



355-006/A

SUMMARY LIST OF SITE ELECTRODES

FROM
MANAGER/BOILER MOUNTING.
PE (BOILER)

TO
MANAGER/ERECTION

REF: PE(B) : BM: BARH-II
DATE : 25-04-11

PPD
(IN DUPLICATE)

PROJECT: BARH-II, 2X660 MW

CUSTOMER No.: 1700 & 1701

P.G. No: 24

P.G. NAME : BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

SL.NO.	TYPE OF ELECTRODE/WIRE	SIZE & QTY IN NOS.				TIG WIRE WT IN KG.	REMARKS.
		D 2.50	D 3.15	D 4.00	D 5.00		
01	ER 70S-A1	-	-	-	-	17.920	
02	ER 90S-B3	-	-	-	-	17.766	
03	ER 90S-B9	-	-	-	-	10.185	
04	ER 347	-	-	-	-	5.425	
05	E7018-A1	3953	5208	14110	-	-	
06	E7018-1	8480	559	-	-	-	
07	E7018	24478	824	-	-	-	
08	E9018-B3	16017	4192	1505	-	-	
09	E9015-B9	10838	9349	6848	-	-	
10	E309	38	-	-	-	-	
11	E347	6739	-	-	-	-	
12	ENiCrFe-3	75	-	-	-	-	

NOTES

1. RESERVE 25% ADDED.
2. QUANTITY GIVEN IS PER BOILER.

ENCL: ERECTION WELDING SCHEDULE SHEET : 4-24-992-08495 to 4-24-992-08518

- C.C
1. PROJECT COORDINATOR (M. ARUNMOZHIDEVAN(DGM)/ COMML.)
 2. SR.MANAGER/W.T.CENTRE. (Attn: Sri G. SUBRAMANIAN)
 3. WELDING SCHEDULE FILE.

DRG No./REV No.

4-24-992-08495/02

PREPARED	CHECKED	APPROVED/WTC	DATE	SH.NO.
K. ARULPRAKASH	C. ARIVAZHAGAN	G. SUBRAMANIAN	25-04-2011	01 / 24



FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24
P.G. DESCRIPTION } : BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

CONTRACTOR No.: -

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM, STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006

REV.NO. : 00

DATE : 25/04/2011

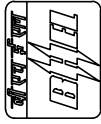
PAGE : 02 OF 24

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	HEAT TREATMENT TEMP. in °C	NDT METHOD/QUANTUM	SPEC. ACC. NO.	REF.	REMARKS
				SIZE	THICK			TIG	ARC SPEC.							
01	0-24-815-00362	PIPE WITH STUB+ TEE (OR) REDUCER (OR) VALVE	SA106 Gr.C + SA234 WPC (OR) SA216 WCB	D168.3	21.95	TIG+ARC	21.95	ER70S-A1	E 7018-A1	1005/05	100	635±15	60			
02	0-24-815-00362 0-24-815-00363 0-24-815-00371	PIPE WITH STUB+ TEE (OR) ELL (OR) REDUCER (OR) VALVE (OR) PIPE	SA106 Gr.C + SA234 WPC (OR) SA216 WCB (OR) SA106 Gr.C	D114.3	17.12	TIG+ARC	17.12	ER70S-A1	E 7018-A1	1005/05	-	635±15	45		100% RT	
03	0-24-815-00362 0-24-815-00363	VALVE + PIPE WITH STUB	SA217 C12A + SA335 P22	D114.3	17.12	TIG+ARC	17.12	ER90S-B3	E 9018 B3	1038/03	220	745±15	60			
04	0-24-815-00362 0-24-815-00363	PIPE + BEND	SA106 Gr.C + SA106 Gr.C	D33.4	9.09	TIG+ARC	9.09	ER70S-A1	E 7018-1	1003/03	-	-	-			
05	0-24-815-00362 0-24-815-00363	PIPE + VALVE (OR) STUB	SA106 Gr.C + SA 105 (OR) SA106 Gr.C	D33.4	9.09	ARC	10	-	E 7018	1105/02	-	-	-		10% MPI (OR) LPI	
06	0-24-815-00362	PIPE + PLATE	SA106 Gr.C + IS2062Fe410W		10	ARC	2.0 m	-	E 7018	1213/00	-	-	-			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARIYAZHAGAN
		DATE	DRAWING NO:
		25/04/2011	4-24-992-08496
			REV.NO.
			01

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* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98



FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION } : BOILER TRIM PIPING & SUPPORTS, SPRAY
: WATER SYSTEM, SV EXHAUST PIPE &
: SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW

CUST. Nos.: 1700 & 1701

DOC. NO. : 9560-102-01-TR-QVM-V-006

CONTRACTOR : -

REV.NO. : 00

CONTRACTOR No.: -

DATE : 25/04/2011

SYSTEM

: SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

PAGE : 03 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME. in min.	NDT METHOD/QUANTUM	SPEC. ACC. NO.	REF. ACC. NORM REF.	REMARKS
				SIZE	THICK			TIG Qty. in gms	ARC SPEC. Qty. in nos								
07	0-24-815-00364	PIPE WITH STUB	SA335 P91 +	D141.3	29.35	TIG+ARC	29.35	ER90S-B9	E9015-B9	1034/04	220	750-770	120	100% RT			
	0-24-815-00365	TEE (OR)	SA234 WP91 (OR)														
	0-24-815-00366	BEND (OR)	SA217 C12A (OR)														
	0-24-815-00367	VALVE (OR)	SA335 P91														
	0-24-815-00368	PIPE (OR)	SA335 P91														
08	0-24-815-00364	PIPE + BEND	SA335 P91 +	D33.4	9.09	TIG+ARC	9.09	ER90S-B9	E9015-B9	1050/01	220	750-770	120				
	0-24-815-00366		SA335 P91														
	0-24-815-00367		SA335 P91														
	0-24-815-00367		SA335 P91														
	0-24-815-00369		SA335 P91														
09	0-24-815-00364	PIPE + VALVE (OR) STUB	SA335 P91 +	D33.4	9.09	ARC	10	-	E9015-B9	1049/01	220	750-770	120	100% MPI (OR) LPI			
	0-24-815-00366		SA182 F91 (OR)														
	0-24-815-00367		SA335 P91														
	0-24-815-00367		SA335 P91														
	0-24-815-00369		SA335 P91														
10	0-24-815-00364	PIPE + BEND	SA335 P91 +	D21.3	7.47	TIG+ARC	7.47	ER90S-B9	E9015-B9	1050/01	220	750-770	120	100% RT			
	0-24-815-00367		SA335 P91														
	0-24-815-00373		SA335 P91														
	0-24-815-00376		SA335 P91														
	0-24-815-00376		SA335 P91														
11	0-24-815-00364	PIPE + VALVE (OR) STUB	SA335 P91 +	D21.3	7.47	ARC	8	-	E9015-B9	1049/01	220	750-770	120	100% MPI (OR) LPI			
	0-24-815-00367		SA182 F91 (OR)														
	0-24-815-00373		SA335 P91														
	0-24-815-00373		SA335 P91														
	0-24-815-00376		SA335 P91														

PREPARED

CHECKED (DESIGN)

CHECKED (W.T.C)

APPROVED

DATE

DRAWING NO:

REV.NO.

