Quotation number	
Prepared by	Vinod Kumar

CORROSION TEST RANGE

SF–450

Mechanical Specifications

Inner Chamber - Standard
SF Series

1.1	Test Space	The inner chamber shall be constructed using fibre reinforced plastic (FRP). The test space floor shall handle a maximum uniform distributed load of 200kg and 30kg of point load. Channels for placement of shelves shall be provided where inclined rack or rods can be placed to hang the unit under test (Inclined rack and FRP rods sold separately)	
1.2	Atomiser	A non corrosive acrylic based fog tower is used to house the acrylic based siphon type nozzle. This fog tower ensures all heavy droplets are collected back in siphon tank and only fine fog is circulated in the chamber. The nozzle shall be capable of a fog fall out rate of 0.5 to 2.5ml / 80cm^2 / h @12 to 18 PSI 450 Ltr model will be provided with one atomizer and 1000 Ltr model will be provided 2 nos of atomizer	
1.3	Angle Racks	1x16 slots [15 Deg inclination] removable angle rack to place the spécimen for 450 Ltr chamber 1x24 slots [15 Deg inclination] removable angle rack to place the spécimen for 1000 Ltr chamber	
1.4	FRP rods	Specimen Hanging Rods FRP	
1.5	Test Space Dimensions [With Hood]	A. Width [mm]	850
1.6		B. Depth [mm]	730
1.7		C Height [mm]	1300
1.8		Volume [L]	868
1.9	Test Space Dimensions [Without Hood]	D. Width [mm]	850
1.10		E. Depth [mm]	730
1.11		F Height [mm]	820
1.12		Volume [L]	519
1.13			

Mechanical Specifications

External Structure
SF Series

2.1	Exterior	The exterior of the chamber shall be constructed using fibre reinforced plastic (FRP) and shall be coated with a white PU based paint. The chamber shall comprise mainly of the test space, the electrical and the pneumatic compartment. These compartments shall be isolated from each other to avoid any failure of components due to corrosion. The electrical compartment shall be in front of the chamber and will have easy access to all the electrical and controls. The colour of the compartment panel shall be dusty grey. The pneumatic compartment shall be in the rear of the chamber and will have easy access to all major components such as saturator and valves.	
2.2	Canopy Door	The canopy door shall have full access to the test space and shall be hinged to the rear of the chamber. These hinges shall be made using nylon. The canopy door shall be of fibre reinforced plastic (FRP) The canopy door shall be operated through a pneumatic cylinder. This cylinder shall be mounted by the side of the chamber and shall be operated through the controller	
2.3	Sealing	The canopy door shall be sealed using a water channel. This water channel has to be filled prior to operation of this chamber. The canopy door support frame shall be immersed in this water channel creating a positive seal and shall avoid any leak of the corrosive fog inside. An overflow drain shall be provided for this water seal.	
2.4	Mounting	The chamber shall be mounted on levelling casters. These casters are a combination of wheels for mobility and adjustable rubber mounts for levelling the chamber. The chamber shall only be wheeled-in or fork lifted to the installation area.	
2.5	Insulation	The test space shall be insulated using multi layered mineral wool. This mineral wool shall have a low `k' factor and high density of up to 48Kg/m3 This insulation shall be non hygroscopic in nature and asbestos free.	
2.6	External Dimensions [Approximate]	A. Width [mm]	1720
2.8		B. Depth [mm]	1370
2.9		C. Height [mm]	1520

