



**BGR ENERGY SYSTEMS LTD  
POWER PROJECT DIVISION**

Sheet 1 of 5

**BOP EPC CONTRACTOR DOCUMENT NO.**

**GID-208-ME-ET-DS-5067**

**OWNERS DOCUMENT NO.**

Rev 5

**PIPE DATA SHEET – ASH HANDLING SYSTEM**

**ODISHA POWER GENERATION CORPORATION LIMITED**

**2 X 660 MW IB THERMAL POWER STATION**

**BANHARPALLI, JHARSUGUDA, ODISHA-768234**

**OWNER'S CONSULTANT: DEVELOPMENT CONSULTANTS PVT LIMITED**

**PIPE DATA SHEET – ASH HANDLING SYSTEM**

**DOCUMENT NO: GID-208-ME-ET-DS-5067**



DC DEVELOPMENT CONSULTANTS PRIVATE LIMITED			
Reviewed for general conformance with Contract drawings and specifications.			
ACTION: 5			
1	Approved	4	Disapproved.
2	Approved except as noted. Forward final drawing.	5	Information/reference only.
3	Approved except as noted. Resubmission required.	6	Information category with comments. Resubmission required.
Approval of Contract documents by the Consultant shall not relieve the Seller of his responsibility for any errors and fulfillment of Contract requirements.			

Digitally signed by Pratip Basak  
DN: cn=Pratip Basak, o=DCPL,  
ou=Power,  
email=pratip.basak@indcgroup  
.com, c=IN  
Date: 2016.11.04 15:51:38  
+05'30'

**BGR ENERGY SYSTEMS LIMITED**

**POWER PROJECTS DIVISION**

**443, ANNA SALAI**

**TEYNAMPET, CHENNAI - 600018**

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**E-mail – ppd@ppd.bgrenergy.com**

**SEPTEMBER – 2016**

<b>19.09.2016</b>	<b>5</b>	CHITTIBABU.M	GOUTAM CHAUDHURI	DEBABRATA DE
<b>DATE</b>	<b>REV</b>	<b>PREPARED BY</b>	<b>CHECKED BY</b>	<b>APPROVED BY</b>



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POWER PROJECT DIVISION**

Sheet 2 of 5

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**PIPE DATA SHEET – ASH HANDLING SYSTEM**

**REVISION CONTROL**

<b>REVISION NUMBER</b>	<b>DATE</b>	<b>PURPOSE</b>
0	06.06.2015	First issue for Information
1	07.12.2015	Revised based on DCPL comments Letter No. OPGC-BOP-2692 dt.04-08-2015 ❶
2	16.02.2016	Revised based on MOM dt. 05.02.2016 ❷
3	06.06.2016	Revised based on DCPL comments Letter No. OPGC-BOP-4606 dt. 11-03-2016 ❸
4	04.08.2016	Revised as marked ❹
5	19.09.2016	Revised based on DCPL comments Letter No. OPGC-BOP-5998 dt. 27-08-2016

**A**
**Air Line**

<b>Service</b>	:	<b>Instrument Air</b>	
<b>Size</b>	:	Up to 50 NB	65 NB and above
<b>Standard</b>	:	Seamless, Stainless Steel as per ASTM A -312 Gr. 304	Seamless, Stainless Steel as per ASTM A -312 Gr. 304
<b>Thickness</b>	:	Schedule 40S as per ANSI B 36.19	Schedule 10S as per ANSI B 36.19
<b>End Style</b>	:	Screwed Ends	Plain Ends / Beveled Ends
<b>Tolerance</b>	:	As per relevant pipe standard	
<b>Insulation</b>	:	Not required	
<b>Hydrotest Pressure</b>	:	As per relevant pipe standard	
<b>Inspection &amp; Testing</b>	:	As per approved QAP	
<b>Manufacturer</b>	:	As per approved Vendor's List	
<b>Service</b>	:	<b>Conveying Air</b>	
<b>Size</b>	:	Up to 50 NB	65 NB and above
<b>Standard</b>	:	MS, ERW Pipe to IS:1239 Part 1 / MS, ERW Pipe to IS:3589 Gr. FE 410	
<b>Thickness</b>	:	Heavy Grade for IS : 1239 Part 1 / Min. 6.35 mm for IS : 3589	
<b>End Style</b>	:	Screwed Ends	Plain Ends / Beveled Ends
<b>Tolerance</b>	:	As per IS:1239, Part 1 / IS : 3589	
<b>Insulation</b>	:	Not required	
<b>Hydrotest Pressure</b>	:	As per IS:1239, Part 1 / IS : 3589	
<b>Inspection &amp; Testing</b>	:	As per approved QAP	
<b>Manufacturer</b>	:	As per approved Vendor's List	
<b>Service</b>	:	<b>Fluidizing Air (ESP &amp; Silo)</b>	
<b>Size</b>	:	Up to 50 NB	65 NB and upto 150 NB
<b>Standard</b>	:	MS, ERW Pipe to IS:1239 Part 1	
<b>Thickness</b>	:	Heavy Grade	
<b>End Style</b>	:	Screwed Ends	Plain Ends / Beveled Ends
<b>Tolerance</b>	:	As per IS:1239, Part 1	
<b>Insulation</b>	:	Required	
<b>Hydrotest Pressure</b>	:	As per IS:1239, Part 1	
<b>Inspection &amp; Testing</b>	:	As per approved QAP	
<b>Manufacturer</b>	:	As per approved Vendor's List	
<b>Service</b>	:	<b>Vacuum Line</b>	
<b>Size</b>	:	200 NB	
<b>Standard</b>	:	MS, ERW Pipe to IS:3589 Gr. Fe 410	
<b>Thickness</b>	:	Min. 6.35 mm	
<b>End Style</b>	:	Beveled Ends	
<b>Tolerance</b>	:	As per IS:3589	
<b>Insulation</b>	:	Not Required	
<b>Hydrotest Pressure</b>	:	As per IS:3589	
<b>Inspection &amp; Testing</b>	:	As per approved QAP	
<b>Manufacturer</b>	:	As per approved Vendor's List	

