

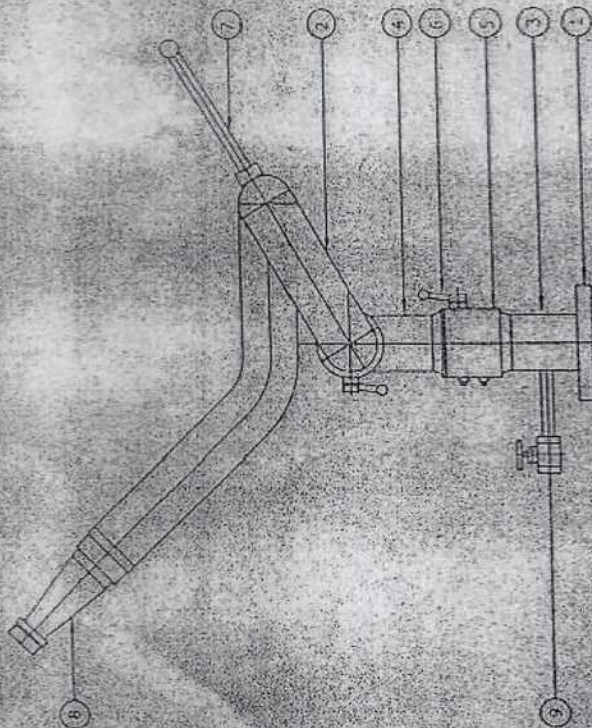
Title	Data Sheet for Water Monitor
Project	Fire Detection & Protection System for 2 x 750 MW Pragati III,CCP

1.0	Manufacturer	NewAge Industries
2.1	Size	75 mm x 38 mm bore
2.2	Design Standard / Specification	As Per IS : 8442
3.0	Quantity	As per system requirement & approved drgs.
4.0	End connections	Flanged End (3" size) & Drilling to ANSI B16.5,150#,FF
5.1	Monitor Movement	Vertical Rotation +80 Deg, -45 Deg. Horizontal Rotation 360 Deg.
5.2	Flow Rate	2580 LPM Min. at 7 kg/cm2
6.0	Material of Construction	
6.1	Base Flange : 80 NB	C.S. to ASTM A-105
6.2	Water Barrel : 80 NB	C.S. Seamless to ASTM A-106,Gr. B
6.3	Pipe : 80 NB	C.S. Seamless to ASTM A-106,Gr. B
6.4	90 Deg. Elbow	C.S. to ASTM A-234,GR. WPB
6.5	Swivel Joint	Gun metal to IS:318,LTB-II
6.6	Lock Handle	Brass to IS:291
6.7	Handle	M.S. to IS:1732
6.8	Nozzle 38mm bore	SS to ASTM A-351,Gr. CF8
6.9	Drain Valve 1/2" size	Gun metal to IS:778
7.0	Hydraulically test Pressure	Entire Assembly shall be Hydraulically tested to Pressure 23kg/cm2 for 5 minutes shall not show any sign of leakage. Monitor shall be tested at operative pressure of 7kg/cm2 have water discharge of 2580LPM & shall have horizontal throw of 60 meters in still air.
8.0	Painting	Three Coats of Chlorinated Rubber Paint over a coat of chlorinated rubber based high build Zinc phosphate primer with Total DFT 200 microns. Attached (No. M121523, Rev.0 dtd. 10.10.09)
9.0	GA drawing	BIS & TAC approved
10.0	Approval	As per approved QAP
11.0	Inspection & Testing	

Handwritten signature

Client	BHEL Doc. No.:
BHEL	FE-VO-314-552-A058

Rev.	Date of Submission	Sheet No.
01	19.02.2010	Page 2 of 2



NOTES

- * ENTIRE ASSEMBLY SHALL BE HYDRAULICALLY TESTED TO PRESSURE 23kg/cm² [G] FOR 5 MINUTES SHALL NOT SHOW ANY SIGN OF LEAKAGE.
- * MONITOR SHALL BE TESTED AT OPERATIVE PRESSURE OF 7 Kg/cm² [G]. HAVE WATER DISCHARGE OF 2580LPM, AND SHALL HAVE HORIZONTAL THROW OF 60 METERS IN STILL AIR.
- * MONITOR MOVEMENT:
 - * VERTICAL ROTATION — +80° -15°
 - * HORIZONTAL ROTATION — 360°
- * ANTI-CORROSION TREATMENT:
 - ALL STEEL COMPONENTS SUBJECTED TO DIRECT WATER CONTACT SHALL BE HOT-DIP GALVANISED TO THICKNESS OF NOT LESS THAN 0.012mm.
- * ALL DIMENSIONS ARE IN MILLIMETERS.