Air & Solution Specifications

SF Series

3.1	Solution Piping	The solution piping in the chamber shall be done using silicone tubing and transparent polyurethane tubing. All polyurethane tubing shall be 8x6mm and PVC and nylon connectors shall be used. A 2m tube shall be provided at the rear of the chamber which shall be immersed in the solution reservoir.
3.2	Low Solution float	A float level switch shall be provided which can be immersed in the solution reservoir. This shall give an output to the controller when the solution reaches low level. A 2m tube shall be provided at the rear of the chamber which shall be immersed in the solution reservoir. Maximum consumption of solution will be 350mL/h A suitable capacity of solution reservoir will be provided
3.3	Water Piping	The water piping in the chamber shall be done using transparent polyurethane tubing. All polyurethane tubing shall be 8x6mm and PVC and nylon connectors shall be used. The main water inlet to the chamber shall be at the rear of the chamber and a 8x6mm PU tube push-in quick connector shall be provided. This water shall be mainly used for the operation of the saturator and humidification system.
3.4	Saturator	A non corrosive FRP based saturator shall be used to saturate the air as per standard. The construction is secured using tie rods and stainless steel plates. The saturator shall be assembled with components such as float switch, heater, sensors and an air dispenser shall be provided for equal distribution of air.
3.5	Atomiser	A non corrosive acrylic based fog tower is used to house the acrylic based siphon type nozzle. This fog tower ensures all heavy droplets are collected back in siphon tank and only fine fog is circulated in the chamber. The nozzle shall be capable of a fog fall out rate of 0.5 to 2.5ml / 80cm^2 / h @12 to 18 PSI 450 Ltr model will be provided with one atomizer and 1000 Ltr model will be provided 2 nos of atomizer
3.6	Pneumatic Piping	The pneumatic piping in the chamber shall be done using blue polyurethane tubing. All polyurethane tubing shall be 8x6mm and push-in quick connectors shall be used.
3.7	Air Purge	An air purge system shall be provided to vent out the corrosive fumes / salt fog from the test space before opening the canopy door. A non corrosive nylon based flat fan nozzle shall be provided with regulated compressed air to drain out the fog.
3.8	Air Regulation	The main air inlet to the chamber shall be at the rear of the chamber and a 8x6mm PU tube push-in quick connector shall be provided. A pressure switch shall also be provided to cut-off the chamber in case of a high or low inlet air pressure. The compressed air of 5 to 6 kg/cm2 shall be provided (Air compressor to be provided by the user). This air shall be regulated in the chamber by means of an air regulator and used for the operation of the pneumatic canopy door operation. The compressed air is further regulated to 1 to 3 kg/cm2 for the operation of the atomiser. A pressure gauge shall be provided to indicate this pressure.

Electrical Specifications

SF Series

4.1	Test Space Heaters	Flexible test space heaters shall be embedded in the test space. These heaters shall be covered with aluminium blankets for uniform distribution of heat. The heater outputs shall be controlled either through solid state relays. The heater surface shall be mounted with a RTD Pt-100 sensor to cut-off the electrical supply in case the surface temperature reaches critical limit. This limit shall be set by safety controller placed in the electrical compartment.
4.2	Saturator Heater	A cartridge type heater suitable for de-mineralised water shall be used in the saturator. This shall ensure high reliability of the heaters. The heater outputs shall be controlled either through solid state relays. The heater surface shall be mounted with a RTD Pt-100 sensor to cut-off the electrical supply in case the surface temperature reaches critical limit. This limit shall be set by safety controller placed in the electrical compartment. The automatic level control shall ensure adequate reservoir of water in the saturator and avoid dry runs.
4.3	Circuit breakers	Miniature circuit breakers shall be used for the protection of control circuit and heaters
4.4	Emergency Stop	A mushroom head emergency stop switch shall be provided on the operating panel of the chamber for immediate shutdown of all chamber operations.
4.5	Power Supply	The power supply shall be as per the equipment label by the side of the chamber. A regulated power supply shall also be provided for the low voltage devices through EMI filter. This combination of regulated power supply with EMI filter shall ensure protection against power surge and spikes.
4.6	Earthing	All electrical components shall be separately earthed to a common earth strip. This earth strip shall be connected to a earth pit suitable to ensure the values between neutral and ground are less than 2V. The doors and the test space shall be connected to ensure complete chamber earthing. A residual current circuit breaker (RCCB) shall be provided to protect against any leakage current

