Corrigendum - 3 dated 16/06/2026 to CPC Tender No. BHEL/CPC/SGL/M_PCP/27/025

Work Description - Package-A: Erection, Testing, Commissioning, Trial Operation & Handing Over of Power Cycle Piping and its auxiliaries, Boiler Integral Piping, associated LP Piping, including Handling of materials at BHEL / Client's Stores / Storage Yard and transportation to site, pre-assembly, erection, alignment, welding, hydro testing, chemical/acid cleaning/pickling, detergent flushing, steam blowing, fixing of hangers & supports, application of lining, Insulation, supply & painting, Stencilling & Labelling of Unit-1 & Common system at 2x800 MW NTPC SINGRAULI STPP STAGE-III
Package-B: Erection, Testing, Commissioning, Trial Operation & Handing Over of Power Cycle Piping and its auxiliaries, Boiler Integral Piping, associated LP Piping, including Handling of materials at BHEL / Client's Stores / Storage Yard and transportation to site, pre-assembly, erection, alignment, welding, hydro testing, chemical/acid cleaning/pickling, detergent flushing, steam blowing, fixing of hangers & supports, application of lining, Insulation, supply & painting, Stencilling & Labelling of Unit-2 at 2x800 MW NTPC SINGRAULI STPP STAGE-III

A) The following clauses of Technical Conditions of Contract (TCC) are modified as mentioned below:

<table>
<tr><th>SL. NO.</th><th>Document/ Reference Clause</th><th>Existing Clause</th><th>Revised As</th></tr>
<tr><td>1.</td><td>Technical Specifications of the Contract (TCC), Chapter-IX, Clause 9.0 – Note to Weight Schedule, Sl. No. 3</td><td>TCC : Chapter-IX : TCC Clause 9.0
<table><tr><th colspan="2">Note to weight schedule:</th></tr><tr><td>3</td><td>Besides PG / PGMA indicated in the weight schedule, there is likely hood of addition product groups integral to the system. The quoted rate shall be applicable for such product groups also. There may be variation or addition of PGMAs, description, weights etc., and any additional scope of work supplied under the above package shall be erected by the contractor and payment will be made as per the quoted / accepted rate in the respective category at the discretion of BHEL. Decision of BHEL Engineer shall be final and binding to the contractor in this regard.</td></tr></table></td><td>TCC : Chapter-IX : TCC Clause 9.0
<table><tr><th colspan="2">Note to weight schedule:</th></tr><tr><td>3</td><td>Besides PG / PGMA indicated in the weight schedule, there is likely hood of addition product groups integral to the system. The quoted rate shall be applicable for such product groups also. There may be variation or addition of PGMAs, description, weights, <u>specification</u> etc., and any additional scope of work supplied under the above package shall be erected by the contractor and payment will be made as per the quoted / accepted rate in the respective category at the discretion of BHEL. Decision of BHEL Engineer shall be final and binding to the contractor in this regard.</td></tr></table></td></tr>
<tr><td>2.</td><td>Technical Specifications of the Contract (TCC), Chapter-IX, Clause 9.0 –</td><td>TCC : Chapter-IX : TCC Clause 9.0
<table><tr><th colspan="2">Note to weight schedule:</th></tr><tr><td>5</td><td>Rate Schedule Identified are indicative only and are based on envisaged material specification. Payment shall be made on the basis of material specification of</td></tr></table></td><td>TCC : Chapter-IX : TCC Clause 9.0
<table><tr><th colspan="2">Note to weight schedule:</th></tr><tr><td>5</td><td>-Deleted-</td></tr></table></td></tr>
</table>

SL. NO.	Document/ Reference Clause	Existing Clause	Revised As
	Note to Weight Schedule, Sl. No. 5	actual material received and erected at site irrespective of PGMA allocation in the weight schedule. BHEL's decision in this regard shall be final.	

B) The following Additional Document is added as mentioned below and attached along with this corrigendum:

SL. NO.	Document/ Reference Clause	Existing Clause	New Clause
1.	New Annexure added as Annexure-15 in Chapter- XXV: Technical Annexure, of TCC	-	Annexure-15 - EWS Power Cycle Piping

Note:

1) **All other terms and conditions against this NIT shall remain unchanged.**
2) **This corrigendum is to be submitted duly signed and stamped along with the Techno-commercial bid (Part- I).**

for BHARAT HEAVY ELECTRICALS LTD
Manager/ SCT- CPC

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP. in °C	PWHT TEMP. in °C	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.					TIME in mins		SPEC. NO	ACC NORM REF.		
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0								
1	0-00-027-35556	F-01 (FURN LOWER FRONT INLET HDR) + F-16 (FURN LOWER SIDE INLET HDRS)	SA106GRC + SA234WPC	406.4	70	GTAW + SMAW	61.25 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% (ISRT+UT) 100% MPI/LPI				
							2	253	59	96	673			175					
2	0-00-027-35556	F-07 (FURN LOWER REAR INLET HDR) + F-16 (FURN LOWER SIDE INLET HDRS)	SA106GRC + SA234WPC	406.4	70	GTAW + SMAW	61.25 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% (ISRT+UT) 100% MPI/LPI				
							2	253	59	96	673			175					
3	0-00-027-35556	F-01 (FURN LOWER FRONT INLET HDR) + F-02TI (FURN LOWER FRONT SPIRAL INLET TERMINAL TUBE)	SA213T12 + SA213T12	38.1	7.11	GTAW + SMAW	7.11 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							271	1969	2341	-	-								
4	0-00-027-35556	F-07 (FURN LOWER REAR INLET HDR) + F-08TI (FURN REAR SPIRAL INLET TERM TUBE)	SA213T12 + SA213T12	38.1	7.11	GTAW + SMAW	7.11 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							271	1969	2341	-	-								
5	0-00-027-35556 0-00-027-35591	F-02TI (FURN LOWER FRONT SPIRAL INLET TERMINAL TUBE) + F-02L (FURN LOWER FRONT SPIRAL WALL PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							258	2021	2863	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	1/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
6	0-00-027-35556 0-00-027-35591	F-08TI (FURN REAR SPIRAL INLET TERM TUBES) + F-08L (FURN LOWER REAR SPIRAL WALL PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							258	2021	2863	-	-								
7	0-00-027-35556 0-00-027-35591	F-02TI (FURN LOWER FRONT SPIRAL INLET TERM TUBES) + F-08L (FURN LOWER REAR SPIRAL WALL PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							3	24	34	-	-								
8	0-00-027-35556 0-00-027-35591	F-08TI (FURN REAR SPIRAL INLET TERM TUBES) + F-02L (FURN LOWER FRONT SPIRAL WALL PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							3	24	34	-	-								
9	0-00-027-35556 0-00-027-35599 0-00-027-35600	F-02TI (FURN LOWER FRONT SPIRAL INLET TERM TUBES) + F-17L (L&R) (FURN LOWER SIDE SPIRAL WALL PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							10	79	111	-	-								
10	0-00-027-35556 0-00-027-35599 0-00-027-35600	F-08TI (FURN LOWER REAR SPIRAL INLET TERM TUBES) + F-17L (L&R) (FURN LOWER SIDE SPIRAL WALL PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							10	79	111	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	2/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
11	0-00-027-35591	F-02L (FURN LOWER FRONT SPIRAL WALL PANEL) + F-02L (FURN LOWER FRONT SPIRAL WALL PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							319	2498	3540	-	-								
12	0-00-027-35591	F-08L (FURN LOWER REAR SPIRAL WALL PANEL) + F-08L (FURN LOWER REAR SPIRAL WALL PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							319	2498	3540	-	-								
13	0-00-027-35591	F-02L (FURN LOWER FRONT SPIRAL WALL PANEL) + CORNER TUBES	SA213T12 + SA213T12	38.1	8	GTAW + SMAW	8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							128	860	1374	-	-								
14	0-00-027-35591	F-02L (FURN LOWER FRONT SPIRAL WALL PANEL) + CORNER TUBES	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							258	2021	2863	-	-								
15	0-00-027-35591	F-08L (FURN LOWER REAR SPIRAL WALL PANEL) + CORNER TUBES	SA213T12 + SA213T12	38.1	8	GTAW + SMAW	8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							128	860	1374	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	3/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
16	0-00-027-35591	F-08L (FURN LOWER REAR SPIRAL WALL PANEL) + CORNER TUBES	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							258	2021	2863	-	-								
17	0-00-027-35587	F-02U (FURN UPPER FRONT SPIRAL WALL PANEL) + CORNER TUBES	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							133	1042	1476	-	-								
18	0-00-027-35588	F-08U (FURN UPPER REAR SPIRAL WALL PANEL) + CORNER TUBES	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							133	1042	1476	-	-								
19	0-00-027-35599 0-00-027-35600	F-17L (L&R) (FURN LOWER SIDE SPIRAL WALL PANEL) + CORNER TUBES	SA213T12 + SA213T12	38.1	8	GTAW + SMAW	8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							516	3464	5536	-	-								
20	0-00-027-35599 0-00-027-35600	F-17L (L&R) (FURN LOWER SIDE SPIRAL WALL PANEL) + CORNER TUBES	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							256	2005	2841	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	4/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
21	0-00-027-35589 0-00-027-35590	F-17U (L&R) (FURN UPPER SIDE SPIRAL WALL PANEL) + CORNER TUBES	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							286	2240	3174	-	-								
22	0-00-027-35578	F-02X (FURN FRONT SPIRAL WALL TO VERT TRANSITION PANEL) + CORNER TUBES	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							68	533	755	-	-								
23	0-00-027-35578	F-02X (FURN FRONT SPIRAL WALL TO VERT TRANSITION PANEL) + CORNER TUBES	SA213T12 + SA182F12CL2	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							2	16	23	-	-								
24	0-00-027-35578	F-08X (FURN REAR SPIRAL WALL TO VERT TRANSITION PANEL) + CORNER TUBES	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							68	533	755	-	-								
25	0-00-027-35578	F-08X (FURN REAR SPIRAL WALL TO VERT TRANSITION PANEL) + CORNER TUBES	SA213T12 + SA182F12CL2	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							2	16	23	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	5/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
26	0-00-027-35577	F-17X (L&R) (FURN SIDE SPIRAL WALL TO VERT TRANSITION PANEL) + CORNER TUBES	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							120	940	1332	-	-								
27	0-00-027-35577	F-17X (L&R) (FURN SIDE SPIRAL WALL TO VERT TRANSITION PANEL) + CORNER TUBES	SA213T12 + SA182F12CL2	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							4	32	45	-	-								
28	0-00-027-35591 0-00-027-35581 0-00-027-35584	F-02L (FURN LOWER FRONT SPIRAL WALL PANEL) + F-WB (FURN BURNER PANELS)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							135	1058	1499	-	-								
29	0-00-027-35591 0-00-027-35581 0-00-027-35584	F-08L (FURN LOWER REAR SPIRAL WALL PANEL) + F-WB (FURN BURNER PANELS)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							135	1058	1499	-	-								
30	0-00-027-35589 0-00-027-35581 0-00-027-35584	F-17U (L&R) (FURN LOWER SIDE SPIRAL WALL PANEL) + F-WB (FURN BURNER PANELS)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							1216	9522	13494	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	6/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
31	0-00-027-35587 0-00-027-35581 0-00-027-35584	F-02U (FURN UPPER FRONT SPIRAL WALL PANEL) + F-WB (FURN BURNER PANELS)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							598	4683	6636	-	-								
32	0-00-027-35588 0-00-027-35581 0-00-027-35584	F-08U (FURN UPPER REAR SPIRAL WALL PANEL) + F-WB (FURN BURNER PANELS)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							598	4683	6636	-	-								
33	0-00-027-35599 0-00-027-35581 0-00-027-35584	F-17L (L&R) (FURN LOWER SIDE SPIRAL WALL PANEL) + F-WB (FURN BURNER PANELS)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							250	1958	2775	-	-								
34	0-00-027-35578	F-02U (FURN UPPER FRONT SPIRAL WALL PANEL) + F-02X (FURN FRONT SPIRAL WALL TO VERT TRANSITION PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							124	971	1376	-	-								
35	0-00-027-35578	F-08U (FURN UPPER REAR SPIRAL WALL PANEL) + F-08X (FURN REAR SPIRAL TO VERT TRANSITION PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							124	971	1376	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	7/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
36	0-00-027-35577	F-17U (L&R) (FURN UPPER SIDE SPIRAL WALL PANEL) + F-17X (L&R) (FURN SIDE SPIRAL TO VERT TRANSITION PANEL)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							218	1708	2420	-	-								
37	0-00-027-35587	F-02U (FURN UPPER FRONT SPIRAL WALL PANEL) + F-OFA (FURN SOFA PANELS)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							485	3798	5382	-	-								
38	0-00-027-35588	F-08U (FURN UPPER REAR SPIRAL WALL PANEL) + F-OFA (FURN SOFA PANELS)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							485	3798	5382	-	-								
39	0-00-027-35577	F-17U (L&R) (FURN UPPER SIDE SPIRAL WALL PANEL) + F-OFA (FURN SOFA PANELS)	SA213T12 + SA213T12	41.3	7.8	GTAW + SMAW	7.8 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							932	7299	10343	-	-								
40	0-00-027-35577	F-17X (L&R) (FURN SIDE SPIRAL TO VERT TRANSITION PANEL) + F-17TO (L&R) (FURN SIDE SPIRAL OUTLET TERM TUBES)	SA213T12 + SA213T12	38.1	7.11	GTAW + SMAW	7.11 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							262	1904	2264	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	8/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
41	0-00-027-35578	F-02X (FURN FRONT SPIRAL TO VERT TRANSITION PANEL) + F-02TO (FURN FRONT SPIRAL OUTLET TERM TUBES)	SA213T12 + SA213T12	38.1	7.11	GTAW + SMAW	7.11 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							140	1018	1210	-	-								
42	0-00-027-35578	F-08X (FURN REAR SPIRAL TO VERT TRANSITION PANEL) + F-08TO (FURN REAR SPIRAL OUTLET TERM TUBES)	SA213T12 + SA213T12	38.1	7.11	GTAW + SMAW	7.11 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							140	1018	1210	-	-								
43	0-00-027-35577	F-17TO (L&R) (FURN SIDE SPIRAL OUTLET TERM TUBES) + F-18 (L&R) (FURN INTERM SIDE HDRS)	SA213T12 + SA213T12	38.1	7.11	GTAW + SMAW	7.11 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							262	1904	2264	-	-								
44	0-00-027-35578	F-02TO (FURN FRONT SPIRAL OUTLET TERM TUBES) + F-03 (FURN INTERM FRONT HDR)	SA213T12 + SA213T12	38.1	7.11	GTAW + SMAW	7.11 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							140	1018	1210	-	-								
45	0-00-027-35578	F-08TO (FURN REAR SPIRAL OUTLET TERM TUBES) + F-09 (FURN INTERM REAR HDR)	SA213T12 + SA213T12	38.1	7.11	GTAW + SMAW	7.11 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							140	1018	1210	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	9/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
46	0-00-027-35577	F-18 (L&R) (FURN INTERM SIDE HDRS) + F-19TI (L&R) (FURN SIDE VERT INLET TERM TUBES)	SA213T12 + SA213T12	33.4	5.59	GTAW + SMAW	5.59 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							786	5305	3873	-	-								
47	0-00-027-35578	F-03 (FURN INTERM FRONT HDR) + F-04TI (FURN FRONT VERTICAL INLET TERM TUBES)	SA213T12 + SA213T12	33.4	5.59	GTAW + SMAW	5.59 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							420	2835	2070	-	-								
48	0-00-027-35578	F-09 (FURN INTERM REAR HDR) + F-10TI (FURN REAR VERT INET TERM TUBES)	SA213T12 + SA213T12	33.4	5.59	GTAW + SMAW	5.59 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							420	2835	2070	-	-								
49	0-00-027-35578	F-03 (FURN FRONT INTERM HDR INSPECTION NOZZLE) + FLAT END COVER	SA182F12CL2 + SA182F12CL2	168.3	39.7	GTAW + SMAW	34.74 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							2	91	25	40	92			100				NDT after SR	01
50	0-00-027-35578	F-09 (FURN REAR INTERM HDR INSPECTION NOZZLE) + FLAT END COVER	SA182F12CL2 + SA182F12CL2	168.3	39.7	GTAW + SMAW	34.74 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							2	91	25	40	92			100				NDT after SR	01