K. ARULPRAKASH

A.SHANMUGARAJU

G.SUBRAMANIAN

C.ARIYAZHAGAN

25/04/2011

4-24-992-08497

02

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24
 P.G. DESCRIPTION } BOILER TRIM PIPING & SUPPORTS, SPRAY
 WATER SYSTEM, SV EXHAUST PIPE &
 SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

CONTRACTOR No.: -

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
 STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006

REV.NO. : 00

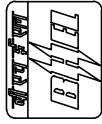
DATE : 25/04/2011

PAGE : 04 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/QUANTUM	SPEC. ACC. NO.	REF.	REMARKS
				SIZE	THICK			TIG Qty. in gms	ARC SPEC. Qty. in nos								
12	0-24-815-00371 0-24-815-00372	PIPE WITH STUB+ TEE (OR) ELL (OR) VALVE (OR) PIPE	SA106 Gr.C + SA234 WPC (OR) SA216 WCB (OR) SA106 Gr.C	D88.9	11.13	TIG+ARC	11.13	ER70S-A1	E 7018-A1	1005/05	100	635±15	30	100% RT			
13	0-24-815-00371 0-24-815-00372	VALVE + PIPE WITH STUB	SA217 C12A+ SA335 P22	D88.9	11.13	TIG+ARC	11.13	ER90S-B3	E 9018 B3	1038/03	220	730-760	60				
14	0-24-815-00371 0-24-815-00372	PIPE + BEND	SA106 Gr.C + SA106 Gr.C	D33.4	6.35	TIG+ARC	6.35	ER70S-A1	E 7018-1	1003/03	-	-	-	20% RT MIN 2 WELD/ WELDER/SHIFT			
15	0-24-815-00371 0-24-815-00372	PIPE + VALVE (OR) STUB	SA106 Gr.C + SA 105 (OR) SA106 Gr.C	D33.4	6.35	ARC	7Δ 30	- -	E 7018 80 -	1105/02	-	-	-	10% MPI (OR) LPI			
16	0-24-815-00371	PIPE + PLATE	SA106 Gr.C + IS2062Fe410W		10	ARC	5Δ 2.0 m	- -	E 7018 22 -	1213/00	-	-	-				
17	0-24-815-00373 0-24-815-00375 0-24-815-00376 0-24-815-00378	PIPE + VALVE	SA335 P91 + SA182 F91	D33.4	6.35	ARC	7Δ 28	- -	E9015-B9 60 -	1049/01	220	750-770	120	100% MPI (OR) LPI			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARIYAZHAGAN	25/04/2011	4-24-992-08498	02

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24
 BOILER TRIM PIPING & SUPPORTS, SPRAY
 P.G. DESCRIPTION } : WATER SYSTEM, SV EXHAUST PIPE &
 : SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701
 CONTRACTOR : -
 CONTRACTOR No.: -
 SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
 : STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006
 REV.NO. : 00
 DATE : 25/04/2011
 PAGE : 05 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/QUANTUM	SPEC. ACC. NO. NORM REF.	REMARKS
				SIZE	THICK			TIG	ARC SPEC.							
				Qty. in nos	Qty. in nos			Qty. in gms	Qty. in nos							
18	0-24-815-00373 0-24-815-00374 0-24-815-00375 0-24-815-00376 0-24-815-00377 0-24-815-00378	PIPE WITH STUB+ TEE (OR) ELL (OR) REDUCER (OR) VALVE (OR) PIPE (OR)	SA335 P91 + SA234 WP91 (OR) SA182 F91 (OR) SA217 C12A (OR) SA335 P91	D88.9	11.13	TIG+ARC	11.13	ER90S-B9	E9015 B9	1050/01	220	750-770	120	100% RT		
19	0-24-815-00373 0-24-815-00375 0-24-815-00376 0-24-815-00378	PIPE + BEND	SA335 P91 + SA335 P91	D33.4	6.35	TIG+ARC	6.35	ER90S-B9	E9015 B9	1050/01	220	750-770	120			
20	0-00-047-48235 TO 0-00-047-48240	PIPE + BEND	SA335 P22+ SA335 P22	D33.4	9.09	TIG+ARC	9.09	ER90S-B3	E 9018 B3	1014/02	-	680-750	30	20% RT MIN 2 WELD/ WELDER/ SHIFT		
21	0-00-047-48202 0-00-047-48203	PIPE WITH STUB+ PIPE WITH STUB OR) BEND (OR) FLAT END COVER (OR) VALVE	SA335 P22 + SA335 P22 (OR) SA182 F22CL3 (OR) SA217 WC9	D159	30	TIG+ARC	30	ER90S-B3	E9018 B3	1014/02	150	680-750	75			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARIYAZHAGAN	25/04/2011	4-24-992-08499	02

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* REFER NDE MANUAL No.PS: CMX: 002 REV.No.01/12-98



FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24
 BOILER TRIM PIPING & SUPPORTS, SPRAY
 P.G. DESCRIPTION } : WATER SYSTEM, SV EXHAUST PIPE &
 : SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701
 CONTRACTOR : -
 CONTRACTOR No.: -
 SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
 : STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006
 REV.NO. : 00
 DATE : 25/04/2011
 PAGE : 06 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/QUANTUM	REF. SPEC. ACC. NORM REF.	REMARKS	
				SIZE	THICK			TIG Qty. in gms	ARC SPEC.								
									Qty. in nos								Ø
22	0-00-047-48202 0-00-047-48203 0-00-047-48204 0-00-047-48212	PIPE + VALVE (OR) STUB	SA335 P22 + SA182 F22 (OR) SA335 P22	D33.4	9.09	ARC	10Δ	-	E 9018 B3	1020/01	200	-	-	100% MPI (OR) LPI			
23	0-00-047-48202 0-00-047-48203 0-00-047-48204 0-00-047-48212	PIPE + BEND	SA335 P22 + SA335 P22	D33.4	9.09	TIG+ARC	9.09Δ	ER90S-B3	E 9018 B3	1014/02	-	680-750	30	20% RT MIN 2 WELD/ WELDER/ SHIFT			
24	0-00-047-48204 0-00-047-48212	PIPE WITH STUB+ PIPE WITH STUB OR) BEND (OR) FLAT END COVER (OR) VALVE	SA335 P22 + SA335 P22 (OR) SA182 F22CL3 (OR) SA217 WC9		20	TIG+ARC	20W	ER90S-B3	E 9018 B3	1014/02	200	680-750	60	100% RT			
25	0-00-047-48205 0-00-047-48210	PIPE + BEND	SA213 T22 + SA213 T22	D47.63	10	TIG+ARC	10Δ	ER90S-B3	E 9018 B3	1014/02	-	680-750	30	20% RT MIN 2 WELD/ WELDER/ SHIFT			
26	0-00-047-48205 0-00-047-48210	PIPE + VALVE (OR) TEE	SA213 T22 + SA182 F22	D47.63	10	ARC	24	-	E 9018 B3	1020/01	200	-	-	100% MPI (OR) LPI			
27	0-00-047-48205	PIPE + VALVE (OR) TEE	SA213 T22 + SA182 F22	D33.4	9.09	ARC	10Δ	-	E 9018 B3	1020/01	200	-	-				

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVIAZHAGAN	25/04/2011	4-24-992-08500	01

