



**BHARAT HEAVY ELECTRICALS LIMITED,
TIRUCHIRAPPALLI 620 014
OUTSOURCING DEPARTMENT**

NIT: 2026OVM002
NIC TENDER ID: 2026_BHEL_61552_1
CORRIGENDUM-II

Kindly note the following points w.r.t NIT 2026OVM002.

- **Finalised drawing for drum with 60 mm thickness applicable to shared BOM.**
 - The arrangement drawing shared pertains to Cust no 5327 with 60mm thickness plate only. Final drawing will be shared after PO placement.
 - With reference to the subject tender, it is hereby clarified that the drawings/details enclosed with the tender are indicative in nature and are provided broadly for understanding of manufacturability only.
 - The schematic drawings NO. 5327-CFBC DRUM shared may be used for estimation of scope, methodology, resources, and costing. However, the same shall not be treated as final manufacturing/construction drawings.
 - Final approved drawings, dimensions, technical details, and other execution requirements shall be issued at the time of Placement of Purchase Order (PO)/Work Order.
- **Drum nozzle drilling layout drawing –**
 - The shared arrangement drawing indicates the location of nozzles. Final drilling plan for Cust no 5327 will be shared after PO placement. Kindly refer drawing 0-04-114-01544 for basic understanding.
- **Drilling nozzle welding configuration with drawing.**
 - Final nozzle sizes are as per Cust no 5327 drawing. For welding reference, Kindly refer drawing 0-04-114-01544 for basic understanding.
- **Drum internal drawing applicable to enquiry 2026OVM002:**
 - Kindly refer drawing 0-04-114-01348 & 0-04-114-01349 for basic understanding. Final drawings will be shared after PO placement.

- **C seam orientation drawing with respect to 2.5 meter/ 2-meter shell length with rolling:**
 - The orientation and location of the C-seam (circumferential seam) may be selected based on the available rolling facility, and accordingly the shell can be fabricated using either 2.5 m or 2.0 m long plates.
 - From an IBR compliance perspective, there is no restriction on adopting either shell length. However, wherever riser, downcomer, or nozzle openings interfere with or are located in the vicinity of a C-seam, the weld joint shall first be subjected to the prescribed radiographic examination in the as-welded condition. Based on the radiographic results, any required opening-out or excavation for fit-up of openings/repairs shall be undertaken. This practice ensures proper assessment of weld quality and compliance with the inspection requirements of IBR Regulations 265 and 266 governing examination and repair of fusion-welded drum joints.

- **Manhole details required:**
 - Standard manhole drawing is shared - 1-03-000-00005-6-0 – Drawing used as a reference for Man hole details..

- **Full throat nozzles with backing Plate welding configuration:**
 - Nozzles 04, 05, 10 & 11 are full throat nozzles. Please refer drawing 0-04-114-01544 for welding reference. Final drawings will be shared after PO placement.

- **Please also clarify can we proceed with MPI post PWHT instead of UT/RT.**
 - Customer approved CQP-7138 Rev 01 is shared herewith. All NDE shall be conducted as per CQP

NOTE:

Participation by a vendor will be considered as acceptance of all Terms & Conditions, including any corrigendum

TITLE BLOCK

02									
01	08.05.2026		First revised submission based on customer comments		MDF		ASG		ASG
00	28-04-2026		Fresh issue		MDF		ASG		ASG
REV NO.	DATE		DESCRIPTION		PRPD .		CKD.		APPD.
OWNER :			BHARAT COAL GASIFICATION AND CHEMICALS LTD.						
PMC :			PROJECTS & DEVELOPMENT INDIA LTD						
PROJECT :	COAL TO 2000 TPD AMMONIUM NITRATE PROJECT OF M/S BCGCL AT LAKHANPUR (ODISHA) INDIA. (Customer no.: 5327 – 5329)								
LOCATION :	LAKHANPUR- JHARSUGUDA (ODISHA)								
PLANT :	COAL GASIFICATION & RAW SYNGAS CLEANING PLANT (LSTK PACKAGE #1)								
SECTION / UNIT :	COAL GASIFICATION SECTION								
TITLE :	CQP FOR BOILER DRUM				DRG NO. :		CQP 7138; Rev. 01		
					SHEET NO.		1 OF 1		
					FILE NO.				
					PROJECTS & DEVELOPMENT INDIA LTD, NOIDA				
					SCALE :				
SUB-VENDOR/ EQUIPMENT OEM :	BHEL Tiruchirappalli and Approved				DRG/ DRAWING				
					DATE (दिनांक)				
					SIZE :				
					CHECKED BY (लिखित)				
					REVIEW : CODE-3 (समीक्षा: कोड -3)				
LSTK : 01					REVIEW : CODE-2 (समीक्षा: कोड -2)				
					REVIEW : CODE-1 (समीक्षा: कोड -1)				
					REVIEW : CODE-4 (समीक्षा: कोड -4)				
Bharat Heavy Electricals Limited				26.05.2026					
This Approval does not absolve the Supplier / Contractor of their contractual obligations / responsibilities									