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	10/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
				SIZE	THICK		Qty in Nos.	Qty in gms	Qty in Nos. Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
51	0-00-027-35577	F-18 (FURN INTERM HDR INSPECTION NOZZLE) + FLAT END COVER	SA182F12CL2 + SA182F12CL2	168.3	39.7	GTAW + SMAW	34.74 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI			NDT after SR	01
							4	182	49	80	184			100					
52	0-00-027-35577	F-19TI (L&R) (FURN SIDE VERT INLET TERM TUBES) + F-17X (L&R) (FURN SIDE SPIRAL TO VERT TRANSITION PANEL)	SA213T12 + SA213T12	33.4	5.59	GTAW + SMAW	5.59 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							786	5305	3873	-	-								
53	0-00-027-35578	F-04TI (FURN FRONT VERTICAL INLET TERM TUBES) + F-02X (FURN FRONT SPIRAL TO VERT TRANSITION PANEL)	SA213T12 + SA213T12	33.4	5.59	GTAW + SMAW	5.59 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							420	2835	2070	-	-								
54	0-00-027-35578	F-10TI (FURN REAR VERT INET TERM TUBES) + F-08X (FURN REAR SPIRAL TO VERT TRANSITION PANEL)	SA213T12 + SA213T12	33.4	5.59	GTAW + SMAW	5.59 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							420	2835	2070	-	-								
55	0-00-027-35586	F-02X (FURN FRONT SPIRAL TO VERT TRANSITION PANEL) + F-04L (FURN LOWER FRONT VERT WALL PANEL)	SA213T12 + SA213T12	38.1	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							420	2786	4642	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	11/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
56	0-00-027-35586	F-04L (FURN INTER FRONT VERT WALL PANEL) + F-04U (FURN UPPER FRONT VERT WALL PANEL)	SA213T12 + SA213T12	38.1	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							420	2786	4642	-	-								
57	0-00-027-35586	F-04U (FURN UPPER FRONT VERT WALL PANEL) + F-05 (FURN UPPER FRONT OUTLET HDR)	SA213T23 + SA213T22	38.1	8.13	GTAW + SMAW	8.13 ▽	ER90S-B3	E9018-B3			1053/04	200	745 ± 15	20% RT + 80% PAUT			100% HC, 260HV (MAX)	
							420	5250	4642	-	-			60					
58	0-00-027-35586	F-08X (FURN REAR SPIRAL TO VERT TRANSITION PANEL) + F-11 (FURN REAR ARCH PANEL)	SA213T12 + SA213T12	38.1	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							420	2786	4642	-	-								
59	0-00-027-35586 0-00-027-35551	F-11 (FURN REAR ARCH PANEL) + F-12 (FURN SCREEN TUBES)	SA213T12 + SA213T12	38.1	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							280	1857	3095	-	-								
60	0-00-027-35586 0-00-027-35551	F-11 (FURN REAR ARCH PANEL) + F-13 (FURN HANGER TUBES)	SA213T12 + SA213T12	38.1	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							140	929	1548	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	12/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
61	0-00-027-35586 0-00-027-35551	F-12 (FURN SCREEN TUBES) + F-14 (FURN UPPER REAR OUTLET HDR)	SA213T12 + SA213T12	38.1	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							280	1857	3095	-	-								
62	0-00-027-35586 0-00-027-35551	F-13 (FURN HANGER TUBES) + F-14 (FURN UPPER REAR OUTLET HDR)	SA213T22 + SA213T22	63.5	12.7	GTAW + SMAW	12.7 ▽	ER90S-B3	E9018-B3			1084/01	200	740 ± 10	20% RT + 80% PAUT			100% HC, 260HV (MAX)	
							140	1636	1308	1152	-			60					
63	0-00-027-35586	F-17X (L&R) (FURN SIDE SPIRAL TO VERT TRANSITION PANEL) + F-19L (L&R) (FURN LOWER SIDE VERT WALL PANEL)	SA213T12 + SA213T12	38.1	9.1	GTAW + SMAW	9.1 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							786	4739	10720	-	-								
64	0-00-027-35586	F-19L (L&R) (FURN LOWER SIDE VERT WALL PANEL) + F-19U (L&R) (FURN UPPER SIDE VERT WALL PANEL)	SA213T12 + SA213T12	38.1	9.1	GTAW + SMAW	9.1 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							786	4739	10720	-	-								
65	0-00-027-35586	F-19U (L&R) (FURN UPPER SIDE VERT WALL PANEL) + F-19U LT (LOOSE TUBES)	SA213T12 + SA213T12	38.1	9.1	GTAW + SMAW	9.1 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							10	61	137	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	13/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
				SIZE	THICK		Qty in Nos.	Qty in gms	Qty in Nos. Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
66	0-00-027-35586	F-19U (L&R) (FURN UPPER SIDE VERT WALL PANEL) + F-20 (L&R) (FURN UPPER SIDE OUTLET HDRS)	SA213T12 + SA213T12	38.1	9.1	GTAW + SMAW	9.1 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20% RT + 80% PAUT				
							786	4739	10720	-	-								
67	1-07-318-01322 1-07-318-01323 0-00-027-35570	F-05 (FURN UPPER FRONT OUTLET HDR) + F-06 (FRONT RISER PIPES)	SA182F12CL2 + SA335P12	219.1	40	GTAW + SMAW	35.00 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							4	270	63	103	261			100				NDT after SR	01
68	1-07-318-01322 1-07-318-01323 0-00-027-35568	F-06 (FRONT RISER PIPES) + F-06 (FRONT RISER PIPES)	SA335P12 + SA335P12	219.1	40	GTAW + SMAW	35.00 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							16	1077	252	412	1042			100				NDT after SR	01
69	1-07-318-01322 1-07-318-01323 0-00-027-35568	F-06 (FRONT RISER PIPES) + F-31 (SEPARATOR)	SA335P12 + SA182F22CL3	219.1	40	GTAW + SMAW	35.00 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% RT 100% MPI/LPI				
							4	270	63	103	261			100				NDT after SR	01
70	0-07-316-02253 0-07-316-02254 0-00-027-35568	F-14 (FURN UPPER REAR OUTLET HDR) + F-15 (REAR RISER PIPES)	SA182F12CL2 + SA335P12	219.1	40	GTAW + SMAW	35.00 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							4	270	63	103	261			100				NDT after SR	01

