparation before welding other side of groove weld  Preheating and inter pass temperature  Peening  Post Weld treatment	Cleaning of weld bead before laying next weld bead :  Root preparation before welding other side of groove weld :  Preheating and inter pass temperature :  Peening :  Post Weld treatment :  Rectification of weld defect :  Inspection of Weld :

lame an	nd address of Fabricator		HEET FOR 72.0 m. CLEAR SPAN BOW STRING GIRDER  M/s. Struc-Rite Metal Building Systems, Unit-II, Borai, Durg-491001.
	Procedure specification No.	:	SRMBS/RKSCPL/SITE/WPS/60M/41
	RDSO Drawing No.	:	RDSO/B-10427 Series
	Welding Joint Description.	:	Fllet 5 mm - Tack Weld
100	Base Metal.	:	1S: 2062 - 2011 E350/E250
	Welding Process	:	FCAW (Flux core Arc Welding)
The second	Welding Position.	:	Horizontal / Vertical
and the latest and the	Welding Consumable.		
	Electrode/Wire Class Dia Drying Method		Class I OF IRS: M-46-2903, Flux cored MS wire.  1.2 mm  N.A.
6.2	Flux		
	Class Type Drying temperature		NA NA
6.3	Shielding Gas	1	CO <sub>2</sub>
07.	Base Metal Preparation	:	Fusion Faces and adjacent surfaces are cleaned and made free fro Cracks, Notches, Mill scale, Grease, Paint, Rust etc., which may affect weld quality.
7.1	Joint design Details	:	N.A.
	Length of Tack Weld 50 mm Distance between tack Weld 300 mm		WEB PLATS - 300 - 300 -
7.2	Joint preparation	:	As Per IS: 4353 - 1995, IS: 7215 & Welded Bridge Code.
08.	Welding Current	2	m /
	Туре	:	oc '
-	Polarity	:	Reverse single अधिक / धातु एवं एसाक
09.	Welder qualification	1	As per IS: 7310 /7307 (Part-I) - 2025. Research Officer of Railways
10.	Welding Parameters and technique	:	अव्यवनावसंव, सखनऊ / R.D.S O., Lucknam
10.1		1:	D 0
	TW.	-	1023 Was assessed to thousand

Page 50

				we Fred		Electrodes	Gas Flow
Weld Pass No.	Electrodes wire dia. (mm)	Ourrent (Amps)	_ Arc Voltage (Volt)	Wire Feed Speed (m/min) 3.5 – 4.0	Travel Speed (m/min) N.A.	Stick out (mm)	(I/min.) 16 - 18
						13 - 16	
		150 - 220	20 - 26				



11.	Provision of run-on / run-off tabs	1	N.A.
12.	Cleaning of weld bead before laying next weld bead	ż	N.A.
13.	groove were		N.A.
14.			Preheat TempMin.150°C & Interpass Temp250°C Max.
	Peening	:	N.A. सञ्ज्ञ अधिक अमितु एवं रसाव
15.	Post Weld treatment	1:	N.A. Asstt. Research Officer/M&C ऐस मंत्रालय / Ministry of Railwa:
16.	POST WEND D COUNCIL	1	By grinding of the defective weld-b-restity the weld of pen \$ 37.2 of ki
17.	Rectification of weld defect		IS 9595-96, using Flux Cored Wire (Class I of IRS M 46) after conducting DP Test.
_	Inspection of Weld		Visual & DPT
18.	Any other relevant Details	1	Tack Weld of all fit up component

54,0.23

A)