BASE FLANGE 3" (Size)
AS PER ANSI-B-16.5, 150 # F/F

- * OUT. DIA. Ø190.5mm
- * P.C.D. Ø152.4mm
- * NO. OF HOLES 4 Nos.
- * HOLE DIA. Ø19 mm
- * FLANGE THK. 23.8 mm

NO.	DESCRIPTION	MATERIAL	SPECIFICATION	QTY.
9	DRAIN VALVE 1/2" SIZE	GUNMETAL	IS-778	01
8	NOZZLE 38mm BORE	S.S.	ASTM-A-351, GR-CF8	01
7	HANDLE	M.S.	IS-1732	01
6	LOCK HANDLE	BRASS	IS-1291	02
5	SWIVEL JOINT	GUNMETAL	IS-318, LTB-D	02
4	90° ELBOW 480 N.B.	C-5	ASTM-A-234, GR-WPB	01
3	PIPE	C.S. SEAMLESS	ASTM-A-106, G-B	01
2	WATER BARREL 100 N.B.	C.S. SEAMLESS	ASTM-A-106, G-B	01
1	BASE FLANGE 3" BORE	C-5	ASTM-A-305	01

NEWAGE INDUSTRIES
SURENDRANAGAR

TITLE: STAND POST TYPE
WATER MONITOR (TYPE-1)
(CAP: 2580 LPM)

PROJECT: 2 X 150 KW TRAGANT/GPP
P.O. NO. 12-28/BB/15371 DT 2009/09

DTY: 10 NOS.

DRN: SUM
CHKD: *[Signature]*

REV: 0 SCALE: N.T.S.

DRAWING No.: ML21523

REV.	ZONE	REVISION	DATE	DRN.	CHKD.	APVD.

9472-001-QVM-Q416

ITEM (MATERIAL, CLASS, GRADE, RATING, RANGE, SIZE ETC.):		STANDARD QUALITY PLAN		Q.P. NO.: 0000-999-QOM-S-021		REVIEWED BY:		APPROVED BY:		
WATER MONITOR (STAND POST TYPE D) FOR FIRE FIGHTING		CONFORMING TO CODE: IS : 8442 - 1977 (REAFFIRMED 2000)		REV. NO: 01 DATE : 26/07/06		U. SUDEEP		ANIL GUPTA		
				PAGE 1 OF 1		O.P. NIRANJAN		ANIL GUPTA		
				VALID UPTO : 25/07/2009		S.SIMLA				
Sl. No	Components & Operation	Characteristics	Class	Type of check	Quantum of check	Reference Document	Acceptance norms	Format of records	Agency	Remarks
1.	2.	3.	4.	5.	M C/N	7.	8.	9.	M C N	11.
1.1	Raw Material Base Flange, Swivel Joint, Water Barrel, Reducer, Nozzle, Elbow, Bends and Lock for horizontal & vertical rotation	Chemical & Mechanical Properties	Major	Chemical & Physical Test	-	Approved Drawing/ Data sheet / IS : 8442	Approved Drawing/ Data sheet / IS : 8442	MTC	P V V	
2	In-process Inspection									
2.1	Machining of components	Dimension, Finish	Major	Measurement, Visual	100%	-- Do --	-- Do --	IR	P	
2.2	Anti Corrosive Treatment	Coating Thickness	Major	Measurement, Visual	100%	-- Do --	-- Do --	IR	P V V	
2.3	Assembly	Fitment	Major	Visual	100%	-- Do --	-- Do --	IR	P	
3	Final Inspection									
3.1	Assembled Water Monitor	Workmanship & Finish	Major	Visual	100%	-- Do --	-- Do --	TC / IR	P W V	
3.2		Dimensional		Measurement	100%	-- Do --	-- Do --	TC / IR	P W V	
3.3		Leakage Test	Major	Hydrotest at 23 Kg/Cm ² for 5 min.	100%	-- Do --	-- Do --	TC / IR	P W V	
3.4	Performance Test	- Discharge Capacity, - Horizontal & Vertical Throw	Major	Measurement	One / Lot / Size	-- Do --	-- Do --	TC / IR	P W V	
3.5	Functional Test-	Horizontal & Vertical Movement and Locking arrangement	Major	Operation	100%	-- Do --	-- Do --	TC / IR	P W V	
3.6		Painting & Marking	Major	Verification	100%	IS : 8442-	IS : 8442	IR	P V V	

Note: Raw Material shall be as per approved drawings/data sheets.

LEGEND: * RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.
 ** M: MANUFACTURER / SUB-SUPPLIER C: MAIN SUPPLIER, N: NTPC P: PERFORM W: WITNESS AND V: VERIFICATION.
 AS APPROPRIATE, CHP: NTPC SHALL IDENTIFY IN COLUMN "N" AS "W".

FORMAT NO.: QS-01-QAI-P-10/F3-R1

ENGG. DIV./QA&I