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	14/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0			in mins		SPEC. NO	ACC NORM		
71	0-07-316-02253 0-07-316-02254 0-00-027-35568	F-15 (REAR RISER PIPES) + F-15 (REAR RISER PIPES)	SA335P12 + SA335P12	219.1	40	GTAW + SMAW	35.00 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							20	1346	315	515	1302			100				NDT after SR	01
72	0-07-316-02253 0-07-316-02254 0-00-027-35568	F-15 (REAR RISER PIPES) + F-31 (SEPARATOR)	SA335P12 + SA182F22CL3	219.1	40	GTAW + SMAW	35.00 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% RT 100% MPI/LPI				
							4	270	63	103	261			100				NDT after SR	01
73	1-07-315-01314 TO 1-07-315-01321 0-00-027-35568	F-20 (FURN UPPER SIDE OUTLET HDRS) + F-21 (SIDE RISER PIPES)	SA182F12CL2 + SA335P12	219.1	40	GTAW + SMAW	35.00 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							8	539	126	206	521			100				NDT after SR	01
74	1-07-315-01314 TO 1-07-315-01321 0-00-027-35568	F-21 (SIDE RISER PIPES) + F-21 (SIDE RISER PIPES)	SA335P12 + SA335P12	219.1	40	GTAW + SMAW	35.00 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							36	2422	566	927	2343			100				NDT after SR	01
75	1-07-315-01314 TO 1-07-315-01321 0-00-027-35568	F-21 (SIDE RISER PIPES) + F-31 (SEPARATOR)	SA335P12 + SA182F22CL3	219.1	40	GTAW + SMAW	35.00 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% RT 100% MPI/LPI				
							8	539	126	206	521			100				NDT after SR	01

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	15/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
76	0-07-102-02217 0-00-027-35568	F-31 (SEPARATOR) + F-32 (LINK TO SEPARATOR STORAGE TANK)	SA182F22CL3 + SA335P12	355.6	65	GTAW + SMAW	56.88 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% RT 100% MPI/LPI				
							4	432	102	168	1030			165				NDT after SR	01
77	0-07-102-02217 0-00-027-35568	F-32 (LINK TO SEPARATOR STORAGE TANK) + F-32 (LINK TO SEPARATOR STORAGE TANK)	SA335P12 + SA335P12	355.6	65	GTAW + SMAW	56.88 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							8	863	204	335	2059			165				NDT after SR	01
78	0-07-102-02217 0-00-027-35568	F-32 (LINK TO SEPARATOR STORAGE TANK) + F-33 (STORAGE TANK)	SA335P12 + SA182F22CL3	355.6	65	GTAW + SMAW	56.88 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% RT 100% MPI/LPI				
							4	432	102	168	1030			165				NDT after SR	01
79	0-07-110-02218 0-00-027-35568	F-33 (STORAGE TANK) + F-49 (FURN DOWNCOMER TO CONNECTING SPHERE)	SA182F22CL3 + SA335P12	406.4	65	GTAW + SMAW	56.88 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% RT 100% MPI/LPI				
							2	260	59	96	603			165				NDT after SR	01
80	0-07-110-02218 0-00-027-35568	F-49 (FURN DOWNCOMER TO CONNECTING SPHERE) + F-50 (FURN CONNECTING SPHERE)	SA335P12 + SA182F12CL2	406.4	65	GTAW + SMAW	56.88 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							2	260	59	96	603			165				NDT after SR	01

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	16/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
81	1-07-217-01324 0-00-027-35568	F-33 (STORAGE TANK) + F-34 (SEPARATOR STORAGE TANK VENT LINK)	SA182F22CL3 + SA335P12	88.9	16	GTAW + SMAW	14.00 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% RT 100% MPI/LPI			NDT after SR	01
							2	58	13	21	4			60					
82	1-07-217-01324 0-00-027-35568	F-34 (SEPARATOR STORAGE TANK VENT LINK) + F-34 (SEPARATOR STORAGE TANK VENT LINK)	SA335P12 + SA234WP22CL1	88.9	16	GTAW + SMAW	14.00 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% RT 100% MPI/LPI			NDT after SR	01
							2	58	13	21	4			60					
83	1-07-217-01324 0-00-027-35568	F-34 (SEPARATOR STORAGE TANK VENT LINK) + S-01 (SH CONNECTING PIPE)	SA335P12 + SA182F12CL2	88.9	16	GTAW + SMAW	14.00 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI			NDT after SR	01
							2	58	13	21	4			60					
84		GAMMA PLUG IN F-01 AND F-07	SA106GRC + SA105			SMAW	7 ◺	-	E7018			1101/01	100	Nil	100% LPI or MPI				
							4	-	2	-	-							FOR T- (25-75) MM	
85		GAMMA PLUG IN RISER LINKS	SA335P12 + SA182F22CL3			SMAW	7 ◺	-	E8018-B2			1102/01	200	Nil	100% LPI or MPI				
							102	-	26	-	-							FOR T- (25-75) MM	

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	17/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 07

CUST No : 1834,1835

PG NAME : Circulation System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Circulation System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
86		GAMMA PLUG IN F-49 LINKS	SA335P12 + SA182F22CL3			SMAW	7 ◺	-	E8018-B2			1102/01	200	Nil	100% LPI or MPI			FOR T- (25-75) MM	
							16	-	5	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
SAJI P J	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-07-CIR-EWS	1	18/18

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 19

CUST No : 1834,1835

PG NAME : Economiser System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Economiser System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 00

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP. in °C	PWHT TEMP. in °C	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0			TIME in mins		SPEC. NO	ACC NORM REF.		
1	0-19-850-02662 0-00-027-35571	ECO I/L LINK + ECO I/L LINK (E-04 + E-04/VALVE)	SA106GRC + SA106GRC	610	82	GTAW + SMAW	71.75 ▽▽	ER70S-A1	E7018-1			1004/04	150	610 ± 15	100% (ISRT+UT) 100% MPI/LPI				
							22	4528	962	1577	14974			205					
2	0-19-850-02662 0-00-027-35571	ECO I/L LINK +ECO I/L LINK(E-04A + E-04A)	SA106GRC + SA106GRC	457	60	GTAW + SMAW	52.50 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% RT 100% MPI/LPI				
							7	1091	230	376	2139			150					
3	0-19-850-02662 0-00-027-35571	ECO I/L LINK+ECO I/L HDR (E-04A + E-05)	SA106GRC + SA106GRC	457	60	GTAW + SMAW	52.50 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% RT 100% MPI/LPI				
							2	312	66	108	611			150					
4	2-19-850-05101 0-00-027-35571	ECO I/L LINK+WATER COOLED HGR I/L HDR LINK (E-04 NOZZLE + E.04.01)	SA105 + SA106GRC	219.1	36	GTAW + SMAW	31.50 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% RT 100% MPI/LPI				
							1	71	16	26	55			90					
5	2-19-850-05101 0-00-027-35571	WATER COOLED HGR I/L HDR LINK + WATER COOLED HGR I/L HDR LINK (E-04.01 + E.04.01)	SA106GRC + SA106GRC	219.1	36	GTAW + SMAW	31.50 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% RT 100% MPI/LPI				
							2	141	32	52	110			90					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	NIRMAL RAJ N	09-02-2026	1834-19-ECO-EWS	0	1/8

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 19

CUST No : 1834,1835

PG NAME : Economiser System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Economiser System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 00

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0			in mins		SPEC. NO	ACC NORM		
6	2-19-850-05101 0-00-027-35571	WATER COOLED HGR I/L HDR LINK + WATER COOLED HGR I/L HDR (E-04.01 + E.05A)	SA106GRC + SA106GRC	219.1	36	GTAW + SMAW	31.50 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% RT 100% MPI/LPI				
							1	71	16	26	55			90					
7	0-00-027-35546	ECO I/L HDR NIPP+ECO I/L TERM TUBE (E-05 NIPPLE + E-06TI)	SA210GRC + SA210GRC	44.45	7.1	GTAW + SMAW	7.1 ▽	ER70S-A1	E7018-1			1003/04	20	Nil	20%RT + 80% PAUT				
							940	8690	9449	-	-								
8	0-00-027-35546	ECO I/L TERM TUBE +ECO COIL LWR ASSY (E-06TI + E-06L)	SA210GRC + SA210GRC	44.45	7.1	GTAW + SMAW	7.1 ▽	ER70S-A1	E7018-1			1003/04	20	Nil	20%RT + 80% PAUT				
							940	8690	9449	-	-								
9	0-00-027-35546	ECO COIL LWR ASSY +ECO COIL INTER ASSY (E-06L + E-06I)	SA210GRC + SA210GRC	44.45	7.1	GTAW + SMAW	7.1 ▽	ER70S-A1	E7018-1			1003/04	20	Nil	20%RT + 80% PAUT				
							940	8690	9449	-	-								
10	0-00-027-35546	ECO COIL INTER ASSY +ECO COIL UPPER ASSY (E-06I + E-6U)	SA210GRC + SA210GRC	44.45	7.1	GTAW + SMAW	7.1 ▽	ER70S-A1	E7018-1			1003/04	20	Nil	20%RT + 80% PAUT				
							940	8690	9449	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	NIRMAL RAJ N	09-02-2026	1834-19-ECO-EWS	0	2/8