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24
 BOILER TRIM PIPING & SUPPORTS, SPRAY
 P.G. DESCRIPTION } : WATER SYSTEM, SV EXHAUST PIPE &
 : SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701
 CONTRACTOR : -
 CONTRACTOR No.: -
 SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
 : STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006
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 PAGE : 07 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/QUANTUM	SPEC. ACC. NORM REF.	REMARKS
				SIZE	THICK			TIG	ARC SPEC.							
								Qty. in nos	Qty. in nos							
28	0-00-047-48206	PIPE + BEND	SA335 P22 + SA335 P22	D48.3	5.08	TIG+ARC	5.08V 30	ER90S-B3 294	E 9018 B3 240	1013/ 01	150	-	-	20% RT MIN 2 WELD/ WELDER/SHIFT		
29	0-00-047-48206	PIPE + VALVE (OR) TEE	SA335 P22 + SA182 F22	D48.3	5.08	ARC	5Δ 12	- -	E 9018 B3 22	1020/ 01	200	-	-	100% MPI (OR) LPI		
30	0-00-047-48206 0-00-047-48240	PIPE + VALVE (OR) TEE	SA335 P22 + SA182 F22	D33.4	6.35	ARC	7Δ 14	- -	E 9018 B3 40	1020/ 01	200	-	-			
31	0-00-047-48207	PIPE + ELL (OR) VALVE	SA335 P91 + SA234 WP91 (OR) SA217 C12A	D88.9	11.13	TIG+ARC	11.13V 32	ER90S-B9 538	E 9015 B9 256 320	1050/ 01	220	750-770	120	100% RT		
32	0-00-047-48207	PIPE + BEND	SA213 T91 + SA213 T91	D47.63	6.30	TIG+ARC	6.3V 22	ER90S-B9 203	E 9015 B9 198	1050/ 01	220	750-770	120	20% RT MIN 2 WELD/ WELDER/ SHIFT		
33	0-00-047-48207	PIPE + VALVE (OR) TEE	SA213 T91 + SA182 F91	D47.63	6.30	ARC	7Δ 12	- -	E 9015 B9 40	1049/ 01	220	750-770	120	100% MPI (OR) LPI		
34	0-00-047-48207 0-00-047-48213	PIPE + VALVE	SA335 P91 + SA182 F91	D33.4	6.35	ARC	7Δ 12	- -	E 9015 B9 40	1049/ 01	220	750-770	120			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVIAZHAGAN	25/04/2011	4-24-992-08501	02

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* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98



FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION } : BOILER TRIM PIPING & SUPPORTS, SPRAY
: WATER SYSTEM, SV EXHAUST PIPE &
: SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

REV.NO. : 00

CONTRACTOR No.: -

DATE : 25/04/2011

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

PAGE : 08 OF 24

DOC. NO. : 9560-102-01-TR-QVM-V-006

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/QUANTUM	SPEC. ACC. NO.	REF. ACC. NORM REF.	REMARKS
				SIZE	THICK			TIG	ARC SPEC.								
35	0-00-047-48208	PIPE + BEND	SA210 Gr.C + SA210 Gr.C	D47.63	8.60	TIG+ARC	8.6V 37	ER70S-A1 300	E 7018-1 296 111 -	1002/ 03	-	-	-	20% RT MIN 2 WELD/ WELDER/SHIFT			
36	0-00-047-48208	PIPE + VALVE (OR) TEE	SA210 Gr.C + SA105	D47.63	8.60	ARC	9Δ 6	- -	E 7018-1 10 11 -	1022/ 00	-	-	-	100% MPI (OR) LPI			
37	0-00-047-48226	PIPE + VALVE (OR) TEE (OR) STUB	SA106 Gr.B + SA105 (OR) SA106 Gr.B	D21.3	7.47	ARC	8Δ 8	- -	E 7018-1 10 8 -	1022/ 00	-	-	-				
38	0-00-047-48209	PIPE + BEND	SA335 P91 + SA335 P91	D48.3	10.16	TIG+ARC	10.16V 22	ER90S-B9 152	E 9015 B9 198 88 -	1050/ 01	220	750- 770	120	100% RT			
39	0-00-047-48209	PIPE + VALVE (OR) TEE	SA335 P91 + SA182 F91	D48.3	10.16	ARC	11Δ 12	- -	E 9015 B9 - 46 -	1049/ 01	220	750- 770	120				
40	0-00-047-48209 0-00-047-48213 0-00-047-48242	PIPE + VALVE (OR) TEE	SA335 P91 + SA182 F91	D33.4	9.09	ARC	10Δ 19	- -	E 9015 B9 - 38 -	1049/ 01	220	750- 770	120	100% MPI (OR) LPI			
41	0-00-047-48211	PIPE + BEND (OR) VALVE	SA335 P91 + SA234 WP91 (OR) SA217 C12A	D88.9	15.24	TIG+ARC	15.24V 28	ER90S-B9 672	E 9015 B9 224 280 140	1050/ 01	220	750- 770	120	100% RT			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVIAZHAGAN	25/04/2011	4-24-992-08502	02

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24
P.G. DESCRIPTION } : BOILER TRIM PIPING & SUPPORTS, SPRAY
: WATER SYSTEM, SV EXHAUST PIPE &
: SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

CONTRACTOR No.: -

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006

REV.NO. : 00

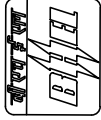
DATE : 25/04/2011

PAGE : 09 OF 24

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.	MIN. PRE. HEAT TEMP. in °C	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/QUANTUM	SPEC. ACC. NO.	REF. NORM REF.	REMARKS
				SIZE	THICK			TIG Qty. in gms	ARC SPEC. Qty. in nos								
42	0-00-047-48213	PIPE + BEND	SA335 P91+ SA335 P91	D33.4	6.35	TIG+ARC	6.35V 14	ER90S-B9 77	E 9015 B9 98	1050/ 01	220	750- 770	120				
43	0-00-047-48213	PIPE + BEND	SA335 P91+ SA335 P91	D33.4	9.09	TIG+ARC	9.09V 22	ER90S-B9 80	E 9015 B9 308	1050/ 01	220	750- 770	120				
44	0-00-047-48214 0-00-047-48215	PIPE + BEND (OR) TEE (OR) VALVE (OR) FLAT END COVER	SA106 Gr.C + SA106 Gr.C (OR) SA234 WPC (OR) SA216 WCB (OR) SA105	D114.3	17.12	TIG+ARC	17.12V 52	ER70S-A1 1664	E 7018-A1 624 728 156	1005/ 05	-	635± 15	45	100% RT			
45	0-00-047-48216	PIPE + BEND	SA335 P22+ SA335 P22	D60.3	12.5	TIG+ARC	12.5V 2	ER90S-B3 19	E 9018 B3 26 14 -	1014/ 02	150	680- 750	60	20% RT MIN 2 WELD/ WELDER/ SHIFT			
46	0-00-047-48216	PIPE + VALVE	SA335 P22+ SA182 F22	D60.3	12.5	ARC	14V 4	- -	E 9018 B3 - 10 17	1023/ 00	150	680- 750	60	100% MPI (OR) LPI			
PREPARED								CHECKED (W.T.C)		DATE		DRAWING NO:		REV.NO.			
K. ARULPRAKASH								G. SUBRAMANIAN		25/04/2011		4-24-992-08503		02			
A.SHANMUGARAJU								C.ARIVAZHAGAN									