MANUFACTURER'S NAME & ADDRESS BHEL: TIRUCHIRAPPALLI / APPD. SUB-CONTRACTOR				CONTRACT QUALITY PLAN ITEM: BOILER DRUM & SUSPENSION RODS SUB-SYSTEM : SG				PROJECT : BCGCL - Coal to Ammonium Nitrate-2000 TPD, LAKHANPUR- JHARSUGUDA PACKAGE : 3X140 TPH CFBC Boiler CONTRACT NO: BCGCL/LSTK-1/LOA/2026/04 BHEL CUST.NO: 5327, 5328, 5329				
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY		REMARKS	
1	2	3	4	5	6	7	8	9	M	B	T	C
									** 10			11

1.0 MATERIAL##											
Plates for Shells, Dished Ends & other attachments: SA 299 Gr A, SA 515 Gr70 (as applicable)											
1.1	Chemical, Mechanical tests, Soundness (UT*), Bend test	A	TC verification	100%	Material specification as per column 2, UT: SA 578 to Level B	Manufacturer's TC	P	V	--	V @	* For thickness > 40mm for attachment plates. @ for Shell and dished end plates
1.2	Branch connections Pipes: SA 106 Gr. B, C Tubes: SA210 Gr. A1, C SA213 TP347H	A	TC verification	100%	Material specification as per column 2, UT: ASTM E213 ECT: ASTM E309	Manufacturer's TC	P	V	--	V	ECT test - if T < 3.6mm
1.3	Bars & Forgings: SA 105, SA 675 Gr.70 (as applicable)	A	TC verification	100%	Material specification UT: ASTM A388 & acceptance as per Cl 3.3.4 of ASME Sec. VIII Div. 2	Manufacturer's TC	P	V	--	--	* For Dia./ thickness ≥ 50mm
2.0	INPROCESS CONTROL										
2.1	Hot Forming (Shells, Dished Ends)	A	Heat Treatment Log/ Chart	100%	870-900 °C	R	P	V	--	--	Forming completion shall not be below 621 °C
2.1.1	Post Forming Heat Treatment	A	HT Chart review	100%	# Normalize at 870 - 900 °C	R	P	V	--	V	# If forming temp. exceeds 900 °C

				FOR CUSTOMER USE		DOC NO:	
PREPARED BY Md Fahad		REVIEWED & APPROVED BY A. Sakthi Ganesh		LEGEND: M: MANUFACTURER / SUB CONTRACTOR B: BHEL / BHEL THIRD PARTY INSPECTION AGENCY T: CUSTOMER THIRD PARTY INSPECTION AGENCY C: CUSTOMER & PDIL, I: FOR INFORMATION, A: CRITICAL, B: MAJOR, C: MINOR. WPS – WELDING PROCEDURE SPECIFICATION, WOR – WELDER QUALIFICATION RECORDS TC – TEST CERTIFICATES/REPORTS R: RECORDS, P: PERFORM, W: WITNESS. V: VERIFICATION OF RECORDS FOR WITNESSED ITEMS AT THE TIME OF INSPECTION		REVIEWED BY NAME & SIGN. OF APPROVING AUTHORITY & SEAL	
NAME & SIGNATURE							