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 19

CUST No : 1834,1835

PG NAME : Economiser System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Economiser System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 00

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
11	0-00-027-35546 0-00-027-35606	ECO COIL UPPER ASSY +ECO O/L TERM TUBES (E-06U + E-06TO)	SA210GRC + SA210GRC	44.45	7.1	GTAW + SMAW	7.1 ▽	ER70S-A1	E7018-1			1003/04	20	Nil	20%RT + 80% PAUT				
							940	8690	9449	-	-								
12	0-00-027-35546 0-00-027-35606	ECO O/L TERM TUBES +ECO JN. HDR NIPPLE (E-06TO + E-07 NIPPLE)	SA210GRC + SA210GRC	44.45	7.1	GTAW + SMAW	7.1 ▽	ER70S-A1	E7018-1			1003/04	20	Nil	20%RT + 80% PAUT				
							940	8690	9449	-	-								
13	0-00-027-35546 0-00-027-35606	WATER COOLED HGR I/L HDR NIPPLE + WATER COOLED HGR I/L TERM TUBES (E-05A NIPPLE + E-06ATI)	SA210GRC + SA210GRC	44.45	13.49	GTAW + SMAW	13.49 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							472	2489	2414	3277	-			35					
14	0-00-027-35546 0-00-027-35606	WATER COOLED HGR I/L TERM TUBES + WATER COOLED HGR TUBES (E-06ATI + E-06A)	SA210GRC + SA210GRC	44.45	13.49	GTAW + SMAW	13.49 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							472	2489	2414	3277	-			35					
15	0-00-027-35546 0-00-027-35605	WATER COOLED HGR TUBES + ECO COIL LWR ASSY HGR TUBES (E-06A + E-06L HGR)	SA210GRC + SA210GRC	44.45	13.49	GTAW + SMAW	13.49 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							472	2489	2414	3277	-			35					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	NIRMAL RAJ N	09-02-2026	1834-19-ECO-EWS	0	3/8

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 19

CUST No : 1834,1835

PG NAME : Economiser System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Economiser System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 00

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
16	0-00-027-35546	ECO COIL LWR ASSY HGR TUBES + ECO COIL INTER ASSY HGR TUBES (E-06L HGR + E-06I-HGR)	SA210GRC + SA210GRC	44.45	13.49	GTAW + SMAW	13.49 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							472	2489	2414	3277	-			35					
17	0-00-027-35546	ECO COIL INTER ASSY HGR TUBES + ECO COIL UPR ASSY HGR TUBES (E-06I HGR + E-06U-HGR)	SA210GRC + SA210GRC	44.45	13.49	GTAW + SMAW	13.49 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							472	2489	2414	3277	-			35					
18	0-00-027-35546	ECO COIL UPR ASSY HGR TUBES + WATER COOLED HGR O/L TERM TUBES (E-06U HGR + E-06ATO)	SA210GRC + SA210GRC	44.45	13.49	GTAW + SMAW	13.49 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							472	2489	2414	3277	-			35					
19	0-00-027-35546	WATER COOLED HGR O/L TERM TUBES + ECO JN. HDR NIPPLES (E-06ATO + E-07 NIPPLE)	SA210GRC + SA210GRC	44.45	13.49	GTAW + SMAW	13.49 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							472	2489	2414	3277	-			35					
20	0-00-027-35544 0-00-027-35606	ECO JN. HDR NIPPLE +ECO LWR HGR TUBE (E-07 NIPPLE + E-08L)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							476	6087	4792	5498	-			40					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	NIRMAL RAJ N	09-02-2026	1834-19-ECO-EWS	0	4/8

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 19

CUST No : 1834,1835

PG NAME : Economiser System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Economiser System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 00

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0			in mins		SPEC. NO	ACC NORM		
21	0-00-027-35544	ECO LWR HGR TUBE +ECO HGR TUBE (LTRH LWR ASSY) (E-08L + R-04L HANGER)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							476	6087	4792	5498	-			40					
22	0-00-027-35544	ECO HGR TUBE (LTRH LWR ASSY)+ECO HGR TUBE (LTRH LWR INTER ASSY) (R-04L HGR + R-04LI HGR)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							476	6087	4792	5498	-			40					
23	0-00-027-35544	ECO HGR TUBE (LTRH LWR INTER ASSY)+ECO HGR TUBE (LTRH INTER ASSY) (R-04LI HGR + R-04I HGR)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							476	6087	4792	5498	-			40					
24	0-00-027-35544	ECO HGR TUBE (LTRH INTER ASSY)+ECO HGR TUBE (LTRH UPR INTER ASSY) (R-04I HANGER + R-04UI HANGER)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							476	6087	4792	5498	-			40					
25	0-00-027-35544	ECO HGR TUBE (LTRH UPR INTER ASSY)+ECO HGR TUBE (LTRH UPR ASSY) (R-04UI HANGER + R-04U HANGER)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							476	6087	4792	5498	-			40					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	NIRMAL RAJ N	09-02-2026	1834-19-ECO-EWS	0	5/8

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 19

CUST No : 1834,1835

PG NAME : Economiser System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Economiser System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 00

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
26	0-00-027-35544	ECO HGR TUBE (LTRH UPR ASSY)+ECO UPR HGR TUBE (R-04U HGR + E-08U)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							476	6087	4792	5498	-			40					
27	0-00-027-35544 0-00-027-35574	ECO UPR HGR TUBE +ECO HGR O/L TERM TUBE (E-08U + E-08TO)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							476	6087	4792	5498	-			40					
28	0-00-027-35544 0-00-027-35574	ECO HGR O/L TERM TUBE +ECO O/L HDR NIPPLE (E-08TO + E-09 NIPP)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							476	6087	4792	5498	-			40					
29	0-00-027-35580	ECO JN. HDR NIPPLE + ECO HGR TUBE (LTRH HDR SUPPT) (E-07 NIPP + E-08X)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							40	512	403	462	-			40					
30	0-00-027-35580	ECO HGR TUBE (LTRH HDR SUPPT)+ECO HGR TUBE (LTRH HDR SUPPT) (E-08X + E-08X)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							160	2046	1611	1848	-			40					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	NIRMAL RAJ N	09-02-2026	1834-19-ECO-EWS	0	6/8

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

ERECTION WELDING SCHEDULE

355-005/A
(09-09-2016)

CUST No : 1834,1835
PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)
WELDING CODE : IBR / ASME
PRESSURE PARTS/~~NON PRESSURE PARTS~~

PG NO : 19
PG NAME : Economiser System
SYSTEM DESCRIPTION : Economiser System
CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 00

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
31	0-00-027-35580	ECO HGR TUBE(LTRH HDR SUPPT)+ECO O/L HDR NIPPLE (E-08X + E-09 NIPPLE)	SA210GRC + SA210GRC	69.85	14.1	GTAW + SMAW	14.1 ▽	ER70S-A1	E7018-1			1004/04	Nil	610 ± 15	20%RT + 80% PAUT				
							40	512	403	462	-			40					
32	0-19-851-02645 0-00-027-35571	ECO O/L HDR+ECO O/L LINK (E-09 + EF-01)	SA106GRC + SA106GRC	508	70	GTAW + SMAW	61.25 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% (ISRT+UT) 100% MPI/LPI				
							2	341	73	120	871			175					
33	0-19-851-02645 0-00-027-35571	ECO O/L LINK+ECO O/L LINK (EF-01 + EF-01)	SA106GRC + SA106GRC	508	70	GTAW + SMAW	61.25 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% (ISRT+UT) 100% MPI/LPI				
							18	3069	656	1075	7832			175					
34	0-19-851-02645 0-19-852-02665 0-00-027-35571	ECO O/L LINK+ECO MIXING LINE (EF-01 + EF-02)	SA106GRC + SA234WPC	508	70	GTAW + SMAW	61.25 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% (ISRT+UT) 100% MPI/LPI				
							2	341	73	120	871			175					
35	0-19-852-02665 0-19-853-02646 0-00-027-35571	ECO MIXING LINE+ECO WW I/L LINK (EF-02 + EF-03)	SA234WPC + SA106GRC	508	70	GTAW + SMAW	61.25 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% (ISRT+UT) 100% MPI/LPI				
							2	341	73	120	871			175					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	**MANIKANDAN C**	**NIRMAL RAJ N**	**09-02-2026**	**1834-19-ECO-EWS**	**0**	**7/8**

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 19

CUST No : 1834,1835

PG NAME : Economiser System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Economiser System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 00

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
36	0-19-853-02646 0-00-027-35571	ECO WW I/L LINK+ECO WW I/L LINK (EF-03 + EF-03)	SA106GRC + SA106GRC	508	70	GTAW + SMAW	61.25 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% (ISRT+UT) 100% MPI/LPI				
							4	682	146	239	1741			175					
37	0-19-853-02646 0-00-027-35571	ECO WW I/L LINK+FURN SIDE I/L HDRS (EF-03 + F-16 L&R)	SA106GRC + SA234WPC	508	70	GTAW + SMAW	61.25 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% (ISRT+UT) 100% MPI/LPI				
							2	341	73	120	871			175					
38	0-19-753-02639 0-19-763-02643 0-19-783-02666 0-19-793-02668	ECO INTER HDRS:INSP. NOZZLE + FLAT END COVER	SA105 + SA105	168.3	45.4	GTAW + SMAW	39.72 ▽▽	ER70S-A1	E7018-1			1004/04	100	610 ± 15	100% RT 100% MPI/LPI				
							8	328	97	159	451			115					
39		GAMMA PLUG	SA105 + SA106GRC			SMAW	7 ◺	-	E7018			1101/01	150	Nil	100% LPI or MPI				
							23	-	6	-	-							FOR T >75 MM	
40		GAMMA PLUG	SA105 + SA106GRC			SMAW	7 ◺	-	E7018			1101/01	100	Nil	100% LPI or MPI				
							43	-	11	-	-							FOR T- (25-75) MM	

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	NIRMAL RAJ N	09-02-2026	1834-19-ECO-EWS	0	8/8