Application Consideration

5.1	General	Certain application constraints should be considered when installing corrosion test chambers. The reliability is often dependent upon proper and complete compliance with these considerations. Where the application varies from the guidelines presented, it should be reviewed with your local installation engineer. The chamber is designed, constructed and manufactured for the sole application of corrosion tests.
5.2	Chamber Placement	A base or foundation is not required if the selected location is level and strong enough to support the chambers weight. Provide lateral clearance as per the recommendations depicted in the layout diagram of the corrosion test chamber. Clearances to the side of the chamber provide access to maintaining the major components.
5.3	Water Treatment	Dirt, scale, products of corrosion, and other foreign material in the water will adversely affect the performance of the corrosion test chamber. Proper water treatment must be determined locally and depends on the type of system and local water characteristics. Please refer the water quality guidelines.
5.4	Ambient Limitations	The corrosion test chambers are designed for use in laboratory conditions in ambient ranging from 20°C to 25°C and humidity between 20% to 70% RH.
5.5	Condensate Drain	The corrosion test chamber shall be connected to a common drain to drain out the water condensate. The chamber is fitted with an internal BSP screw threaded R 1”.
5.6	Sound	The sound pressure level emitted from the corrosion test chamber is approximately 60dB(A) measured at a distance of 1m from the front of the chamber, in a non reverberating room.
5.7	Unit Under Test Limitations	The corrosion test chamber cannot be used for tests on explosive, toxic or easy inflammable materials nor with specimens generating or releasing such materials. This applies particularly to all tests with liquids that boil easily, fuel, hydraulic fluids, lubricants and the like. In this case, the information on the material safety data sheet is to be kept in mind. Prior to commencement of the tests, the operator has to check the material compatibility of the materials fitted in the test space (fibre reinforced plastic, acrylic, nylon, polyurethane, silicone) to the materials/ gases which might be discharged by the test material. The latter can form acids or bases when exposed to humidity. The leaking materials/gases can lead to extensive damage of the chamber. No living being is allowed to stay in the test chamber. There is danger to life.
5.8	Exhaust Port (Applicable only for BT model)	The CCT chambers are fitted with exhaust ports and shall be connected by a flexible hose and vented outside the laboratory. The first chamber exhaust port is fitted with an external BSP screw threaded R 2 1/2” The second air circulator exhaust port is fitted with an external BSP screw threaded R 2”

Water Quality Guidelines

SF- Series

6.1	Consideration	This guideline for the water quality of tap water used in plate heat exchangers of stainless steel [EN No. 1.4404 ~ AISI 316L] brazed with pure copper. The water which flows in these plate heat exchangers varies a lot from application to application and corrosion can be a problem in some situations. It is important to point out that the water specification is not a guarantee against corrosion, but it must be considered as a tool to avoid the most critical water applications. A summary of the parameters and their recommended quality limits are listed in the table below.
6.2	Temperature Parameter	In general, an increase in temperature will increase the corrosion rate of most metals. For copper in heated water, the likelihood of pitting is higher at temperatures above 60°C. Also the risk of stress corrosion cracking of stainless steel will increase at temperatures above 60°C, and pitting and crevice corrosion in stainless steel is also temperature dependent [see the section about chloride].
6.3	pH Parameter	General corrosion of copper mainly depends on pH and the risk of corrosion is lowest if pH is kept as per the range given in Appendix A
6.4	Alkalinity Parameter	If the content of hydrogen carbonate [HCO3-] in the water is very low, i.e. below 70 mg/l , corrosion products of copper will dissolve and it will be released into the system. It is recommended to maintain HCO3 concentration level as mentioned in the Appendix A
6.5	Conductivity Parameter	A high conductivity in the tap water means that the water has a high concentration of ionic substances. In general, an increase in conductivity of tap water will increase the corrosion rate of most metals. The conductivity should maintain as per the range given in Appendix A
6.6	Hardness Parameter	Copper is susceptible to corrosion in very soft water and the [Ca2+, Mg2+] / [HCO3-] ratio should therefore as per the range given in Appendix A
6.7	Chloride Parameter	Presence of chloride in the drinking water will increase the risk of localized corrosion of stainless steel. The limit value will depend on temperature according to table

CHLORIDE CONTENT	MAXIMUM TEMPERATURE				
	30 °C/86 °F	60 °C/140 °F	80 °C/176 °F	120 °C/248 °F	130 °C/266 °F
= 10 ppm	SS 304	SS 304	SS 304	SS 304	SS 316
= 25 ppm	SS 304	SS 304	SS 304	SS 316	SS 316[4]
= 50 ppm	SS 304	SS 304	SS 316	SS 316	254 SMO
= 80 ppm	SS 316	SS 316	SS 316	SS 316[4]	254 SMO
= 150 ppm	SS 316	SS 316	SS 316[4]	254 SMO	254 SMO
= 300 ppm	SS 316	SS 316[4]	254 SMO	254 SMO	254 SMO
> 300 ppm	254 SMO	254 SMO	254 SMO	254 SMO	254 SMO

