

TTTD-106-1 Rev No. 5 Form No.		PROJECT ENGINEERING & SYSTEM DIVISION BHEL, HYDERABAD –32.			PY51409			
					Rev No. 01			
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COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED, It must not be used directly or indirectly in any way detrimental to the interest of the company. <u>TECHNICAL SPECIFICATION</u> <u>FOR BRANCH PIPE WITH NOZZLE</u>								
Revisions :	Prepared by:	Checked by:	Approved By:	Date				
	-SD-	-SD-	-SD-					
	00	Sumant	Amit/PCS	MNSR	28.07.18			

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1. SCOPE/INTENT:

1.1. This specification covers the technical requirements of constructional features, accessories, inspection, tests, test certificates, documentation, preservation, packing and forwarding of Branch Pipe with Nozzle.

1.2. Scope of supply shall include design, manufacture, inspection, shop testing, shop painting, packing and delivery.

1.3. The supplier shall strictly comply with this standard in all respects. No deviation shall be allowed. However, bidder can raise technical queries on the specification during pre-bid stage and clarifications may be sought from BHEL before the bid submission.

APPLICATION:
These items suitable for fire protection systems (Water based protection system).

2. VARIANT TABLE:

Var. No.	Description	Material Code
01	Triple purpose nozzle (SS304)	PY9751409012
02	Triple purpose nozzle (SS316)	PY9751409020
03	Fog type nozzle (SS304)	PY9751409039
04	Fog type nozzle (SS316)	PY9751409047
05	Short Branch with nozzle (SS304)	PY9751409055
06	Short Branch with nozzle (SS316)	PY9751409063

Note: Bidder to quote as per Material Code as mentioned in the Enquiry

3. TECHNICAL REQUIREMENTS:

3.1. SS 304 Triple Purpose nozzle, Fog Type nozzle and Branch pipe with Solid Jet Nozzle

Sl. No.	Requirements	Compliance
A	TRIPLE PURPOSE NOZZLE	
3.1	Size	63 mm dia. Male instantaneous inlet
3.2	Outlet	Hollow jet, Spray and Shut Off
3.3	Standard	IS:2871
3.4	VOID	
3.5	Material of Construction	
3.5.1	Body	SS 304 (IS:3444, Gr 1)
3.5.2	Nozzle	SS 304 (IS:3444, Gr 1)

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3.2. SS 316 Triple Purpose nozzle, Fog Type nozzle and Branch pipe with Solid Jet Nozzle

Sl. No.	Requirements	Compliance
A	TRIPLE PURPOSE NOZZLE	
3.1	Size	63 mm dia. Male instantaneous inlet
3.2	Outlet	Hollow jet, Spray and Shut Off
3.3	Standard	IS:2871
3.4	VOID	
3.5	Material of Construction	
3.5.1	Body	SS 316 (IS:3444, Gr 4)
3.5.2	Nozzle	SS 316 (IS:3444, Gr 4)
3.5.3	Diffuser Nut & Valve	SS 316 (IS:3444, Gr 4)
3.5.4	Washer & O Ring	Rubber IS:937
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C	SHORT BRANCHPIPE WITH NOZZLE	
3.1	Size	63 mm dia. Male instantaneous inlet

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4. PAINTING As per OEM standard.																																				
5. INSPECTION AND TESTING As per BHEL QAP (Refer attached Annexure)																																				
6. DOCUMENTATION: 6.1. Along with the offer: Signed and stamped copy of this specification as token of acceptance of the specification for execution in the event of Order.																																				
6.2. After PO Placement: Two copies each of the following documents shall be submitted for approval. • G.A. Drawings with weights and dimensions • Technical Data sheets, Catalogue • Material specification details • Tests to be conducted • O&M manuals • Storage/Preservation instructions for at least three years.																																				
Final documentation consisting of above documents shall be submitted in requisite sets (to be decided post order) of hard and soft copies.																																				
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COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company.	Schedule for document submissions:										
	<table border="1"> <thead> <tr> <th>S.no</th> <th>Description</th> <th>Schedule</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Submission of GA drawing & Technical Datasheet by vendor</td> <td>7 days from the date of P.O.</td> </tr> <tr> <td>2</td> <td>Approval GA drawing & Technical Datasheet by BHEL</td> <td>14 days from receipt of the document*</td> </tr> </tbody> </table> * The GA drawing & Technical Datasheet submitted by vendor shall be strictly in compliance to all applicable standards and specification. 7. PRESERVATION, PACKING & MARKING OR PACKING CASE: 7.1. A suitable temporary rust preventive with minimum life of two years shall be applied inside the item/equipment body in order to prevent corrosion. 7.2. All the item / equipment shall be packed suitably in closed wooden cases in order to avoid damage during transit and storage at BHEL. Suitable supports shall be provided inside the cases in order to avoid internal movement. In case of exported consignments, the packing shall be seaworthy (Refer enclosed Annexure for Export Packing guidelines, AA 0490009, Rev-01). Each item / equipment after end protection should be wrapped in polythene sheet before packing in the cases. Each packing case must contain two copies of the shipping list giving details of all the contents of the case. 7.3. The following marking shall be done on each packing case minimum on two sides and at the top. (a) Complete address of the consignee and destination as per BHEL Purchase Order. (b) BHEL Purchase order Number (c) BHEL item Material Code (d) Number of pieces in each packing case (e) Net Weight (f) Gross Weight (g) Packing case number and total number of packing (h) Arrow indicating top of the packing case.			S.no	Description	Schedule	1	Submission of GA drawing & Technical Datasheet by vendor	7 days from the date of P.O.	2	Approval GA drawing & Technical Datasheet by BHEL
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			Rev. No.	Date	Revision Details	Revised By	Checked By	Approved By
			00	28.07.2018	First Issue	-SD-	-SD-	-SD-
			01	07.02.2020	Revised Issue	-SD-	-SD-	-SD-
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