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 17

CUST No : 1834,1835

PG NAME : Reheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Reheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP. in °C	PWHT TEMP. in °C	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.					TIME in mins		SPEC. NO	ACC NORM REF.		
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0								
1	0-00-027-35822	LTRH I/L HDR + SPOOL PIPE (R-03 HDR + R-03 SPOOL)	SA335P12 + SA335P12	558.8	35	GTAW + SMAW	30.62 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							2	439	81	132	300			90				NDT after SR	01
2	0-00-027-35822 0-00-027-35557	LTRH I/L HDR NIPPLE + LTRH I/L TERM TUBE (R-03 NIPPLE + R-04TI)	SA213T11 + SA213T11	69.85	5.08	GTAW + SMAW	5.08 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							952	17510	8317	-	-								
3	0-00-027-35557 0-00-027-35544	LTRH I/L TERM TUBE +LTRH LWR ASSY (R-04TI + R-04L)	SA213T11 + SA213T11	69.85	5.08	GTAW + SMAW	5.08 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							952	17510	8317	-	-								
4	0-00-027-35557 0-00-027-35544	LTRH LWR ASSY +LTRH LWR INTER ASSY (R-04L + R-04LI)	SA213T11 + SA213T11	69.85	5.08	GTAW + SMAW	5.08 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	100% RT				
							952	17510	8317	-	-								
5	0-00-027-35557 0-00-027-35544	LTRH LWR INTER ASSY+LTRH INTER ASSY (R-04LI + R-04I)	SA213T11 + SA213T22	69.85	5.08	GTAW + SMAW	5.08 ▽	ER80S-B2	E8018-B2			1011/01	150	Nil	100% RT				
							952	17510	8317	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-17-RH-EWS	1	1/6

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 17

CUST No : 1834,1835

PG NAME : Reheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Reheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
6	0-00-027-35557 0-00-027-35544	LTRH INTER ASSY +LTRH UPR INTER ASSY (R-04I + R-04UI)	SA213T22 + SA213T22	69.85	5.08	GTAW + SMAW	5.08 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	100% RT				
							952	17510	8317	-	-								
7	0-00-027-35557 0-00-027-35544	LTRH UPR INTER ASSY+LTRH UPR ASSY (R-04UI + R-04U)	SA213T22 + SA213T22	69.85	5.08	GTAW + SMAW	5.08 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	100% RT				
							952	17510	8317	-	-								
8	0-00-027-35573 0-00-027-35544	LTRH UPR ASSY + LTRH PENDANT LOOSE TUBE (R-04U + R-07B-LT)	SA213 UNS S30432 + SA213 UNS S30432	63.5	4	GTAW	4 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							952	71350	-	-	-								
9	0-00-027-35573 0-00-027-35544	LTRH PENDANT LOOSE TUBE+ LTRH PENDANT ASSY (R-07B-LT + R-07)	SA213 UNS S30432 + SA213 UNS S30432	63.5	4	GTAW	4 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							952	71350	-	-	-								
10	0-00-027-35573 0-00-027-35544	LTRH PENDANT ASSY +LTRH O/L TERM TUBE (R-07 + R-07TO)	SA213 UNS S30432 + SA213 UNS S30432	63.5	4	GTAW	4 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							952	71350	-	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-17-RH-EWS	1	2/6

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 17

CUST No : 1834,1835

PG NAME : Reheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Reheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
11	0-00-027-35573 0-00-027-35544	LTRH O/L TERM TUBE +LTRH O/L HDR NIPPLE (R-07TO (1, 8) + R-08 NIPPLE)	SA213 UNS S30432 + SA213 UNS S30432	50.8	4	GTAW	4 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							238	14270	-	-	-								
12	0-00-027-35573 0-00-027-35544	LTRH O/L TERM TUBE +LTRH O/L HDR NIPPLE (R-07TO (2-7) + R-08 NIPPLE)	SA213 UNS S30432 + SA213 UNS S30432	44.45	4.2	GTAW	4.2 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							714	40491	-	-	-								
13	0-00-027-35548 1-17-174-00671	LTRH O/L HDR+ LINK TO RH DESH (R-08 + R-09)	SA335P91 + SA234WP91	813	40	GTAW + SMAW	35.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	654	195	260	791			100					
14	0-00-027-35548 1-17-174-00671	LINK TO RH DESH+ LINK TO RH DESH (R-09 + R-09)	SA335P91 + SA234WP91	813	40	GTAW + SMAW	35.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	654	195	260	791			100					
15	0-00-027-35548 0-17-900-00729	LINK TO RH DESH+ RH DESH (R-09 + R-10)	SA335P91 + SA335P91	813	40	GTAW + SMAW	35.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	654	195	260	791			100					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-17-RH-EWS	1	3/6

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 17

CUST No : 1834,1835

PG NAME : Reheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Reheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
16	0-00-027-35548 0-17-900-00729 0-17-174-00801	RH DESH+ LINK TO FINISH RH (R-10 + R-11)	SA335P91 + SA335P91	813	40	GTAW + SMAW	35.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	654	195	260	791			100					
17	0-00-027-35548 0-17-174-00801	LINK TO FINISH RH+ LINK TO FINISH RH (R-11 + R-11)	SA335P91 + SA234WP91	813	40	GTAW + SMAW	35.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							7	2286	680	908	2767			100					
18	0-00-027-35547 0-17-174-00801	LINK TO FINISH RH+ FINISH RH I/L HDR (R-11 + R-12)	SA234WP91 + SA335P91	609.6	40	GTAW + SMAW	35.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	476	146	195	583			100					
19	0-00-027-35559 0-00-027-35560	FINISH RH I/L HDR NIPP+ FINISH RH I/L TERM TUBES (R-12 NIPPLE + R-13TI (1))	SA213T22 + SA213T22	76.2	6.6	GTAW + SMAW	6.6 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	20%RT + 80% PAUT				
							51	991	770	-	-								
20	0-00-027-35559 0-00-027-35560	FINISH RH I/L HDR NIPP+ FINISH RH I/L TERM TUBES (R-12 NIPPLE + R-13TI (2-3))	SA213T22 + SA213T22	63.5	5.59	GTAW + SMAW	5.59 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	100% RT				
							102	1643	956	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-17-RH-EWS	1	4/6

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 17

CUST No : 1834,1835

PG NAME : Reheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Reheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
21	0-00-027-35559 0-00-027-35560	FIN. RH I/L HDR NIPP+ FINISH RH I/L TERM TUBES (R-12 NIPPLE + R-13TI (4-5))	SA213T22 + SA213T22	50.8	4.5	GTAW + SMAW	4.5 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	100% RT				
							102	1310	529	-	-								
22	0-00-027-35559 0-00-027-35560	FIN RH I/L HDR NIPP+ FINISH RH I/L TERM TUBES (R-12 NIPPLE + R-13TI (6-14))	SA213T22 + SA213T22	44.5	4.5	GTAW + SMAW	4.5 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	100% RT				
							459	4992	2085	-	-								
23	0-00-027-35559 0-00-027-35560	FINISH RH I/L TERM TUBES + FINISH RH ASSY (R-13TI (1) + R-13(1))	SA213 UNS S30432 + SA213 UNS S30432	76.2	5.08	GTAW	5.08 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							51	6800	-	-	-								
24	0-00-027-35559 0-00-027-35560	FINISH RH I/L TERM TUBES + FINISH RH ASSY (R-13TI (2-14) + R-13(2-14))	SA213 UNS S30432 + SA213 UNS S30432	63.5	4	GTAW	4 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							663	49691	-	-	-								
25	0-00-027-35559 0-00-027-35560	FINISH RH ASSY+FIN. RH O/L TERM TUBES (R-13 (1) + R-13TO (1))	SA213 UNS S30432 + SA213 UNS S30432	76.2	5.08	GTAW	5.08 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							51	6800	-	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-17-RH-EWS	1	5/6

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 17

CUST No : 1834,1835

PG NAME : Reheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Reheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
26	0-00-027-35559 0-00-027-35560	FIN RH ASSY+FIN. RH O/L TERM TUBES (R-13 (2-14) + R-13TO (2-14))	SA213 UNS S30432 + SA213 UNS S30432	63.5	4	GTAW	4 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							663	49691	-	-	-								
27	0-00-027-35559 0-00-027-35560	FIN RH O/L TERM TUBE+FINISH RH O/L HDR NIPPLE (R-13TO (1-14) + R-14 NIP)	SA213 UNS S30432 + SA213 UNS S30432	57.15	4.2	GTAW	4.2 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							714	52060	-	-	-								
28		GAMMA PLUG	SA335P12 + SA182F22CL3			SMAW	7 ◺	-	E8018-B2			1102/01	200	Nil	100% LPI or MPI				
							2	-	1	-	-							FOR T- (25-75) MM	

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-17-RH-EWS	1	6/6

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP. in °C	PWHT TEMP. in °C	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.					TIME in mins		SPEC. NO	ACC NORM REF.		
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0								
1	2-12-850-03559 TO 2-12-850-03566 0-00-027-35568	SEPARATOR+ SH CONNECTING PIPE (F-31 NOZZLE + S-01)	SA182F22CL3 + SA335P12	273	50	GTAW + SMAW	43.75 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% RT 100% MPI/LPI			NDT after SR	01
							8	666	157	257	1020			125					
2	2-12-850-03559 TO 2-12-850-03566	SH CONN. PIPE+ SH CONN. PIPE (S-01 + S-01)	SA335P12 + SA234WP12CL1	273	50	GTAW + SMAW	43.75 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI			NDT after SR	01
							32	2661	627	1027	4079			125					
3	2-12-850-03559 TO 2-12-850-03566 0-00-027-35569	SH CONNECTING PIPE + SH FURNACE ROOF I/L HDR (S-01 + S-02 TEE)	SA335P12 + SA234WP12CL1	273	50	GTAW + SMAW	43.75 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI			NDT after SR	01
							8	666	157	257	1020			125					
4	0-00-027-35549 0-00-027-35569	SH FURNACE ROOF I/L HEADER + SH FURN ROOF PANEL/LT (S-02 NIPPLE + S-03/S-03LT)	SA213T12 + SA213T12	54	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							208	2407	1928	300	-								
5	0-00-027-35549 0-00-027-35569	SH FURN ROOF I/L HDR /SH FURN ROOF PANEL + LOOSE TUBE (S-02 NIPP/S-03 + S-03LT)	SA213T12 + SA213T12	50.8	8.64	GTAW + SMAW	8.64 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							4	42	34	8	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	1/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
6	0-00-027-35549 0-00-027-35569	SH FURN ROOF PNL LOOSE TUBE +SH FURN ROOF PANEL (S-03LT + S-03)	SA213T12 + SA213T12	54	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							32	371	297	47	-								
7	0-00-027-35549 0-00-027-35569	SH FURN ROOF PANEL +SH FURN ROOF TUBES (S-03 + S-04A)	SA213T12 + SA213T12	60.3	10.16	GTAW + SMAW	10.16 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							210	2577	2043	796	-								
8	0-00-027-35549 0-00-027-35569	SH FURN ROOF TUBE +SH FURN ROOF TUBES (S-04A + S-04B)	SA213T12 + SA213T12	60.3	10.16	GTAW + SMAW	10.16 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							210	2577	2043	796	-								
9	0-00-027-35549 0-00-027-35569	SH FURN ROOF TUBES+SH FURN ROOF O/L HDR (S-04B + S-05 NIPPLE)	SA213T12 + SA213T22	60.3	10.16	GTAW + SMAW	10.16 ▽	ER80S-B2	E8018-B2			1012/04	150	680-720	20%RT + 80% PAUT				
							210	2577	2043	796	-			30					
10	0-00-027-35569 0-00-027-35579	SH FURN ROOF O/L HDR ELBOW+BP EXT SIDE I/L HDR (S-05 ELBOW + S-06 TEE)	SA234WP22CL1 + SA234WP12CL1	406.4	80	GTAW + SMAW	70.00 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% (ISRT+UT) 100% MPI/LPI				
							2	237	59	96	818			200				NDT after SR	01