[4] with copper brazing material

6.8	Sulphate Parameter	High concentrations of sulphate will increase the risk of pitting in copper. Please refer to Appendix A for the concentration level
6.9	Nitrate Parameter	Nitrate ions have an influence similar to that of sulphate. Recommended concentration level is as per Appendix A given below

Water Quality Guidelines

Appendix A - Water recommendations

The guide below indicates the corrosion resistance of stainless steels and brazing materials in district energy water at room temperature. The table lists a number of important chemical components. However, corrosion is a very complex process influenced by many different factors in combination. This table is therefore a considerable simplification and should not be considered definitive.

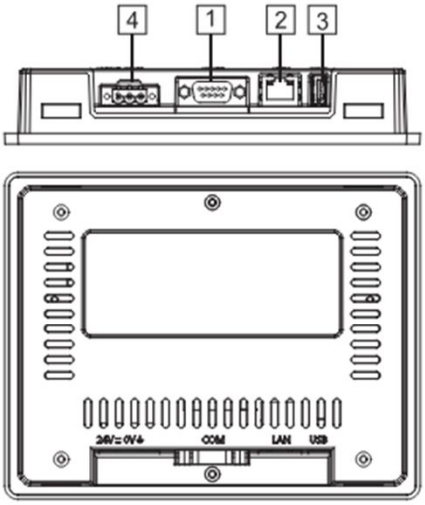
EXPLANATIONS:

\+ Good resistance under normal conditions
0 Corrosion problems possible especially when more factors have value 0
\- Use not recommended

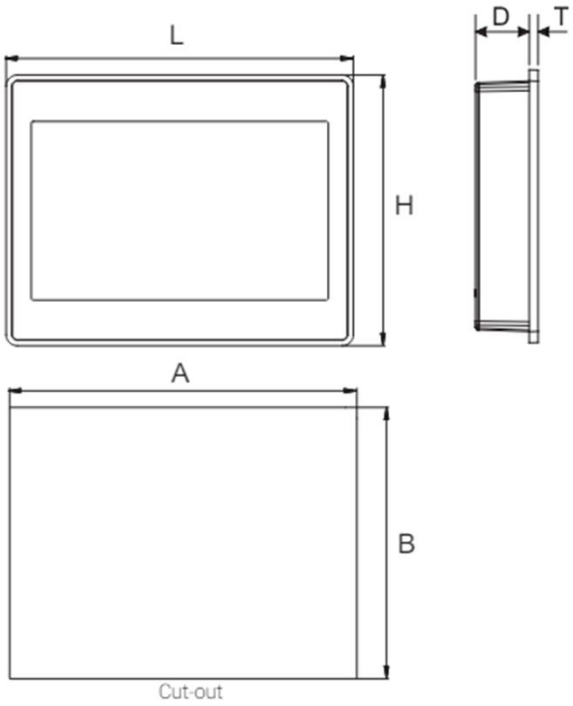
			Plate material			Brazing material		
WATER CONTENT	**CONCENTRATION (mg/l or ppm)**	**TIME LIMITS Analyze before**	**AISI 304**	**AISI 316**	**254 SMO**	**COPPER**	**NICKEL**	**STAINLESS STEEL**
Alkalinity (HCO_3^-)	< 70	Within 24 h	+	+	+	0	+	+
	70-300		+	+	+	+	+	+
	> 300		+	+	+	0/+	+	+
Sulfate[1] (SO_4^{2-})	< 70	No limit	+	+	+	+	+	+
	70-300		+	+	+	0/-	+	+
	> 300		+	+	+	-	+	+
HCO_3^- / SO_4^{2-}	> 1.0	No limit	+	+	+	+	+	+
	< 1.0		+	+	+	0/-	+	+
Electrical conductivity	< 10 µS/cm	No limit	+	+	+	0	+	+
	10-500 µS/cm		+	+	+	+	+	+
	> 500 µS/cm		+	+	+	0	+	+
pH [2]	< 6.0	Within 24 h	0	0	0	0	+	0
	6.0-7.5		+	+	+	0	+	+
	7.5-10.0		+	+	+	+	+	+
	>10.0		+	+	+	0	+	+
Ammonium (NH_4^+)	< 2	Within 24 h	+	+	+	+	+	+
	2-20		+	+	+	0	+	+
	> 20		+	+	+	-	+	+
Chlorides (Cl^-)	< 100	No limit	+	+	+	+	+	+
Please also see	100-200		0	+	+	+	+	+
table below	200-300		-	+	+	+	+	+
	> 300		-	-	+	0/+	+	-
Free chlorine (Cl_2)	< 1	Within 5 h	+	+	+	+	+	+
	1-5		-	-	0	0	+	-
	> 5		-	-	-	0/-	+	-
Oxygen	< 0.02 or as low as possible		+	+	+	+	+	+
Hydrogen sulfide (H_2S)	< 0.05	No limit		+	+	+	+	+
	> 0.05			+	+	0/-	+	+
Free (aggressive)	< 5	No limit	+	+	+	+	+	+
carbon dioxide (CO_2)	5-20		+	+	+	0	+	+
	> 20		+	+	+	-	+	+
Total hardness (°dH)	4.0-8.5	No limit	+	+	+	+	+	+
Nitrate[1] (NO_3^-)	< 100	No limit	+	+	+	+	+	+
	> 100		+	+	+	0	+	+
Iron[3] (Fe)	< 0.2	No limit	+	+	+	+	+	+
	> 0.2		+	+	+	0	+	+
Aluminum (Al)	< 0.2	No limit	+	+	+	+	+	+
	> 0.2		+	+	+	0	+	+
Manganese[3] (Mn)	< 0.1	No limit	+	+	+	+	+	+
	> 0.1		+	+	+	0	+	+