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24
P.G. DESCRIPTION }
BOILER TRIM PIPING & SUPPORTS, SPRAY
WATER SYSTEM, SV EXHAUST PIPE &
SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

CONTRACTOR No.: -

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006

REV.NO. : 00

DATE : 25/04/2011

PAGE : 10 OF 24

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	HEAT TREATMENT TEMP. in °C	NDT METHOD/QUANTUM	SPEC. NO.	ACC. NORM REF.	REMARKS
				SIZE	THICK			TIG	ARC SPEC.							
47	0-00-047-48217 0-00-047-48218	PIPE + BEND (OR) VALVE (OR) ELL	SA335 P22 + SA335 P22 (OR) SA217 WC9 (OR) SA234WP22CL1	D88.9	20	TIG+ARC	20W	ER90S-B3	E 9018 B3	1014/ 02	200	680- 750	60			
48	0-00-047-48219	PIPE WITH STUB+ (OR) PIPE (OR) BEND (OR) VALVE (OR) TEE (OR) FLAT END COVER	SA106 Gr.C+ SA106 Gr.C (OR) SA216 WCB (OR) SA234 WPC (OR) SA105	D159	30	TIG+ARC	30W	ER70S-A1	E 7018-A1	1005/ 05	100	635± 15	75			100% RT
49	0-00-047-48219 0-00-047-48224,225 0-00-047-48228,229 0-00-047-48235 0-00-047-48238 0-00-047-48241	PIPE + BEND	SA106 Gr.C+ SA106 Gr.C	D33.4	9.09	TIG+ARC	9.09W	ER70S-A1	E 7018-1	1003/ 03	-	-	-			20% RT MIN 2 WELD/ WELDER/ SHIFT
50	0-00-047-48226	PIPE + BEND	SA106 Gr.B+ SA106 Gr.B	D21.3	7.47	TIG+ARC	7.47W	ER70S-A1	E 7018-1	1003/ 03	-	-	-			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVIAZHAGAN
		DATE	DRAWING NO:
		25/04/2011	4-24-992-08504
			REV.NO. 01

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION }
BOILER TRIM PIPING & SUPPORTS, SPRAY
WATER SYSTEM, SV EXHAUST PIPE &
SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

CONTRACTOR No.: -

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006

REV.NO. : 00

DATE : 25/04/2011

PAGE : 11 OF 24

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	HEAT TREATMENT TEMP. in °C in min.	NDT METHOD/ QUANTUM	REF.		REMARKS	
				SIZE	THICK			TIG Qty. in gms	ARC SPEC. Qty. in nos					SPEC. NO.	ACC. NORM REF.		
51	0-00-047-48208 0-00-047-48219 0-00-047-48224,225 0-00-047-48228,229 0-00-047-48235 0-00-047-48238 0-00-047-48241	PIPE + VALVE (OR) TEE (OR) STUB	SA106 Gr.C+ SA105 (OR) SA106 Gr.C	D33.4	9.09	ARC	10Δ	-	E 7018	1105/02	-	-	-	100% MPI (OR) LPI			
52	0-00-047-48220 0-00-047-48221 0-00-047-48222 0-00-047-48223	PIPE + BEND (OR) VALVE	SA213 T22+ SA213 T22 (OR) SA217 WC9	D76.1	12.5	TIG+ARC	12.5Δ	ER90S B3	E 9018 B3	1014/02	200	680-750	35	20% RT MIN 2 WELD/ WELDER/ SHIFT			
53	0-00-047-48225	PIPE WITH STUB+ PIPE (OR) VALVE	SA106 Gr.C+ SA106 Gr.C (OR) SA216 WCB	D88.9	15.24	TIG+ARC	15.24Δ	ER70S-A1	E 7018-A1	1005/05	-	635±15	40	100% RT			
54	0-00-047-48226	TEE+PIPE (OR) VALVE (OR) REDUCER	SA234 WPC+ SA210 Gr.C (OR) SA216 WCB (OR) SA105	D76.1	12.5	TIG+ARC	12.5Δ	ER70S-A1	E 7018-A1	1005/05	-	635±15	35	20% RT MIN 2 WELD/ WELDER/ SHIFT			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVIAZHAGAN	25/04/2011	4-24-992-08505	02

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24
 P.G. DESCRIPTION } BOILER TRIM PIPING & SUPPORTS, SPRAY
 WATER SYSTEM, SV EXHAUST PIPE &
 SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701
 CONTRACTOR : -
 CONTRACTOR No.: -
 SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
 STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006
 REV.NO. : 00
 DATE : 25/04/2011
 PAGE : 12 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/QUANTUM	SPEC. ACC. NO. NORM REF.	REMARKS
				SIZE	THICK			TIG	ARC SPEC.							
								Qty. in nos	Qty. in nos							
55	0-00-047-48226 0-00-047-48227	PIPE + BEND (OR) PIPE WITH STUB (OR) REDUCER	SA106 Gr.C+ SA106 Gr.C (OR) SA105	D60.3	11.07	TIG+ARC	11.07 ER70S-A1	E 7018-A1	1005/05	-	635±15	30	20% RT MIN 2 WELD/ WELDER/ SHIFT			
56	0-00-047-48226 0-00-047-48227	PIPE + VALVE	SA106 Gr.C+ SA105	D60.3	11.07	ARC	11 Δ	E 7018	1105/02	-	-	-	10% MPI (OR) LPI			
57	0-00-047-48242	PIPE + ELL (OR) TEE (OR) REDUCER (OR) VALVE (OR) PIE WITH STUB	SA335 P91+ SA234 WP91 (OR) SA217 C12A (OR) SA335 P91	D127	20	TIG+ARC	20 W ER90S B9	E 9015-B9	1050/01	220	750-770	120				
58	0-00-047-48242	PIPE + BEND (OR) REDUCER	SA335 P91+ SA335 P91 (OR) SA234 WP91	D88.9	15.24	TIG+ARC	15.24 W ER90S B9	E 9015-B9	1050/01	220	750-770	120	100% RT			
59	0-00-047-48232 0-00-047-48233	PIPE + BEND	SA106 Gr.C+ SA106 Gr.C	D48.3	10.16	TIG+ARC	10.16 W ER70S-A1	E 7018-1	1003/03	-	-	-	20% RT MIN 2 WELD/ WELDER/ SHIFT			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVVAZHAGAN	25/04/2011	4-24-992-08506	03

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION } : BOILER TRIM PIPING & SUPPORTS, SPRAY
: WATER SYSTEM, SV EXHAUST PIPE &
: SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

REV.NO. : 00

CONTRACTOR No.: -

DATE : 25/04/2011

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

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DOC. NO. : 9560-102-01-TR-QVM-V-006

