

ENGINEERING SPECIFICATIONS FOR MODEL AFD 7,000

CONFIGURATION 1 : 75/62.5 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	7000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	7000	120.2	68.6	22.5	4.4
REGENERATION ENTERING AIR	2310	95	78	117.5	47.3
REGENERATION LEAVING AIR	2310	153	103	245.2	19.6
ADSORPTION, GRAIN DEPRESSION				42.1	

CONFIGURATION 1: 95/78 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	7000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	7000	141.3	81.4	66	7.7
REGENERATION ENTERING AIR	2310	95	78	117.5	47.3
REGENERATION LEAVING AIR	2310	149.9	105.5	273.6	23.4
ADSORPTION, GRAIN DEPRESSION				51.5	

CONFIG 2: 95/78 ENT AIR (W/POST-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	7000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	7000	139.3	80.9	66	7.7
PROCESS AIR LEAVING SYSTEM	7000	53.0	52.3	57	95.6
REGENERATION ENTERING AIR	2310	95	78	117.5	47.3
REGENERATION LEAVING AIR	2310	149.9	105.5	273.6	23.4
ADSORPTION, GRAIN DEPRESSION				60.5	

CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	7000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	7000	103.3	60.8	12.3	4.3
REGENERATION ENTERING AIR	2310	95	78	117.5	47.3
REGENERATION LEAVING AIR	2310	138.8	101.9	256.1	29.1
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	7000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	7000	52.36	52.28	58.04	99.49
PROCESS AIR LEAVING DESICCANT WHEEL	7000	100.3	59.8	12.3	4.3
PROCESS AIR LEAVING SYSTEM	7000	55.7	40.2	12.3	18.73
REGENERATION ENTERING AIR	2310	95	78	117.5	47.3
REGENERATION LEAVING AIR	2310	138.8	101.9	256.1	29.1
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	201	1604	4.14	5
CONFIGURATION 2	201	1783	5.71	7 1/2
CONFIGURATION 3	201	1734	5.63	7 1/2
CONFIGURATION 4	201	1840	6.64	7 1/2

REGENERATION AIR BLOWER				
	SIZE	RPM	BHP	HP
CONFIGURATION ALL	120	3500	2.42	3

DESICCANT ROTOR 1525 mm X 200 mm	
WHEEL DIAMETER / DEPTH	60/7.9 (IN)
PROCESS AIR FACE VELOCITY	496.2 (FPM)
DELTA P FOR PROCESS / REGENERATION	0.7/1.1 (IN WC)
REGENERATION AIR FACE VELOCITY	491.3 (FPM)
HEATER OUTPUT	517.7 (MBH)

STATIC PRESSURE	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	1.65	1	2.65	2.05	1	3.05
CONFIG 2	2.71	1	3.71	2.05	1	3.05
CONFIG 3	2.66	1	3.66	2.05	1	3.05
CONFIG 4	3.3	1	4.3	2.05	1	3.05

COIL DATA	CONFIG 2	CONFIG 3	CONFIG 4	
	POST	PRE	PRE	POST
FACE AREA (SQ FT)	14.2	15.5	15.5	14.2
FIN HEIGHT X LENGTH (IN)	33X62	36X62	36X62	33X62
FACE VELOCITY (FPM)	492.7	451.6	451.6	492.7
NUMBER OF ROWS	6	6	6	4
CAPACITY (MBH)	705.2	624	624	355.1
FLUID VELOCITY (GPM)	145.6	129.3	129.3	75.2
FLUID PRESSURE DROP (IN WC)	11.8	16.1	16.1	22.5
EWV/LWT (°F)	45/54.7	45/54.6	45/54.6	45/54.4

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