Controller Specifications

Controller Specification enviCoM 4.0 - 7”



1 Serial Port
2 Ethernet Port
3 USB port (vers. 2.0 - 1.1)
4 Power Supply



System Resource		
7.1	Display Colours	7” TFT 16:9 - 64K
7.2	Resolution	800x480, WVGA
7.3	Brightness	200 Cd/m2 typ.
7.4	Dimming	Yes
7.5	Touchscreen	Resistive
7.6	CPU	32-bit RISC single core - 1 GHz
7.7	Operating System	Linux 3.12
7.8	Flash	4 GB
7.9	RAM	512 MB
7.10	RTC, RTC Back-up, Buzzer	Yes

Controller Specifications

Controller Specification enviCoM 4.0 - 7”

Interface		
7.11	Ethernet port	1 (port 0 - 10/100)
7.12	USB port	1 (Host v. 2.0, max. 500 mA)
7.13	Serial port	1 (RS-232, RS-485, RS-422, software configurable)

Ratings		
7.14	Power Supply	24 Vdc (10 to 32 Vdc)
7.15	Current Consumption	0.3 A at 24 Vdc (max.)
7.16	Input Protection	Automatic
7.17	Battery	Yes (Supercapacitor)

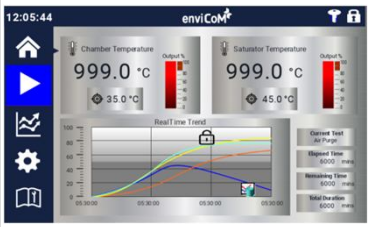
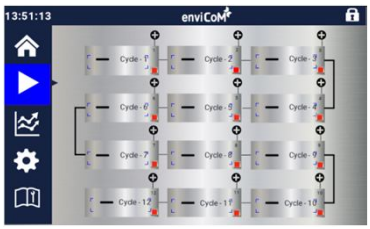
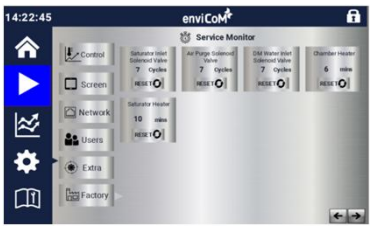
ENVIRONMENT CONDITIONS		
7.18	Operating Temp	0 to 50 °C (vertical installation)
7.19	Storage Temp	-20°C to +70°C
7.20	Operating / Storage Humidity	5-85% RH, non condensing
7.21	Protection Class	IP66 (front), IP20 (rear) Type: 2, 4X