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/ QUANTUM	SPEC. ACC. NO. NORM REF.	REMARKS
				SIZE	THICK			TIG	ARC SPEC.							
								Qty. in nos	Qty. in nos							
60	0-00-047-48231 0-00-047-48233	PIPE + BEND (OR) CONNECTOR (OR) TEE (OR) VALVE	SA106 Gr.B+ SA106 Gr.B (OR) SA105 (OR) SA234 WPC (OR) SA216 WCB	D73.0	14.02	TIG+ARC	14.02	VER70S-A1	E 7018-1	1004/ 03	-	610± 15	40	20% RT MIN 2 WELD/ WELDER/ SHIFT		
61	0-00-047-48232 0-00-047-48234	PIPE + TEE (OR) CONNECTOR (OR) COUPLING ORIFICE	SA106 Gr. C+ SA105	D48.3	10.16	ARC	11Δ	-	E 7018	1105/ 02	-	-	-			
62	0-00-047-48232 0-00-047-48234	PIPE + VALVE (OR) CONNECTOR	SA106 Gr. C+ SA105	D21.3	7.47	ARC	8Δ	-	E 7018	1105/ 02	-	-	-	10% MPI (OR) LPI		
63	0-00-047-48232 0-00-047-48234	PIPE + VALVE (OR) TEE	SA106 Gr.C+ SA105	D26.7	5.56	ARC	6Δ	-	E 7018	1105/ 02	-	-	-			
64	0-00-047-48233	PIPE + BEND	SA335 P91+ SA335 P91	D73.0	14.02	TIG+ARC	14.02	VER90S B9	E 9015 B9	1050/ 01	220	750- 770	120			
65	0-00-047-48233	PIPE + VALVE	SA335 P22+ SA217 C12A	D73.0	14.02	TIG+ARC	14.02	VER90S B3	E 9018 B3	1038/ 03	220	730- 760	60	100% RT		

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVAZHAGAN	25/04/2011	4-24-992-08507	03

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS

P.G.No. : 24
 P.G. DESCRIPTION } BOILER TRIM PIPING & SUPPORTS, SPRAY
 WATER SYSTEM, SV EXHAUST PIPE &
 SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701
 CONTRACTOR : -
 CONTRACTOR No.: -
 SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
 STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006
 REV.NO. : 00
 DATE : 25/04/2011
 PAGE : 14 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/QUANTUM	SPEC. ACC. NO.	REF.	REMARKS	
				SIZE	THICK			TIG Qty. in gms	ARC SPEC.									
									Qty. in nos									Ø
66	0-00-047-48235 0-00-047-48236 0-00-047-48237 0-00-047-48238 0-00-047-48239 0-00-047-48240	PIPE + VALVE (OR) CONNECTOR	SA335 P22+ SA182 F22 (OR) SA182 F22CL3	D33.4	9.09	ARC	10Δ 116	-	E 9018 B3	1020/01	150	-	-	100% MPI (OR) LPI				
67	0-00-047-48240	PIPE + BEND	SA335 P22+ SA335 P22	D33.4	6.35	TIG+ARC	6.35Δ 22	ER90S-B3 121	E 9018 B3 154 - -	1013/02	150	-	-	20% RT MIN 2. WELD/ WELDER/ SHIFT				
68	D0801M0105-0213	PIPE + VALVE	SA106 Gr.C+ SA105	D558.8	67.2	TIG+ARC	67.2Δ 1	ER70S-A1 161	E 7018-A1 42 69 493	1005/05	150	635±15	170					
69	D0801M0105-0213	PIPE + VALVE	SA106 Gr.C+ SA105	D558.8	71.4	TIG+ARC	71.4Δ 3	ER70S-A1 483	E 7018-A1 126 207 1479	1005/05	150	635±15	180					
70	D0801M0105-0213	PIPE + NOZZLE	SA106 Gr.C+ SA105	D558.8	72.6	TIG+ARC	72.6Δ 1	ER70S-A1 161	E 7018-A1 42 69 493	1005/05	150	635±15	182	100% RT				
71	D0801M0105-0213	PIPE + VALVE (OR) MIXING SPHERE	SA106 Gr.C+ SA105	D508	66.1	TIG+ARC	66.1Δ 3	ER70S-A1 426	E 7018-A1 114 189 1323	1005/05	150	635±15	165					
72	D0801M0105-0213	PIPE + VALVE	SA106 Gr.C+ SA105	D508	66.8	TIG+ARC	66.8Δ 3	ER70S-A1 426	E 7018-A1 114 189 1323	1005/05	150	635±15	170					

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVAZHAGAN	25/04/2011	4-24-992-08508	02

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS / NON PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION }
BOILER TRIM PIPING & SUPPORTS, SPRAY
WATER SYSTEM, SV EXHAUST PIPE &
SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

CONTRACTOR No.: -

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006

REV.NO. : 00

DATE : 25/04/2011

PAGE : 15 OF 24

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	HEAT TREATMENT TEMP. in °C in min.	NDT METHOD/ QUANTUM	REF.		REMARKS	
				SIZE	THICK			TIG Qty. in gms	ARC SPEC. Qty. in nos					SPEC. NO.	ACC. NORM REF.		
73	D0801M0105-0213	PIPE + VALVE (OR) PUMP (OR) PIPE	SA106 Gr.C+ SA105 (OR) SA106 Gr.C	D355.6	46.3	TIG+ARC	46.3W	ER70S-A1	E 7018-A1	1005/05	150	635±15	120				
74	D0801M0105-0213	PIPE + VALVE (OR) MIXING SPHERE (OR) ELBOW	SA106 Gr.C+ SA105 (OR) SA234 Gr.WPC	D323.9	43.6	TIG+ARC	43.6W	ER70S-A1	E 7018-A1	1005/05	150	635±15	120				
75	D0801M0105-0213	PIPE + ELBOW	SA106 Gr.C+ SA234 Gr.WPC	D508	63	TIG+ARC	63W	ER70S-A1	E 7018-A1	1005/05	150	635±15	160	100% RT			
76	D0801M0105-0213	PIPE + TEE (OR) ELBOW (OR) REDUCER (OR) VALVE	SA106 Gr.C+ SA234 Gr.WPC (OR) SA105 (OR) SA182 F11CL.1	D406.4	50.6	TIG+ARC	50.6W	ER70S-A1	E 7018-A1	1005/05	150	635±15	130				
77	0-00-047-48107 0-00-047-48169	STRUCTURE+ STRUCTURE	SA2062FE410A + SA2062FE410A	-	6.0	ARC	921m	-	E 7018	1201/02	-	-	-	100% MPI (OR) LPI			
78	0-00-047-48106	MS LINE STUB+ SAFTEY VALVE	SA182 F91+ SA217 C12A	D177.8	57.15	TIG+ARG	53.98W	ER90S B3	E 9015-B9	1034/04	220	750-770	145	100% RT			

PREPARED

CHECKED (DESIGN)

CHECKED (W.T.C)

APPROVED

DATE

DRAWING NO:

REV.NO.