MANUFACTURER'S NAME & ADDRESS				CONTRACT QUALITY PLAN						PROJECT : BCGCL - Coal to Ammonium Nitrate-2000 TPD, LAKHANPUR- JHARSUGUDA				
BHEL: TIRUCHIRAPPALLI / APPD. SUB-CONTRACTOR				ITEM: BOILER DRUM & SUSPENSION RODS						PACKAGE : 3X140 TPH CFBC Boiler				
SUB-SYSTEM : SG				Qp NO. CQP: 7138 Rev 01						CONTRACT NO: BCGCL/LSTK-1/LOA/2026/04				
				DATE. 08/05/2026						BHEL CUST.NO: 5327, 5328, 5329				
				PAGE 2 OF 4										
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS		
1	2	3	4	5	6	7	8	9	M	B	T	C	11	
									** 10					
2.2	Dimensions	Thickness, Dia., Ovality, shell length, Profile, Dished end height.	C	Measurement	100%	Drawing & IBR		R	P	V	--	--		
2.3	Drum Suspension Rods	Forming Temperature	B	Review of HT Chart/Log	100%	900-950 °C		R	P	V	--	--	Normalize at 870 -920 °C if upper temp. is exceeded	
2.4	Welding	Procedure Qualification, Personnel Qualification	B	WPS review	100%	ASME Sec. IX		WPS	P	V	--	--		
				WQR review	100%	IBR		WQR	P	V	--	--		
2.5	Welding inspection	Profile, size, reinforcement	B	Visual and measurement	100%	Drawing and ASME Sec-I		-	P	V	--	--		
2.6 NDE before PWHT														
2.6.1	Gas Cut Openings in Shell/Dished End Plates, Back gouged areas.	Discontinuities	C	MPI	100%	BHE:NDT:PB:MT-01		R	P	V	--	--		
2.6.2	Butt joints	Weld Quality	B	UT+RT+MPI	100%	BHE:NDT:PB:UT-01 BHE:NDT:PB:RT-01 BHE:NDT:PB:MT-01		R	P	V	--	V	# Review of reports	
2.6.3	Full Penetration Welds (Nozzles & Load bearing Attachments)	Weld Quality	B	UT+MPI	100%	BHE:NDT:PB:UT-01 BHE:NDT:PB:MT-01		R	P	V	--	V		

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ITEM: BOILER DRUM & SUSPENSION RODS SUB-SYSTEM : SG			QP NO. CQP: 7138 Rev 01 DATE: 08/05/2026 PAGE 3 OF 4		QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS	
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK					M	B	T	C	
1	2	3	4	5	6	7	8	9	** 10			11	
2.6.4	Other Nozzle & attachment welds	Weld quality	B	MPI/LPI	100%	BHE:NDE:PB:MT-01 BHE:NDE:PB:PT-01		R	P	V	--	-	
2.6.5	Drum Suspension Rods	Butt weld quality	B	UT+MPI	100%	BHE:NDE:PB:UT- 01, BHE:NDE:PB:MT-01		R	P	V	--	-	
2.7	Dimensional Checks Shells & Dished Ends Nozzles	Inside Diameter, Ovality, Thickness, Profile, Manhole Fit-up, Attachment welding, overall length Location, Ht., EP	B	Measurement	100%	Drawing & IBR		R	P	V	--	V	
2.8	Final PWHT of Drum & Test Plates, Suspension Rod	Temperature & Time Control	A	Review of HT Charts	100%	615 ± 20 ° C & IBR, ASME Sec-I		R	P	V	--	V Soaking as per IBR	
2.9 NDE after PWHT													
2.9.1	CS and LS	Weld quality	A	MPI	100%	BHE:NDT:PB: MT-01		R	P	V	--	V	
2.9.2	Full Penetration Welds (Nozzles & Load Bearing Attachments)	Weld Quality	B	MPI	100%	BHE:NDT:PB: MT-01		R	P	V	--	V	
2.9.3	Other Nozzle and Attachment welds	Weld Quality	B	MPI	100%	BHE:NDT:PB:MT-01		R	P	V	--	-	
2.9.4	Drum Suspension Rods	Butt weld quality	B	MPI	100%	BHE:NDT:PB:MT-01		R	P	V	--		

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SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	7	8	9	M	B	T	C	11
1	2	3	4	5	6	7	8	9	** 10			11	
2.10	Production. test plates for LS, CS welds	Mechanical properties	A	Mechanical tests	as per IBR	IBR		R	P	V	--	V	
2.11	Hydro Test	Strength & Leak tightness.	A	Visual	100%	Drawing, IBR and ASME Sec-I		R	P	V	--	W	
2.12	Suspension Rods	(*) Profile, Thread matching, Axis marking	B	Visual and measurement	100%	Drawing			P	V	--		*30 deg. (cumulative) on either side shall be ensured by template.
2.13	Assy. of Internals	Appearance, Dimensions	B	Visual	100%	Drawing		R	P	V	--		As applicable.
3.0 3.1	FINAL INSPECTION Verification of completion	Dimensions, Orientation, Review of Test reports, Identification (WO, DU No), Axis Marking.	B	Verification. Visual	100%	Drawing & In-process records		R	P	V	--	V	
3.2	Painting & preservation	Appearance DFT	C	Visual Measurement	100% Random	As per approved panting schedule			P	V	--	--	
3.3	Data Folder	Code Compliance	B	Compilation of records	100%	As required by IBR		R	P	V	--	I	Applicable IBR forms will be sent to site.

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