DIMENSIONS AND WEIGHTS		
7.22	Faceplate LxH	187x147 mm (7.36x5.79“)
7.23	Cutout AxB	176x136 mm (6.93x5.35“)
7.24	Depth D+T	29+5 mm (1.14+0.19”)
7.25	Weight	Approx 0.6 Kg

Control Module		
7.26	Sampling period	50 ms (2 channels synchronous sampling)
7.27	Control type	PID control

Approvals		
7.28	CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)
7.29	ATEX	Zone 2: II 3 G Ex ic ec IIC T6 Gc
7.30	UL	cULus: UL508
7.31	UL	cULus: Class 1 Div 2
7.32	DNV-GL	Yes
7.33	EU RO MR	Yes
7.34	RCM	Yes

Controller Features

7.35	Monitor:	An intuitive touch screen controller designed to program and monitor the salt spray corrosion test chamber naturally and easy to understand. The Chamber Temperature, Saturator Temperature, Graph, Program Timing Information and User Level Controls can be accessed form this screen	
7.36	Reporting	Graphical and tabular view of test (target vs actual) downloadable onto a pen drive	
7.37	Program	Simple institutive program screen to start and stop your tests as per various standards. Continuous 12 steps of various different test cycles can be programmed.	
7.38	User Level Security	User, Admin, and Factory level security rights are provided to avoid any unwanted changes or disruption of tests.	
7.39	Service Monitor	All critical components are monitored for their usage and preventive maintenance popups are enabled.	

Performance Considerations

SF Series

8.1	Performance Data	Temperature range [°C] Min	5°C above ambient
8.2		Temperature range [°C] Max	55C
8.3		Temperature fluctuation [°C]	±1°C
8.4	Mechanical Details	Type of material used	Fibre reinforced plastic, Acrylic & Nylon
8.5		Hood operation	Pneumatic operated
8.6		Solution and air tubing	Poly-Urethane tube
8.7		Spray Mechanism	Acrylic atomiser
8.8		Removable Angle Racks	1x18 slots [15 Deg inclination] (for 450 Ltr) 1x24 slots [15 Deg inclination] for 1000 Ltr
8.9		Fog fall out rate	1 to 3ml/80cm2/h
8.10		Noise Level [dbA]	50
8.11	Installation and Operations [Refer Mechanical Layout for Site requisites]	Installation Location	Sonipat
8.12		Nominal voltage	1P/N/E 230VAC ±10% 50Hz
8.13		Nominal power [kW] – (Approximate)	3.2
8.14		Nominal current [A] – (Approximate)	13
8.15		Crimped Power cable length [mtr]	5 meter to provide
8.16		DM water inlet connection	8x6mm PU quick connector
8.17		Air inlet connection	8x6mm PU quick connector
8.18		Drain Connections	1'' BSP male thread
8.19	Accessories Included (Default)	Specimen Hanging Rods FRP [nos]	6
8.20		PU tube 6x8mm blue & clear [mtr]	3
8.21		Funnel, Jar & rubber cork [set]	2
8.22		Solution Tank : 30 Liters MoC : Plastic	1
8.23	Documents Included	Operation & Maintenance Manual [set]	Soft copy – 1 (Pen Drive) Hard copy – 0
8.24		a. Manufacturer Calibration Certificate* [nos]	1
8.25		b. Warranty Certificate [nos]	1
8.26		c. Drawings & Test reports [set]	1
8.27		e. Service Log Book [nos]	1
8.28	Shipping Details [Approximate]	Net Weight [Kg]	350
8.29		Gross Weight [After packing] [Kg]	500

Performance Considerations

SF Series

8.30	Logistics Details	Freight & Transit Insurance by	CME
8.31		Unloading & Placement of the chamber by	Customer
8.32		Unpacking of the Chamber by	Customer
8.33		Transportation Documents	Invoice, Delivery Challan, Packing List & E-Way Bill
8.34	Additional Information	Warranty Period	12 months from the date of installation or 13 months from the date of supply, whichever is earlier *Note: Warranty shall be null and void, if the equipment is not placed as per the conditions/parameters mentioned in the Site Requirement Conditions (SRC) document, which is shared on PO receipt.*
8.35		Equipment placement in standard lab condition (The environmental chambers are designed for use in laboratory conditions in ambient ranging from 15°C to 25°C and humidity between 20% to 75% RH)	Yes
8.36		If not in standard Lab Condition, Temperature & Humidity conditions at equipment location	NA
8.37		* Calibration shall be done only for temperature sensor, gauges and controllers	
8.38		** Inspection at Supplier factory (If Applicable) shall be conducted only with water as solution. Test with other solutions shall be conducted at customer premises, required solution to be provided by the purchaser.	
		Additional test standard to comply Test testing as per ASTM B117,DIN50021SS,DIN53167, ISO2409:1992,TRWS-12971200. similar to the WO no. 121095	