K. ARULPRAKASH

A.SHANMUGARAJU

G.SUBRAMANIAN

C.ARIVAZHAGAN

25/04/2011

4-24-992-08509

01

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS / NON PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION }
BOILER TRIM PIPING & SUPPORTS, SPRAY
WATER SYSTEM, SV EXHAUST PIPE &
SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR :-

CONTRACTOR No.: -

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006

REV.NO. : 00

DATE : 25/04/2011

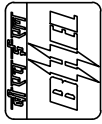
PAGE : 16 OF 24

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.	MIN. PRE. HEAT TEMP. in °C	HEAT TREATMENT TEMP. in °C	NDT METHOD/QUANTUM	SPEC. NO.	ACC. NORM REF.	REMARKS
				SIZE	THICK			TIG	ARC SPEC.							
79	0-00-047-48106	PIPE+ELBOW	SA335 P91+ SA335 P91	D168.3	7.11	TIG+ARG	7.11V 8	ER90S B9 424	E 9015-B9 72	1050/ 01	220	750- 770	120			
80	0-00-047-48106	PIPE STUB+ GATE VALVE (OR) ERV	SA182 F91+ SA217 C12A (OR) SA182 F91	D127	36.48	TIG+ARG	31.75V 4	ER90S B3 100	E 9015-B9 100 76	1034/ 04	220	750- 770	120			
81	0-00-047-48106	PIPE STUB+ SAFETY VALVE	SA182 F91+ SA217 C12A	D222.3	34.95	TIG+ARG	31.75V 6	ER90S B3 360	E 9015-B9 150 318	1034/ 04	220	750- 770	120			
82	0-00-047-48106	PIPE+ELBOW	SA335 P91+ SA335 P91	D273	6.35	TIG+ARG	6.35V 12	ER90S B9 1068	E 9015-B9 108 -	1050/ 01	220	750- 770	120	100% RT		
83	0-00-047-48106	PIPE STUB+ GATE VALVE (OR) ERV	SA335 P91+ SA217 C12A (OR) SA182 F91	D177.7	50.04	TIG+ARG	47.63V 10	ER90S B3 500	E 9015-B9 480 320	1034/ 04	220	750- 770	120			
84	0-00-047-48106	PIPE STUB+ SAFETY VALVE	SA105+ SA216 WCB	D222.3	34.95	TIG+ARG	31.75V 4	ER70S-A1 240	E 7018-A1 100 212	1005/ 05	150	635± 15	90			
85	0-00-047-48106	PIPE+ELBOW	SA106 Gr.B+ SA234 WPC	D273	6.35	TIG+ARG	6.35V 8	ER70S-A1 712	E 7018-1 160 72 -	1002/ 03	-	-	-			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVIAZHAGAN
DATE		DRAWING NO:	
25/04/2011		4-24-992-08510	
REV.NO.		REV.NO.	
		03	

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS / NON PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION } : BOILER TRIM PIPING & SUPPORTS, SPRAY
: WATER SYSTEM, SV EXHAUST PIPE &
: SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

REV.NO. : 00

CONTRACTOR No.: -

DATE : 25/04/2011

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

PAGE : 17 OF 24

DOC. NO. : 9560-102-01-TR-QVM-V-006

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	HEAT TREATMENT TEMP. in °C	NDT METHOD/QUANTUM	REF.		REMARKS			
				SIZE	THICK			TIG	ARC SPEC.					SPEC. NO.	ACC. NORM REF.				
																	Qty. in nos	Qty. in nos	
86	0-00-047-48106 00108-1E0320	PIPE+ENLARGER (OR) BEND (OR) PIPE	API 5LGr.B+ API 5LGr.B	-	6.4	ARC	6.4V 150m	Ø2.5 Ø3.15 Ø4.0	E 7018 - -	1213/ 00	-	-	20% RT MIN 2 WELD/ WELDER/SHIFT						
87	0-00-047-48106	PIPE+ELBOW	SA213 T91+ SA182 F91	D47.63	5.0	ARC	5Δ 6.0m	- 66	E 9015-B9 -	1049/ 01	220	750- 770	100% MPI (OR) LPI						
88	0-00-047-48106	PIPE+PIPE	IS1239+ IS1239	D27.2	2.65	ARC	2.65V 28	- 392	E 7018 -	1201/ 01	-	-	-						
89	0-00-047-48106	PIPE+PIPE	IS1239+ IS1239	D34.2	3.25	ARC	3.25V 28	- 392	E 7018 -	1201/ 01	-	-	-						
90	0-00-047-48106	PIPE+ELBOW	SA213 T91+ SA182 F91	D76.2	5.1	ARC	5.1V 36	- 396	E 9015-B9 -	1049/ 01	220	750- 770	100% RT						
91	0-00-047-48106	PIPE+ELBOW	SA106 Gr.B+ SA234 WPB	D73.0	5.16	TIG+ARC	5.16V 36	ER70S-A1 580	E 7018-1 -	1003/ 03	-	-	20% RT MIN 2 WELD/ WELDER/SHIFT						
92	0-00-047-48106	PIPE+FLANGE	SA335 P91+ SA182 F91	-	7.11	ARC	7Δ 16m	- 320	E 9015-B9 -	1049/ 01	220	750- 770	100% MPI (OR) LPI						
PREPARED								CHECKED (W.T.C)		APPROVED		DATE		DRAWING NO:		REV.NO.			
K. ARULPRAKASH								A.SHANMUGARAJU		G.SUBRAMANIAN		C.ARIYAZHAGAN		25/04/2011		4-24-992-08511		03	

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS / NON PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION }
BOILER TRIM PIPING & SUPPORTS, SPRAY
WATER SYSTEM, SV EXHAUST PIPE &
SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

DOC. NO. : 9560-102-01-TR-QVM-V-006

CONTRACTOR No.: -

REV.NO. : 00

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DATE : 25/04/2011

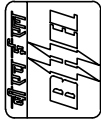
PAGE : 18 OF 24

SL. NO.	DRG NO. FOR WELD LOCAION & 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	HEAT TREATMENT TEMP. in °C in min.	NDT METHOD/ QUANTUM	REF.		REMARKS	
				SIZE	THICK			TIG Qty. in gms	ARC SPEC. Qty. in nos					SPEC. NO.	ACC. NORM REF.		
																	SIZE
93	0-00-047-48106	PIPE+FLANGE	SA106 Gr.B+ SA105	-	6.35	ARG	7Δ	-	E 7018-1	1022/00	-	-	10% MPI (OR) LPI				
94	0-00-047-48106	PIPE+FLANGE	SA335 P91+ SA182 F91	-	6.35	ARG	8Δ 6.0m	-	E 9015-B9	1049/01	220	750-770	120	100% MPI (OR) LPI			
95	0-00-047-48106	PIPE+DRIP PAN (OR) PLATE	SA106 Gr.B+ IS2062E250A	-	6.35 +5	ARG	5Δ 14.5m	-	E 7018	1213/00	-	-	-				
96	0-00-047-48106	STRUCTURE+ STRUCTURE	IS2062E250A+ IS2062E250A	-	5.7	ARG	6Δ 58m	-	E 7018	1201/02	-	-	-	10% MPI (OR) LPI			
97	0-00-047-48106	PIPE+STUB (OR) PLATE	IS1161YST240+ IS2062E250A	-	6.4	ARG	3Δ 51m	-	E 7018	1201/02	-	-	-				
98	ALL ERECTION DRAWINGS	NAME PLATE HOLDER+PIPE	SA240TYPE304 + SA106 Gr.B	< D108	< 19	ARC	3Δ 20m	-	E7018-A1	1104/01	-	-	-				
99	ALL ERECTION DRAWINGS	NAME PLATE HOLDER+PIPE	SA240TYPE304 + SA335 P22	< D108	< 19	ARC	3Δ 7m	-	E 309	1210/00	150 on P22	-	-	100% LPI			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARIVAZHAGAN	25/04/2011	4-24-992-08512	01

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS / NON PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION }
BOILER TRIM PIPING & SUPPORTS, SPRAY
WATER SYSTEM, SV EXHAUST PIPE &
SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

