HUMIDIFIERS - ADDENDUM

SYMBOL	MFR	MODEL	CFM	ENT. STEAM P.S.I.G.	CONTROL VALVE LB/HR	DISPERSION PANEL					REMARKS
						MODEL	FACE VEL. FPM	A.D.P. IN. W.C.	DIMENSIONS WIDTH	DIMENSIONS HEIGHT	
H-1A,B	ARMSTRONG	CS-14	11,804	10	280	HUMIDIPACK	787	0.07	60"	36"	TWO HUMIDIFIERS IN BANK (SCHEDULE IS FOR EACH HUMIDIFIER) *1, *2, *3, *4, *5, *6, *7
H-2	ARMSTRONG	CS-14	11,000	10	280	HUMIDIPACK	772	0.07	54"	38"	*1, *2, *3, *4, *5, *6, *7

REMARKS:

1. STEAM-TO-STEAM HUMIDIFIER WITH 14 GA. STAINLESS STEEL TANK AND COVER. HEAT EXCHANGER AND HEADERS SHALL BE NICKEL-PLATED TUBULAR COPPER. NORMALLY CLOSED MODULATING STEAM VALVE SHALL BE MOUNTED ON THE STEAM SUPPLY TO THE HEAT EXCHANGER WITH MODIFIED LINEAR FLOW CHARACTERISITICS, STAINLESS STEEL TRIM AND PNEUMATIC ACTUATOR. PROVIDE FLOAT AND THERMOSTATIC TRAP. NEMA 4 CONTROL CABINET ENCLOSURE. HUMIDIFIER SHALL BE CAPABLE OF SUPPORTING TAP OR SOFTENED WATER. HUMIDIFIER SHALL CONTAIN THE FOLLOWING OPERATIONAL AND MAINTENANCE FEATURES: WATER MAKEUP VALVE CONTROL, AUTO DRAIN FLUSH, END-OF-SEASON DRAIN, LOW WATER CUTOFF, MODULATING STEAM CONTROL, SURFACE SKIMMER, REMOVABLE COVER AND REMOVABLE CLEANOUT PLATE. MICROPROCESSOR-BASED CONTROLLER SHALL BE PROVIDED AND BE CAPABLE OF STEAM MODULATION OF HUMIDIFIER OUTPUT, AS WELL AS CONTROL OF ALL FILL AND DRAIN FUNCTIONS. KEYPAD INTERFACE SHALL BE CAPABLE OF MONITORING AND/OR CONTROLLING THE FOLLOWING PARAMETERS: GENERATION STATUS, AUTO DRAIN/FLUSH FREQUENCY INTERVAL AND DURATION, END-OF-SEASON DRAIN STATUS, SYSTEM FAULT INDICATOR, HIGH LIMIT AND AIR FLOW PROVING CIRCUIT CONDITION, AND SERVICE MESSAGE. PROVIDE A METHOD TO REMOVE A MAJORITY OF THE SCALE FROM THE GENERATOR WITHOUT CHEMICALS TO REDUCE CHEMICAL CLEANING FREQUENCY.
2. STEAM DISPERSION PANEL SHALL INCLUDE THE FOLLOWING COMPONENTS: SINGLE HEADER AND CLOSELY-SPACED STEAM DISPERSION TUBES. DISPERSION TUBES SHALL BE MADE OF A MATERIAL DESIGNED FOR HIGH STEAM TEMPERATURES. THE HUMIDIFIER SHALL PROVIDE ABSORPTION CHARACTERISTICS THAT PRECLUDE WATER ACCUMULATION ON ANY IN-DUCT SURFACES WITHIN 23" DOWNSTREAM OF THE HUMIDIFIER TUBE PANEL. EACH PACKAGED HUMIDIFIER PANEL SHALL CONTAIN STAINLESS STEEL MOUNTING POINTS. ALL TUBES AND HEADERS SHALL BE 304 STAINLESS STEEL AND JOINTS SHALL BE WELDED.
3. PROVIDE THE FOLLOWING ACCESSORIES: FACTORY MOUNTED CONTROL CABINET, HUMIDIFIER INSULATION, FACTORY DISPERSION PANEL INSULATION, 4" FLANGED OUTLETS, AND SUPPORT LEGS. COORDINATE CONTROL OPTIONS AND CONTROL OF HUMIDIFICATION SYSTEM WITH CONTROL CONTRACTOR. CONTROL CONTRACTOR TO PROVIDE PRIMARY CONTROL SIGNAL, AIR PROVING SWITCH, MODULATING HIGH LIMIT CONTROL, VAV CONTROL PACKAGE AND COLD SNAP OFFSET SENSOR.
4. PROVIDE TWO-YEAR WARRANTY STARTING FROM SUBSTANTIAL COMPLETION OF PROJECT ENSURING THAT SYSTEM IS FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP.
5. PROVIDE TEMP-R-DRAIN (1 FOR EACH STEAM-TO-STEAM HEAT EXCHANGER AND EACH DISPERSION PANEL) TO TEMPER DISCHARGE HOT WATER BEFORE IT IS DISCHARGED TO SEWER SYSTEM. ROUTE COLD WATER CONNECTION TO EXISTING MAIN DOMESTIC WATER LINE AND ROUTE DISCHARGE TO FLOOR DRAIN.
6. OPEN SPACE AROUND DISPERSION PANELS SHALL BE BLOCKED OFF SO THAT NO AIRFLOW BYPASSES AROUND DESIGNED FACE AREA.
7. CONTRACTOR SHALL FILL OUT AND CORRECT SCHEDULE FOR AS-BUILT CONDITIONS.

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1 Addendum

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