<b>B</b>	<b>Water Line</b>
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<b>Service</b>	:	<b>Ash, DM &amp; Overflow Water</b>		
<b>Size</b>	:	Up to 50 NB	Above 50 NB to 150 NB	from 200 NB to 400 NB
<b>Standard</b>	:	MS, ERW Pipe to IS:1239 Part 1		MS, ERW Pipe to IS:3589 Gr. Fe 410
<b>Thickness</b>	:	Heavy Grade		Min 6.35 mm
<b>End Style</b>	:	Screwed Ends	Plain Ends / Beveled Ends	Beveled Ends
<b>Tolerance</b>	:	As per IS:1239, Part 1		As per IS:3589
<b>Insulation</b>	:	Not required		
<b>Hydrotest Pressure</b>	:	As per IS:1239, Part 1		As per IS:3589
<b>Inspection &amp; Testing</b>	:	As per approved QAP		
<b>Manufacturer</b>	:	As per approved Vendor's List		

<b>C</b>	<b>Slurry Line</b>
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<b>Service</b>	:	<b>BA Slurry</b>	<b>Disposal Line</b>
<b>Size</b>	:	200 NB	350 NB
<b>Standard</b>	:	MS, ERW Pipe to IS:3589 Gr. FE 410	
<b>Thickness</b>	:	9.5 mm thk (Minimum thickness will be limited to 9.0 mm)	
<b>End Style</b>	:	Bevel Ends	
<b>Insulation</b>	:	Not Required	
<b>Hydrotest Pressure</b>	:	As per IS:3589	
<b>Inspection &amp; Testing</b>	:	As per approved QAP	
<b>Manufacturer</b>	:	As per approved Vendor's List	

<b>D</b>	<b>HCSD Line</b>
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<b>Service</b>	:	<b>HCSD</b>
<b>Size</b>	:	200 mm ID
<b>Standard</b>	:	Please refer latest approved HCSD pipe datasheet.
<b>Thickness</b>	:	
<b>End Style</b>	:	
<b>Tolerance</b>	:	
<b>Insulation</b>	:	
<b>Hydrotest Pressure</b>	:	
<b>Inspection &amp; Testing</b>	:	
<b>Manufacturer</b>	:	

<b>E</b>	<b>Drain Line</b>
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<b>Service</b>	:	<b>Drain</b>
<b>Size</b>	:	from 50 NB to 150 NB
<b>Standard</b>	:	MS, ERW Pipe to IS:1239 Part 1
<b>Thickness</b>	:	MS, ERW Pipe to IS:1239 Part 1
<b>End Style</b>	:	Plain Ends
<b>Tolerance</b>	:	As per IS:1239 Part 1
<b>Insulation</b>	:	Not Required
<b>Hydrotest Pressure</b>	:	As per IS:1239, Part 1



**PIPE DATA SHEET - ASH HANDLING SYSTEM**

<b>Inspection &amp; Testing</b>	:	As per approved QAP
<b>Manufacturer</b>	:	As per approved Vendor's List

<b>F</b>	<b>Ash Conveying Line</b>
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<b>Service</b>	:	<b>Vacuum Conveying</b>	<b>Pressure Conveying</b>
<b>Size</b>	:	200 NB & 250 NB	250 to 350 NB
<b>Standard</b>	:	CI Pipes, As IS: 1536 Class D	MS, ERW Pipe to IS:3589 Gr. FE 410
<b>Thickness</b>	:	As per IS: 1536 Class D	9.5 mm Thk.
<b>End Style</b>	:	Plain Ends	Beveled Ends
<b>Tolerance</b>	:	As per IS: 1536 Class D	As per IS:3589
<b>Insulation</b>	:	Not Required	
<b>Hydrotest Pressure</b>	:	As per IS: 1536 Class D	As per IS:3589
<b>Inspection &amp; Testing</b>	:	As per approved QAP	
<b>Manufacturer</b>	:	As per approved Vendor's List	