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	2/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
11	0-00-027-35579	BP EXT SIDE I/L HDR+BP EXT SIDE WALL PANEL (S-06 NIPPLE + S-07 L&R)	SA213T12 + SA213T12	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							172	1535	1968	-	-								
12	0-00-027-35579	BP EXT SIDE WALL PANEL LOOSE TUBES + BP EXT SIDE WALL PANEL (S-07 L&R LT+ S-07 L&R)	SA213T12 + SA213T12	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							26	232	298	-	-								
13	0-00-027-35579	BP EXT SIDE WALL PANEL+BP EXT SIDE FLOOR PANEL (S-07 L&R + S-08 L&R)	SA213T12 + SA213T12	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							172	1535	1968	-	-								
14	0-00-027-35579	BP EXT SIDE FLOOR PANEL + BP EXT SIDE FLOOR PANEL (S-08 L&R + S-08TOA/B)	SA213T12 + SA213T12	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							172	1535	1968	-	-								
15	0-00-027-35579 0-00-027-36584	BP EXT SIDE FLOOR PANEL + BP EXT SIDE FLOOR PANEL LOOSE TUBES (S-08TOA/B + S-08 LT)	SA213T12 + SA213T12	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							172	1535	1968	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	3/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
16	0-00-027-35579 0-00-027-36584	BP EXT SIDE FLOOR PANEL LOOSE TUBES + BP EXT SIDE FLOOR O/L HDR (S-08 LT + S-09 NIPP)	SA213T12 + SA213T12	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							172	1535	1968	-	-								
17	0-00-027-35575	BP EXT SIDE FLOOR O/L HDR+ SC FURN ARCH SUPPT I/L HDR (S-09 + S-09A TEE)	SA335P12 + SA234WP12CL1	406.4	85	GTAW + SMAW	74.38 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% (ISRT+UT) 100% MPI/LPI				
							1	115	30	48	447			215				NDT after SR	01
18	0-00-027-35575	SC FURN ARCH SUPPORT I/L HDR+SC FURN ARCH SUPPT LINK (S-09A NOZZLE + S-09B)	SA182F12CL2 + SA335P12	168.3	47.6	GTAW + SMAW	41.65 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							20	786	242	396	1205			120				NDT after SR	01
19	0-00-027-35575	SC FURN ARCH SUPT LINK+SC FURN ARCH SUPPT O/L HDR (S-09B + S-09C NOZZLE)	SA335P12 + SA182F12CL2	168.3	47.6	GTAW + SMAW	41.65 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							20	786	242	396	1205			120				NDT after SR	01
20	0-00-027-35575	SC FURN ARCH SUPT O/L HDR + BP EXT SIDE CONNECTING LINK (S-09C TEE + S-10)	SA234WP12CL1 + SA335P12	323.9	60	GTAW + SMAW	52.50 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							2	196	47	77	410			150				NDT after SR	01

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	4/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0			in mins		SPEC. NO	ACC NORM		
21	0-12-184-03706 0-00-027-35571	BP EXT SIDE CONN. LINK+ BP EXT SIDE CONN. LINK (S-10 + S-10)	SA234WP12CL1 + SA335P12	323.9	60	GTAW + SMAW	52.50 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							12	1173	279	457	2457			150				NDT after SR	01
22	0-12-184-03706 0-00-027-35571	BP EXT SIDE CONN. LINK+ BP LWR FRONT HDR (S-10 + S-14)	SA335P12 + SA335P22	323.9	60	GTAW + SMAW	52.50 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% RT 100% MPI/LPI				
							2	196	47	77	410			150				NDT after SR	01
23	1-12-184-02197 0-00-027-35575	BP EQUALIZING LINE+BP EXT SIDE FLOOR O/L HDR/ EXT SIDE LINK (S-09D + S-09/S-10)	SA213T12 + SA213T12	38.1	6.6	GTAW + SMAW	6.6 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							2	16	16	-	-								
24	1-12-184-02197 0-00-027-35575	BP EQUALIZING LINE+BP EQUALIZING LINE (S-09D + S-09D)	SA213T12 + SA213T12	38.1	6.6	GTAW + SMAW	6.6 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							6	46	46	-	-								
25	0-00-027-35579	BP EXT SIDE I/L HDR +BP UPR SIDE I/L HDR (S-06 TEE + S-11 -L&R)	SA234WP12CL1 + SA335P12	406.4	85	GTAW + SMAW	74.38 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% (ISRT+UT) 100% MPI/LPI				
							2	230	59	96	893			215				NDT after SR	01

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	5/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
26	0-00-027-35601	BP UPR SIDE I/L HDR +BP UPR SIDE WALL PANEL (S-11 NIPPLE + S-12U L&R)	SA213T12 + SA213T12	50.8	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							278	2941	2394	384	-								
27	0-00-027-35601	BP UPR SIDE WALL PANEL+ BP INTER SIDE WALL PANEL (S-12U L&R + S-12I L&R)	SA213T12 + SA213T12	50.8	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							278	2941	2394	384	-								
28	0-00-027-35601	BP INTER SIDE WALL PANEL+ BP LWR SIDE WALL PANEL (S-12I L&R + S-12L L&R)	SA213T12 + SA213T12	50.8	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							278	2941	2394	384	-								
29	0-00-027-35601	LTRH OPENING LOOSE TUBES L&R	SA213T12 + SA213T12	50.8	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							40	424	345	56	-								
30	0-00-027-35601	BP LWR SIDE WALL PANEL + BP LWR SIDE WALL PANEL LOOSE TUBES (S-12L L&R + S-13 LT)	SA213T12 + SA213T22	50.8	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1012/04	150	680-720	20%RT + 80% PAUT				
							16	170	138	23	-			30					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	6/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
31	0-00-027-35601	BP LWR SIDE WALL PANEL+ BP LOWER SIDE HDR NIPPLES (S-12L L&R + S-13 L&R NIPPLE)	SA213T12 + SA213T22	50.8	8.13	GTAW + SMAW	8.13 ▽	ER80S-B2	E8018-B2			1012/04	150	680-720	20%RT + 80% PAUT				
							262	2772	2256	362	-			30					
32	0-00-027-35601	BP LWR SIDE WALL PANEL LOOSE TUBES + BP LOWER SIDE HDR NIPPLES (S-13 LT + S-13 L&R NIPPLE)	SA213T22 + SA213T22	50.8	8.13	GTAW + SMAW	8.13 ▽	ER90S-B3	E9018-B3			1014/03	150	680-720	20%RT + 80% PAUT				
							16	170	138	23	-			30					
33	0-00-027-35601 0-00-027-35572	BP LWR FRONT WALL + BP LWR FRONT WALL PANEL LOOSE TUBES (S-15L + S-14LT/S-13 LT)	SA213T12 + SA213T22	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1011/01	150	Nil	20%RT + 80% PAUT				
							12	108	138	-	-								
34	0-00-027-35601	BP LWR FRONT HDR+ BP LOWER FRONT WALL PANEL (S-14 NIPPLE + S-15L)	SA213T22 + SA213T12	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1011/01	150	Nil	20%RT + 80% PAUT				
							148	1321	1694	-	-								
35	0-00-027-35601 0-00-027-35572	BP LWR FRONT WALL PANEL LOOSE TUBES+ BP LWR FRONT/SIDE HDR(S-14LT/S-13LT + S-14/S-13)	SA213T22 + SA213T22	44.45	7.62	GTAW + SMAW	7.62 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	20%RT + 80% PAUT				
							12	108	138	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	7/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
36	0-00-027-35601	BP LWR FRONT WALL PANEL+ BP UPPER FRONT WALL PANEL (S-15L + S-15U)	SA213T12 + SA213T12	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							160	1428	1831	-	-								
37	0-00-027-35601	BP UPR FRONT WALL PANEL+BP UPR FRONT WALL PANEL (S-15U + S-16 PANEL)	SA213T12 + SA213T12	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							160	1428	1831	-	-								
38	0-00-027-35601	BP UPR FRONT WALL PANEL+BP FRONT SCREEN TUBES (S-16 PANEL + S-16)	SA213T12 + SA213T12	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							160	1428	1831	-	-								
39	0-00-027-35601 0-00-027-35569	BP FRONT SCREEN TUBES+ BP FRONT O/L HDR (S-16 + S-22 NIPPLE)	SA213T12 + SA213T22	44.45	7.62	GTAW + SMAW	7.62 ▽	ER80S-B2	E8018-B2			1011/01	150	Nil	20%RT + 80% PAUT				
							160	1428	1831	-	-								
40	0-00-027-35569 0-00-027-35558	BP FRONT O/L HDR+ BP ROOF PANEL (S-22 NIPPLE + S-21)	SA213T22 + SA213T12	48.3	9.2	GTAW + SMAW	9.2 ▽	ER80S-B2	E8018-B2			1012/04	150	680-720	20%RT + 80% PAUT				
							160	1462	1226	360	-			30					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	8/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
41	0-00-027-35601	BP ROOF PANEL+ BP UPPER REAR WALL PANEL (S-21 + S-20U)	SA213T12 + SA213T12	48.3	9.2	GTAW + SMAW	9.2 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							160	1462	1226	360	-								
42	0-00-027-35601	BP UPR REAR WALL PANEL+ BP INTER REAR WALL PANEL (S-20U + S-20I)	SA213T12 + SA213T12	48.3	9.2	GTAW + SMAW	9.2 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							160	1462	1226	360	-								
43	0-00-027-35601	BP INTER REAR WALL PANEL+ BP LOWER REAR WALL PANEL (S-20I + S-20L)	SA213T12 + SA213T12	48.3	9.2	GTAW + SMAW	9.2 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							160	1462	1226	360	-								
44	0-00-027-35601 0-00-027-35572	BP LOWER REAR WALL PANEL + BP LOWER REAR WALL PANEL LOOSE TUBES (S-20L + S-13LT/S-17LT)	SA213T12 + SA213T22	48.3	9.2	GTAW + SMAW	9.2 ▽	ER80S-B2	E8018-B2			1012/04	150	680-720	20%RT + 80% PAUT				
							8	74	62	18	-			30					
45	0-00-027-35601 0-00-027-35572	BP LWR REAR WALL + BP LWR REAR HDR (S-20L+S-17 NIPP)	SA213T12 + SA213T22	48.3	9.2	GTAW + SMAW	9.2 ▽	ER80S-B2	E8018-B2			1012/04	150	680-720	20%RT + 80% PAUT				
							152	1389	1165	342	-			30					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	9/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0			in mins		SPEC. NO	ACC NORM		
46	0-00-027-35601 0-00-027-35572	BP LOWER REAR WALL PANEL LOOSE TUBES + BP LWR REAR HDR (S-13LT/S-17LT + S-17NIPP)	SA213T22 + SA213T22	48.3	9.2	GTAW + SMAW	9.2 ▽	ER90S-B3	E9018-B3			1014/03	150	680-720	20%RT + 80% PAUT				
							8	74	62	18	-			30					
47	0-00-027-35572	BP LWR FRONT HDR+ BP LWR SIDE HDRS (S-14 + S-13 ELBOW L&R)	SA335P91 + SA234WP91	406.4	80	GTAW + SMAW	70.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	237	98	130	1145			200					
48	0-00-027-35572	BP LWR SIDE HDRS+ BP LWR REAR HDR (S-13 ELBOW L&R+ S-17)	SA234WP91 + SA335P91	406.4	80	GTAW + SMAW	70.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	237	98	130	1145			200					
49	0-00-027-35569	BP FRONT O/L HDR + SPOOL PIPE	SA234WP22CL1 + SA335P12	457	75	GTAW + SMAW	65.62 ▽▽	ER80S-B2	E8018-B2			1012/04	150	680-720	100% (ISRT+UT) 100% MPI/LPI				
							2	289	66	108	855			190				NDT after SR	01
50	0-00-027-35569	BP FRONT O/L HDR SPOOL PIPE + LINK FROM BP FRNT O/L HDR (S-22 SPOOL PIPE + S-25A)	SA335P12 + SA335P12	457	75	GTAW + SMAW	65.62 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% (ISRT+UT) 100% MPI/LPI				
							2	289	66	108	855			190				NDT after SR	01