Compliance to Test Standard

S.No.	Name of Test Standard\	Standard origin industry/ country	Brief Description of Standard	Model that can comply with	Accessories info, if any required
9.1	ASTM B-117	American	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray of neutral (pH 6.5 to 7.2) salt water solution, which falls-out on to the specimens at a rate of 1.0 to 2.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil
9.2	ASTM B-287	American	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray of acidified (pH 3.1 to 3.3) salt water solution, which falls-out on to the specimens at a rate of 0.75 to 2.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil
9.3	ASTM B-368	American	Chamber Temperature - 49°C; Saturator Temperature - 60°C Exposed to a continuous indirect spray of acidified (pH 3.1 to 3.3) salt water solution, which falls-out on to the specimens at a rate of 1to 2.0ml/80cm²/hour, in a chamber temperature of +49C.	SF-450 SF-1000	Nil
9.4	ASTM D-1735	American	Chamber Temperature - 38°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray water, which falls-out on to the specimens at a rate of 1.5 to 3.0ml/80cm²/hour, in a chamber temperature of +38C	SF-450 SF-1000	Nil
9.5	ASTM G85, Annex 1	American	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray of acidified (pH 3.1 to 3.3) salt water solution, which falls-out on to the specimens at a rate of 1.0 to 2.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil
9.6	GM 4298P	American	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray of neutral (pH 6.5 to 7.2) salt water solution, which falls-out on to the specimens at a rate of 1.0 to 2.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil
9.7	GM 4465P	American	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray water, which falls-out on to the specimens at a rate of 1.0 to 2.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil
9.8	MIL STD 202F	American Military	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray of neutral (pH 6.5 to 7.2) salt water solution, which falls-out on to the specimens at a rate of 1.0 to 2.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil

Compliance to Test Standard

S.No	Name of Test Standard\	Standard origin industry/ country	Brief Description of Standard	Model that can comply with	Accessories info, if any required
9.9	AS 2331 Method 3.1	Australia	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray water, which falls-out on to the specimens at a rate of 1.5 to 3.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil
9.10	AS 2331 Method 3.2	Australia	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray of acidified (pH 3.1 to 3.3) salt water solution, which falls-out on to the specimens at a rate of 1.0 to 2.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil
9.11	AS 2331 Method 3.3	Australia	Chamber Temperature - 50°C; Saturator Temperature - 60°C Exposed to a continuous indirect spray of acidified (pH 3.1 to 3.3) salt water solution, which falls-out on to the specimens at a rate of 1.0 to 2.0ml/80cm²/hour, in a chamber temperature of +50C.	SF-450 SF-1000	Nil
9.12	AA0324 (AA-P 184)	BMW	Chamber Temperature - 35°C or 50°C; Saturator Temperature - 45°C or 60°C Exposed to a continuous indirect spray water, which falls-out on to the specimens at a rate of 30 to 40ml/80cm²/24hours, in a chamber temperature of +35C or 50°C.	SF-450 SF-1000	Nil
9.13	BS 2011 Part 2.1	British	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray water, which falls-out on to the specimens at a rate of 1.0 to 2.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil
9.14	BS 3900 F12	British	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray of neutral (pH 6.5 to 7.2) salt water solution, which falls-out on to the specimens at a rate of 1.0 to 2.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil
9.15	BS 7479	British	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray water, which falls-out on to the specimens at a rate of 1.5 to 3.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil
9.16	BS 5466 P1	British	Chamber Temperature - 35°C; Saturator Temperature - 45°C Exposed to a continuous indirect spray of neutral (pH 6.5 to 7.2) salt water solution, which falls-out on to the specimens at a rate of 1.0 to 2.0ml/80cm²/hour, in a chamber temperature of +35C.	SF-450 SF-1000	Nil