REV.NO. : 00

CONTRACTOR No.: -

DATE : 25/04/2011

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

PAGE : 19 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/ QUANTUM	SPEC. ACC. NO. NORM REF.	REMARKS	
				SIZE	THICK			TIG Qty. in gms	ARC SPEC. Qty. in nos								
																	7.11
100	00108-1E0320	PIPE+ELBOW	SA335P22+ SA335P22	D168.3	7.11	TIG+ARG	7.11	ER90S-B3	E 9018-B3	1013/01	150	-	30				
101	00108-1E0320	PIPE+ELBOW	SA335P22+ SA335P22	D219.1	12.7	TIG+ARG	12.7	ER90S-B3	E 9018-B3	1014/02	150	680-750	30				
102	00108-1E0320	PIPE STUB+ SAFETY VALVE	SA182 F22+ SA217 WC9	D196.9	57.18	TIG+ARG	57.18	ER90S-B3	E 9018-B3	1014/02	150	680-750	145	100% RT			
103	00108-1E0320	PIPE STUB+ SAFETY VALVE	SA182 F22+ SA217 WC9	D196.9	65.7	TIG+ARG	65.7	ER90S-B3	E 9018-B3	1014/02	150	680-750	165				
104	3-24-810-02626 TO 3-24-810-02629 3-24-810-02633 3-24-810-02634 3-24-810-02647 3-24-810-02648	STRUCTURE+ WELD ON CLEVIS	IS2062E250A+ IS2062E250A	-	11.4	ARG	6.0m	-	E 7018	1201/02	-	-	-				
105	3-24-810-02632	STRUCTURE+ WELD ON CLEVIS	IS2062E250A+ IS2062E250A	-	7.7	ARG	1.0m	-	E 7018	1201/02	-	-	-				

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARIYAZHAGAN	25/04/2011	4-24-992-08513	01

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS / NON PRESSURE PARTS

P.G.No. : 24
BOILER TRIM PIPING & SUPPORTS, SPRAY
P.G. DESCRIPTION } : WATER SYSTEM, SV EXHAUST PIPE &
SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701
CONTRACTOR : -
CONTRACTOR No.: -
SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006
REV.NO. : 00
DATE : 25/04/2011
PAGE : 20 OF 24

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	HEAT TREATMENT		NDT METHOD/QUANTUM	SPEC. ACC. NO. NORM REF.	REMARKS
				SIZE	THICK			TIG Qty. in gms	ARC SPEC. Qty. in nos			HEAT TREATMENT TEMP. in °C	HOLD TIME in min.			
106	3-24-810-02630	STRUCTURE+ WELD ON CLEVIS	IS2062E250A+ IS2062E250A	-	9.0	ARG	8Δ	-	E 7018	1201/02	-	-	-			
	3-24-810-02631															
	3-24-810-02636															
	TO															
107	3-24-810-02646	STRUCTURE+ STIFFENER PLATE (OR) WELD ON CLEVIS	IS2062E250A+ IS2062E250A	-	7.7	ARG	5Δ	-	E 7018	1201/02	-	-	-			
	3-24-810-02626															
	3-24-810-02628															
	TO															
108	3-24-810-02635	PIPE+ PLATE	SA335 P91+ SA387 Gr.22	-	11.13	ARG	6Δ	-	E 9018 B3	1113/00	220	730-760	30			
	3-24-810-02637															
	3-24-810-02642															
	TO															
108	3-24-810-02648	PIPE+ PLATE	SA335 P91+ SA387 Gr.22	-	11.13	ARG	6Δ	-	E 9018 B3	1113/00	220	730-760	30			
	00108-1B4603															
	00108-1B4607															
	00108-1B4617															
00108-1E0336	TO	00108-1E0352														

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVAZHAGAN
DATE		DRAWING NO:	
25/04/2011		4-24-992-08514	
REV.NO.		01	

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS / NON PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION }
BOILER TRIM PIPING & SUPPORTS, SPRAY
WATER SYSTEM, SV EXHAUST PIPE &
SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

REV.NO. : 00

CONTRACTOR No.: -

DATE : 25/04/2011

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

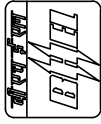
PAGE : 21 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/ QUANTUM	SPEC. ACC. NO.	REF. ACC. NORM REF.	REMARKS
				SIZE	THICK			TIG Qty. in gms	ARC SPEC. Qty. in nos								
109	0-00-047-48106	PIPE+DRIP PAN	SA335 P91+ IS2062E250A	-	8+5	ARC	5Δ 11m	-	E 9015-B9	-	-	-	-	100% MPI (OR) LPI			
110	1-24-350-00912	PIPE+PIPE (OR) BEND (OR) TEE (OR) VALVE	SA106 Gr.B + SA106 Gr.B (OR) SA234 WPB (OR) SA105	D114.3	6.02	TIG+ARC	6.02V 24	ER70S-A1	E 7018-1	1002/ 03	-	-	-	-			
111	1-24-350-00912	PIPE+PIPE (OR) BEND (OR) REDUCER	SA106 Gr.B + SA106 Gr.B (OR) SA234 WPB	D168.3	7.11	TIG+ARC	7.11V 9	ER70S-A1	E 7018-1	1002/ 03	-	-	-	100% RT			
112	1-24-350-00912	PIPE+REDUCER	SA106 Gr.B + SA234 WPB	D219.1	6.35	TIG+ARC	6.35V 1	ER70S-A1	E 7018-1	1002/ 03	-	-	-				
113	1-24-350-00912	PIPE+FLANGE	SA312TP304H+ SA105	D219.1	6.35	ARC	7Δ 3	-	ENICrFe3	1031/ 00	-	-	-	100% LPI			
114	1-24-350-00912	PIPE+FLANGE	SA106 Gr.B + SA105	D219.1	6.35	ARC	7Δ 3	-	E 7018-1	1022/ 00	-	-	-	10% MPI (OR) LPI			

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARVIAZHAGAN	25/04/2011	4-24-992-08515	02

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FIELD WELDING SCHEDULE

WELDING CODE : I.B.R / A.S.M.E
PRESSURE PARTS / NON PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION }
BOILER TRIM PIPING & SUPPORTS, SPRAY
WATER SYSTEM, SV EXHAUST PIPE &
SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