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	10/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
51	1-12-852-02195 0-00-027-35548	LINK FROM BP FRNT O/L HDR+LINK FROM BP FRNT O/L HDR (S-25A + S-25A)	SA335P12 + SA234WP12CL1	457	75	GTAW + SMAW	65.62 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% (ISRT+UT) 100% MPI/LPI				
							4	578	132	215	1709			190				NDT after SR	01
52	1-12-852-02195 0-00-027-35548	LINK FROM BP FRNT O/L HDR+ LINK TO PLATEN SH (S-25A + S25B)	SA335P12 + SA335P12	457	75	GTAW + SMAW	65.62 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% (ISRT+UT) 100% MPI/LPI				
							2	289	66	108	855			190				NDT after SR	01
53	1-12-852-02196 0-00-027-35547	LINK TO PLATEN SH+ LINK TO PLATEN SH (S-25B + S-25B)	SA335P12 + SA234WP12CL1	457	75	GTAW + SMAW	65.62 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% (ISRT+UT) 100% MPI/LPI				
							4	578	132	215	1709			190				NDT after SR	01
54	1-12-852-02196 0-00-027-35547	LINK TO PLATEN SH+ SH PLATEN FRONT I/L HDR (S-25B + S-26 TEE)	SA335P12 + SA234WP12CL1	457	75	GTAW + SMAW	65.62 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% (ISRT+UT) 100% MPI/LPI				
							2	289	66	108	855			190				NDT after SR	01
55	0-12-187-03715 0-00-027-35547	BP BYPASS PIPE+ LINK TO SH PLATEN (S-24 + S-25B)	SA335P12 + SA182F12CL2	273	45	GTAW + SMAW	39.38 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI				
							2	174	40	65	206			115				NDT after SR	01

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	11/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
56	0-12-187-03715 0-00-027-35547	BP BYPASS PIPE + LINK FROM SH CONNECTING PIPE (S-24 + S-01 TEE)	SA335P12 + SA234WP12CL1	273	45	GTAW + SMAW	39.38 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI			NDT after SR	01
							8	696	157	257	821			115					
57	0-12-187-03715 0-00-027-35547	BP BYPASS PIPE+ BP BYPASS PIPE (S-24 + S-24)	SA335P12 + SA335P12	273	45	GTAW + SMAW	39.38 ▽▽	ER80S-B2	E8018-B2			1010/06	150	650-670	100% RT 100% MPI/LPI			NDT after SR	01
							20	1740	392	642	2051			115					
58	0-00-027-35561 0-00-027-35562	SH PLATEN FRONT I/L HDR+SH PLATEN FRONT I/L TERM TUBE (S-26 NIPPLE + S-27TI(1))	SA213T22 + SA213T22	50.8	8.64	GTAW + SMAW	8.64 ▽	ER90S-B3	E9018-B3			1014/03	150	680-720	20%RT + 80% PAUT				
							34	349	286	62	-			30					
59	0-00-027-35561 0-00-027-35562	SH PLATEN FRONT I/L HDR+SH PLATEN FRONT I/L TERM TUBE (S-26 NIPPLE + S-27TI (2-3))	SA213T22 + SA213T22	44.5	7.1	GTAW + SMAW	7.1 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	20%RT + 80% PAUT				
							68	630	685	-	-								
60	0-00-027-35561 0-00-027-35562	SH PLATEN FRONT I/L HDR+SH PLATEN FRONT I/L TERM TUBE (S-26 NIPPLE + S-27TI (4-18))	SA213T22 + SA213T22	33.4	6.6	GTAW + SMAW	6.6 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	20%RT + 80% PAUT				
							510	3122	3375	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	12/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
61	0-00-027-35561 0-00-027-35562	SH PLATEN FRONT I/L TERM TUBE+SH PLATEN FRONT ASSY (S-27TI(1) + S-27(1))	SA213T22 + SA213T22	50.8	8.64	GTAW + SMAW	8.64 ▽	ER90S-B3	E9018-B3			1014/03	150	680-720	100% RT				
							34	349	286	62	-			30					
62	0-00-027-35561 0-00-027-35562	SH PLATEN FRONT I/L TERM TUBE+SH PLATEN FRONT ASSY (S-27TI(2-3) + S-27(2-3))	SA213T22 + SA213T22	44.5	7.1	GTAW + SMAW	7.1 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	100% RT				
							68	630	685	-	-								
63	0-00-027-35561 0-00-027-35562	SH PLATEN FRONT I/L TERM TUBE+SH PLATEN FRONT ASSY (S-27TI(4-18) + S-27(4-18))	SA213T22 + SA213T22	33.4	6.6	GTAW + SMAW	6.6 ▽	ER90S-B3	E9018-B3			1013/02	150	Nil	100% RT				
							510	3122	3375	-	-								
64	0-00-027-35561 0-00-027-35562	SH PLATEN FRONT ASSY+ SH PLATEN FRONT O/L TERM TUBE (S-27 (1) + S-27TO (1))	SA213 UNS S30432 + SA213 UNS S30432	50.8	8.64	GTAW	8.64 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							34	4683	-	-	-								
65	0-00-027-35561 0-00-027-35562	SH PLATEN FRONT ASSY+ SH PLATEN FRONT O/L TERM TUBE (S-27 (2-18) + S-27TO (2-18))	SA213 UNS S30432 + SA213 UNS S30432	44.45	7.11	GTAW	7.11 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							578	48606	-	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	13/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
66	0-00-027-35561 0-00-027-35562	SH PLATEN FRONT O/L TERM TUBE+ SH PLATEN FRONT O/L HDR (S-27TO (1) + S-28 NIPPLE)	SA213 UNS S30432 + SA213 UNS S30432	50.8	8.64	GTAW	8.64 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							34	4683	-	-	-								
67	0-00-027-35561 0-00-027-35562	SH PLATEN FRONT O/L TERM TUBE+ SH PLATEN FRONT O/L HDR (S-27TO (2-18) + S-28 NIPPLE)	SA213 UNS S30432 + SA213 UNS S30432	44.45	7.11	GTAW	7.11 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							578	48606	-	-	-								
68	0-12-178-03679 0-00-027-35547	SH PLATEN FRONT O/L HDR+ LINK TO SH DESUPERHEATER-1 (S-28 TEE + S-29)	SA234WP91 + SA335P91	559	80	GTAW + SMAW	70.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	371	134	179	1663			200					
69	0-12-178-03679 0-00-027-35547	LINK TO SH DESH-1+ LINK TO SH DESH-1 (S-29 + S-29)	SA335P91 + SA234WP91	559	80	GTAW + SMAW	70.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							6	1111	401	535	4987			200					
70	0-12-178-03679 0-00-027-35547	LINK TO SH DESH-1+ SH DESH-1 (S-29 + S-30)	SA335P91 + SA335P91	559	80	GTAW + SMAW	70.00 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	371	134	179	1663			200					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	14/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
71	0-12-178-03680 0-00-027-35547	SH DESH-1+ LINK FROM SH DESH-1 (S-30 + S-31)	SA335P91 + SA335P91	558.8	76.2	GTAW + SMAW	66.68 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	376	134	179	1544			195					
72	0-12-178-03680 0-00-027-35547	LINK FROM SH DESH-1+ LINK FROM SH DESH-1 (S-30 + S-30)	SA335P91 + SA234WP91	558.8	76.2	GTAW + SMAW	66.68 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	376	134	179	1544			195					
73	0-12-178-03680 0-00-027-35547	LINK FROM SH DESH-1+ SH PLATEN REAR I/L HDR (S-31 + S-32 TEE)	SA335P91 + SA234WP91	558.8	75	GTAW + SMAW	65.62 ▽▽	ER90S-B9	E9015-B91			1050/06	220	740-770	100% UT 100% MPI			NDT after SR; 100% HC, 180 HB TO 300HB	
							2	378	134	179	1507			190					
74	0-00-027-35563 0-00-027-35564	SH PLATEN REAR I/L HDR+ SH PLATEN REAR I/L TERM TUBE (S-32 NIPPLE + S-33TI (1))	SA213 UNS S30432 + SA213 UNS S30432	50.8	8.64	GTAW	8.64 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							34	4683	-	-	-								
75	0-00-027-35563 0-00-027-35564	SH PLATEN REAR I/L HDR+ SH PLATEN REAR I/L TERM TUBE (S-32 NIPPLE + S-33TI (2-18))	SA213 UNS S30432 + SA213 UNS S30432	44.45	7.11	GTAW	7.11 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							578	48606	-	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	15/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
76	0-00-027-35563 0-00-027-35564	SH PLATEN REAR I/L TERM TUBE+ SH PLATEN REAR ASSY (S-33TI (1) + S-33 (1))	SA213 UNS S30432 + SA213 UNS S30432	50.8	8.64	GTAW	8.64 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							34	4683	-	-	-								
77	0-00-027-35563 0-00-027-35564	SH PLATEN REAR I/L TERM TUBE+ SH PLATEN REAR ASSY (S-33TI (2-18) + S-33 (2-18))	SA213 UNS S30432 + SA213 UNS S30432	44.45	7.11	GTAW	7.11 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							578	48606	-	-	-								
78	0-00-027-35563 0-00-027-35564	SH PLATEN REAR ASSY+ SH PLATEN REAR O/L TERM TUBE (S-33(1)+S-33TO (1))	SA213 UNS S30432 + SA213 UNS S30432	50.8	8.64	GTAW	8.64 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							34	4683	-	-	-								
79	0-00-027-35563 0-00-027-35564	SH PLATEN REAR ASSY+ SH PLATEN REAR O/L TERM TUBE (S-33 (2-18) + S-33TO (2-18))	SA213 UNS S30432 + SA213 UNS S30432	44.45	7.11	GTAW	7.11 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	100% RT				
							578	48606	-	-	-								
80	0-00-027-35563 0-00-027-35564	SH PLATEN REAR O/L TERM TUBE+ SH PLATEN REAR O/L HDR (S-33TO (1) + S-34 NIPPLE)	SA213 UNS S30432 + SA213 UNS S30432	50.8	8.64	GTAW	8.64 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							34	4683	-	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	16/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
81	0-00-027-35563 0-00-027-35564	SH PLATEN REAR O/L TERM TUBE+ SH PLATEN REAR O/L HDR (S-33TO(2-3) + S-34 NIPPLE)	SA213 UNS S30432 + SA213 UNS S30432	44.45	7.6	GTAW	7.6 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							68	6461	-	-	-								
82	0-00-027-35563 0-00-027-35564	SH PLATEN REAR O/L TERM TUBE+ SH PLATEN REAR O/L HDR (S-33TO (4-18) + S-34 NIPPLE)	SA213 UNS S30432 + SA213 UNS S30432	44.45	8.1	GTAW	8.1 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							510	54502	-	-	-								
83	0-12-179-03684	SH PLATEN REAR O/L HDR+ LINK FROM SH DESUPERHEATER-2 (S-34 TEE + S-35)	SA234WP92 + SA335P92	559	85	GTAW + SMAW	74.38 ▽▽	ER90S-B92	E9015-B92			1056/04	220	755 ± 15	100% UT 100% MPI			NDT after SR; 100% HC, 186 HB TO 300HB	
							2	363	134	179	1822			215					
84	0-12-179-03684	LINK FROM SH DESH-2 +LINK FROM SH DESH-2 (S-35 + S-35)	SA234WP92 + SA335P92	559	85	GTAW + SMAW	74.38 ▽▽	ER90S-B92	E9015-B92			1056/04	220	755 ± 15	100% UT 100% MPI			NDT after SR; 100% HC, 186 HB TO 300HB	
							4	726	268	357	3644			215					
85	0-12-179-03684	LINK FROM SH DESH-2+ SH DESUPERHEATER-2 (S-35 + S-36)	SA335P92 + SA335P92	559	85	GTAW + SMAW	74.38 ▽▽	ER90S-B92	E9015-B92			1056/04	220	755 ± 15	100% UT 100% MPI			NDT after SR; 100% HC, 186 HB TO 300HB	
							2	363	134	179	1822			215					

