

ENGINEERING SPECIFICATIONS FOR MODEL AFD 9,000

CONFIGURATION 1 : 75/62.5 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	9000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	9000	117.2	67.9	23.7	5
REGENERATION ENTERING AIR	2970	95	78	117.5	47.3
REGENERATION LEAVING AIR	2970	163.5	104.2	241.4	15
ADSORPTION, GRAIN DEPRESSION				40.9	

CONFIGURATION 1: 95/78 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	9000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	9000	139.5	81.3	67.8	7.9
REGENERATION ENTERING AIR	2970	95	78	117.5	47.3
REGENERATION LEAVING AIR	2970	156	105.3	268.09	19.8
ADSORPTION, GRAIN DEPRESSION				49.7	

CONFIG 2: 95/78 ENT AIR (W/POST-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	9000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	9000	137.2	80.8	67.8	8.4
PROCESS AIR LEAVING SYSTEM	9000	53.1	52.5	57.7	96.2
REGENERATION ENTERING AIR	2970	95	78	117.5	47.3
REGENERATION LEAVING AIR	2970	156	105.3	268.09	19.8
ADSORPTION, GRAIN DEPRESSION				59.8	

CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	9000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	9000	97.9	58.9	12.3	4.64
REGENERATION ENTERING AIR	2970	95	78	117.5	47.3
REGENERATION LEAVING AIR	2970	152.3	103.4	249.8	20.3
ADSORPTION, GRAIN DEPRESSION				105.2	

CONFIG 4: 95/78 ENT AIR (W/PRE/POST)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	9000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	9000	51.4	51.3	55.9	99.35
PROCESS AIR LEAVING DESICCANT WHEEL	9000	94.9	57.8	12.3	5
PROCESS AIR LEAVING SYSTEM	9000	55.3	40	12.3	19.2
REGENERATION ENTERING AIR	2970	95	78	117.5	47.3
REGENERATION LEAVING AIR	2970	156	105.3	268.09	19.8
ADSORPTION, GRAIN DEPRESSION				105.2	

Ratings listed above are based upon component selection data with an added safety factor.
Actual system performance of the **DRYOMATIC** unit will meet specification intent.

PROCESS AIR BLOWER				
	SIZE	RPM	BHP	HP
CONFIGURATION 1	221	1484	5.43	7 1/2
CONFIGURATION 2	201	2013	8.18	10
CONFIGURATION 3	201	1970	8.23	10
CONFIGURATION 4	201	2056	9.4	10

REGENERATION AIR BLOWER				
	SIZE	RPM	BHP	HP
CONFIGURATION ALL	130	3500	3.84	5

DESICCANT ROTOR 1525 mm X 200 mm	
WHEEL DIAMETER / DEPTH	60/7.9 (IN)
PROCESS AIR FACE VELOCITY	638 (FPM)
DELTA P FOR PROCESS / REGENERATION	1/1.5 (IN WC)
REGENERATION AIR FACE VELOCITY	631.6 (FPM)
HEATER OUTPUT	666 (MBH)

STATIC PRESSURE	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	1.95	1	2.95	2.45	1	3.45
CONFIG 2	3.03	1	4.03	2.45	1	3.45
CONFIG 3	3.01	1	4.01	2.45	1	3.45
CONFIG 4	3.67	1	4.67	2.45	1	3.45

COIL DATA	CONFIG 2	CONFIG 3	CONFIG 4	
	POST	PRE	PRE	POST
FACE AREA (SQ FT)	18.08	19.38	19.38	18.08
FIN HEIGHT X LENGTH (IN)	42x62	45x62	45x62	42x62
FACE VELOCITY (FPM)	497.7	464.52	464.52	497.7
NUMBER OF ROWS	6	6	6	4
CAPACITY (MBH)	892.9	824.64	824.64	415.5
FLUID VELOCITY (GPM)	185.4	166.3	166.3	91.25
FLUID PRESSURE DROP(IN WC)	15.33	16.25	16.25	9.29
EWV/LWT (°F)	45/55	45/55	45/55	45/55

Coil ratings are in compliance with ARI 410.
Blower ratings comply with the requirements of the AMCA Certified Ratings Program.