CONTRACTOR No.: -

SYSTEM : SG-PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006

REV.NO. : 00

DATE : 25/04/2011

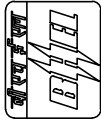
PAGE : 22 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/QUANTUM	SPEC. ACC. NO. NORM REF.	REMARKS
				SIZE	THICK			TIG Qty. in nos	ARC SPEC. Qty. in nos							
115	1-24-350-00912	PIPE+PLATE	SA106 Gr.B+ SA515 Gr70	-	12	ARC	10Δ	-	E 7018	1105/02	-	-	-	10% MPI (OR) LPI		
116	1-00-047-47724	PIPE+REDUCER (OR) VALVE	SA213TP347H+ SA182 F316	D31.8	6.0	ARC	6Δ	-	E347	1029/00	-	-	-	100% LPI		
117	1-00-047-47724 2-24-800-01150	PIPE+BEND (OR) PIPE	SA213TP347H+ SA213TP347H	D31.8	6.0	TIG+ARC	6.0V 866	RT347 4330	E347 -	1016/01	-	-	-	20% RT MIN 2 WELD/ WELDER/SHIFT		
118	1-00-047-47724	PIPE+PIPE STUB	SA106 Gr.B+ SA106 Gr.B	D33.4	3.38	ARC	3Δ 12	-	E 7018-1 -	1022/00	-	-	-	10% MPI (OR) LPI		
119	1-00-047-47724	PIPE+PIPE (OR) REDUCER	SA106 Gr.B+ SA106 Gr.B (OR) SA234 WPB	D33.4	3.38	TIG	3.38V 7	ER70S-A1 200	-	1003/03	-	-	-	20% RT MIN 2 WELD/ WELDER/ SHIFT		
120	1-00-047-47724	PIPE+VALVE	SA106 Gr.B+ SA105	D60.3	3.91	ARC	4Δ 8	-	E 7018-1 - 14	1022/00	-	-	-	10% MPI (OR) LPI		
121	1-00-047-47724	PIPE+VALVE (OR) STUB	SA106 Gr.B+ SA105 (OR) SA182F12CL.2	D33.4	3.38	ARC	4Δ 30	-	E 7018 - 28	1105/02	-	-	-	10% MPI (OR) LPI		

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARIVAZHAGAN	25/04/2011	4-24-992-08516	03

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* REFER NDE MANUAL No.PS:CMX:002 REV.No.01/12-98



FIELD WELDING SCHEDULE

P.G.No. : 24
 BOILER TRIM PIPING & SUPPORTS, SPRAY
 P.G. DESCRIPTION } : WATER SYSTEM, SV EXHAUST PIPE &
 : SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701
 CONTRACTOR : -
 CONTRACTOR No.: -
 SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
 : STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

DOC. NO. : 9560-102-01-TR-QVM-V-006
 REV.NO. : 00
 DATE : 25/04/2011
 PAGE : 23 OF 24

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	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/QUANTUM	SPEC. ACC. NO.	REF. NORM REF.	REMARKS			
				SIZE	THICK			TIG	ARC SPEC. Qty. in nos									Ø2.5	Ø3.15	Ø4.0
122	1-00-047-47724	PIPE+PIPE (OR) REDUCER	SA106 Gr.B+ SA106 Gr.B (OR) SA234 WPB	D60.3	3.91	TIG	3.91V	ER70S-A1	1003/03	-	-	-	-	20% RT MIN						
123	1-00-047-47724	STRUCTURE+ STRUCTURE	SA2062FE410A + SA2062FE410A	-	6.0	ARC	6Δ	E 7018	1201/02	-	-	-	-	2 WELD/ WELDER/ SHIFT						
124	1-00-047-47724	STRUCTURE+ STRUCTURE	SA2062FE410A + SA2062FE410A	-	10	ARC	5Δ	E 7018	1201/02	-	-	-	-	10% MPI (OR) LPI						
125	1-00-047-47724	STRUCTURE+ STRUCTURE	SA2062FE410A + SA2062FE410A	-	3.6	ARC	3Δ	E 7018	1201/02	-	-	-	-							
126	2-24-800-01151	PIPE+VALVE (OR) TEE (OR) REDUCER	SA335 P91+ SA182 F91	D33.4	9.09	ARC	10Δ	E9015-B9	1049/01	220	750-770	120								
127	2-24-800-01151	PIPE+VALVE (OR) REDUCER	SA335 P91+ SA182 F91	D21.3	7.47	ARC	50	114	1049/01	220	750-770	120		100% MPI (OR) LPI						
128	2-24-800-01151	PIPE+BEND (OR) PIPE	SA335 P91+ SA335 P91	D33.4	9.09	TIG+ARC	9.09V	ER90S-B9	1050/01	220	750-770	120		100% RT						

PREPARED	CHECKED (DESIGN)	CHECKED (W.T.C)	APPROVED	DATE	DRAWING NO:	REV.NO.
K. ARULPRAKASH	A.SHANMUGARAJU	G.SUBRAMANIAN	C.ARIYAZHAGAN	25/04/2011	4-24-992-08517	02

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FIELD WELDING SCHEDULE

WELDING CODE : I.BR / A.S.M.E
PRESSURE PARTS / NON PRESSURE PARTS

P.G.No. : 24

P.G. DESCRIPTION } : BOILER TRIM PIPING & SUPPORTS, SPRAY
: WATER SYSTEM, SV EXHAUST PIPE &
: SILENCER SUPPORT ARRGT.

PROJECT : BARH-II, 2 x 660 MW CUST. Nos.: 1700 & 1701

CONTRACTOR : -

DOC. NO. : 9560-102-01-TR-QVM-V-006

REV.NO. : 00

CONTRACTOR No.: -

DATE : 25/04/2011

SYSTEM : SG. PACKAGE - BOILER TRIM PIPING & SUPPORTS, SPRAY WATER SYSTEM,
STARTUP SYSTEM, SV EXHAUST PIPE & SILENCER SUPPORT ARRGT.

PAGE : 24 OF 24

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.		MIN. PRE. HEAT TEMP. in °C	HEAT TREATMENT TEMP. in °C	HOLD TIME in min.	NDT METHOD/ QUANTUM	SPEC. ACC. NO. NORM REF.	REMARKS
				SIZE	THICK			TIG	ARC SPEC.						
				Qty. in nos	Qty. in nos			Qty. in gms	Qty. in nos						
129	2-24-800-01151	PIPE+BEND (OR) PIPE	SA335 P91+ SA335 P91	D21.3	7.47	TIG+ARC	7.47	ER90S-B9	E9015B9	220	750-770	120	100% RT		
130	1-24-800-00962	PIPE+VALVE	SA106 Gr.C+ SA105	D33.4	9.09	ARC	10Δ	-	E 7018	-	-	-	10% MPI (OR) LPI		
131	3-24-800-02848	PIPE+VALVE	SA335 P22+ SA182 F22	D33.4	6.35	ARC	7Δ	-	E9018-B3	200	-	-	100% MPI (OR) LPI		
132	3-24-800-02848	PIPE+PIPE	SA335 P22+ SA335 P22	D33.4	6.35	ARC	6.35	ER90S-B3	E9018-B3	150	-	-	20% RT MIN 2 WELD/ WELDER/SHIFT		
133	3-24-800-02848	PIPE+VALVE	SA335 P22+ SA182 F22	D33.4	9.09	ARC	10Δ	-	E9018-B3	-	680-750	30	100% MPI (OR) LPI		
134	3-24-800-02848	PIPE+PIPE	SA335 P22+ SA335 P22	D33.4	9.09	TIG+ARC	9.09	ER90S-B3	E9018-B3	-	680-750	-	20% RT MIN 2 WELD/ WELDER/SHIFT		
135	0-19-850-00892	PIPE+NRFV	SA106 Gr.C+ SA216 WCC	D457.2	55.5	TIG+ARC	55.5	ER70S-A1	E 7018-A1	100	635±15	140	100% RT		
PREPARED								CHECKED (DESIGN)		DATE		DRAWING NO:		REV.NO.	
K. ARULPRAKASH								A.SHANMUGARAJU		25/04/2011		4-24-992-08518		02	
G.SUBRAMANTAN								G.SUBRAMANTAN		C.ARIYAZHAGAN					

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