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	17/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
86	0-12-179-03685	SH DESH-2+ LINK TO FINISH SH (S-36 + S-37)	SA335P92 + SA335P92	559	85	GTAW + SMAW	74.38 ▽▽	ER90S-B92	E9015-B92			1056/04	220	755 ± 15	100% UT 100% MPI			NDT after SR; 100% HC, 186 HB TO 300HB	
							2	363	134	179	1822			215					
87	0-12-179-03685	LINK TO FINISH SH+ LINK TO FINISH SH (S-37 + S-37)	SA234WP92 + SA335P92	559	85	GTAW + SMAW	74.38 ▽▽	ER90S-B92	E9015-B92			1056/04	220	755 ± 15	100% UT 100% MPI			NDT after SR; 100% HC, 186 HB TO 300HB	
							3	544	201	268	2733			215					
88	0-12-179-03685	LINK TO FINISH SH+ FINISH SH I/L HDR (S-37 + S-38 TEE)	SA335P92 + SA234WP92	559	80	GTAW + SMAW	70.00 ▽▽	ER90S-B92	E9015-B92			1056/04	220	755 ± 15	100% UT 100% MPI			NDT after SR; 100% HC, 186 HB TO 300HB	
							2	371	134	179	1663			200					
89	0-00-027-35565 0-00-027-35566	FINISH SH I/L HDR+ FINISH SH I/L TERM TUBE (S-38 NIPPLE + S-39TI (1-11))	SA213 UNS S30432 + SA213 UNS S30432	44.45	7.11	GTAW	7.11 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							1144	96203	-	-	-								
90	0-00-027-35565 0-00-027-35566	FINISH SH I/L TERM TUBE+ FINISH SH FRONT ASSY (S-39TI (1) + S-39 (1-11))	SA213 UNS S30432 + SA213 UNS S30432	44.45	7.11	GTAW	7.11 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							1144	96203	-	-	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	18/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
91	0-00-027-35565 0-00-027-35566	FINISH SH FRONT ASSY+ FINISH SH REAR ASSY (S-39 (1) + S-40 (1))	SA213 UNS S30432 + SA213 UNS S30432	44.45	8.1	GTAW	8.1 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							104	11115	-	-	-								
92	0-00-027-35565 0-00-027-35566	FINISH SH FRONT ASSY+ FINISH SH REAR ASSY (S-39 (2-11) + S-40 (2-11))	SA213 UNS S30432 + SA213 UNS S30432	44.45	7.6	GTAW	7.6 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							1040	98807	-	-	-								
93	0-00-027-35565 0-00-027-35566	FINISH SH REAR ASSY+ FINISH SH O/L TERM TUBE (S-40 (1-11) + S-40TI (1-11)	SA213 UNS S30432 + SA213 UNS S30432	38.1	9.14	GTAW	9.14 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							1144	131277	-	-	-								
94	0-00-027-35565 0-00-027-35566	FINISH SH REAR ASSY+ FINISH SH O/L HDR (S-40 (1-11) + S-41 NIPPLE)	SA213 UNS S30432 + SA213 UNS S30432	38.1	9.14	GTAW	9.14 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							1144	131277	-	-	-								
95	0-00-027-35552 0-00-027-35553 0-00-027-35554	SC FURN ARCH SUPPT I/L HDR+ STEAM COOLED SPACER TUBE (S-09A + S-44), (S-44+S-44)	SA213T12 + SA213T12	50.8	9.14	GTAW + SMAW	9.14 ▽	ER80S-B2	E8018-B2			1009/03	150	Nil	20%RT + 80% PAUT				
							6	60	50	14	-								

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	19/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.

355-005/A
(09-09-2016)

ERECTION WELDING SCHEDULE

PG NO : 12

CUST No : 1834,1835

PG NAME : Superheater System

PROJECT : Lara Super Thermal Power Plant - Stage-II (2x800 MW)

SYSTEM DESCRIPTION : Superheater System

WELDING CODE : IBR / ASME

PRESSURE PARTS/~~NON PRESSURE PARTS~~

CUST DOC NO : 9587-001-102-QVM-Q-185 CUST DOC REV : 01

SL. NO	DRG NO. FOR WELD LOCATION & IDENTIFICATION MARK	DESCRIPTION OF PARTS TO BE WELDED	MATERIAL SPEC.	DIMENSIONS		PROCESS OF WELDING	TYPE OF WELD	ELECTRODE FILLER SPEC				WPS NO/REV NO.	MIN. PRE HEAT TEMP.	PWHT TEMP. in TIME in mins	NDT METHOD/ QUANTUM	* REF-.		REMARKS	REV
								GTAW	SMAW										
									Qty in Nos.										
				SIZE	THICK		Qty in Nos.	Qty in gms	Ø2.5	Ø3.15	Ø4.0					SPEC. NO	ACC NORM		
96	0-00-027-35552 0-00-027-35553 0-00-027-35554	SC SPACER TUBE + SC SPACER TUBE (S-44 + S-44)	SA213 UNS S30432 + SA213 UNS S30432	57.15	9.65	GTAW	9.65 ▽	Nittetsu YT304H / Super TIG 304H	-			1054/03	10	Nil	20%RT + 80% PAUT				
							49	9342	-	-	-								
97	0-00-027-35552 0-00-027-35553 0-00-027-35554	SC SPACER TUBE+SH PLATEN REAR I/L HDR (S-44 + S-32), (S-44 + S-44)	SA213T91 + SA213T91	42.4	7.11	GTAW + SMAW	7.11 ▽	ER90S-B9	E9015-B91			1036/09	220	745 ± 15	20%RT + 80% PAUT			NDT after SR; 100% HC, 180 HB TO 300HB	
							6	94	97	-	-			30					
98		GAMMA PLUG	SA335P12 + SA182F22CL3			SMAW	7 ◺	-	E8018-B2			1102/01	200	Nil	100% LPI or MPI				
							157	-	40	-	-							FOR T- (25-75) MM	
99		GAMMA PLUG	SA234WP22CL1 + SA182F22CL3			SMAW	7 ◺	-	E9018-B3			1103/01	200	Nil	100% LPI or MPI				
							2	-	1	-	-							FOR T >75 MM	

PREPARED	CHECKED (W.T.C)	APPROVED	DATE	DOC NO.	REV NO :	PAGE NO.
RUDRABHATLA SAIKUMAR	MANIKANDAN C	ANAND KUMAR S	06-05-2026	1834-12-SH-EWS	1	20/20

CAUTION : THE INFMN ON THIS DOCUMENT IS THE PROPERTY OF BHEL. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO INTEREST OF BHEL.

* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98. NOTE: HARDNESS CHECK OF 3% OF TOTAL WELD JOINTS IN ALLOY STEEL PIPES (OTHER THAN GR91) TO BE CARRIED OUT (260 HV MAX).
FOR TUBE BUTT JOINTS, 10% OF TOTAL RT QUANTUM SHALL BE PERFORMED USING COMPUTERIZED RT.