

ENGINEERING SPECIFICATIONS FOR MODEL AFD 18,000

CONFIGURATION 1 : 75/62.5 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	18000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	18000	117.0	67.9	24	5.2
REGENERATION ENTERING AIR	5940	95	78	117.5	47.3
REGENERATION LEAVING AIR	5940	165.4	104.4	240.7	14.3
ADSORPTION, GRAIN DEPRESSION				40.6	

CONFIGURATION 1: 95/78 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	18000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	18000	139.9	81.4	68.1	7.8
REGENERATION ENTERING AIR	5940	95	78	117.5	47.3
REGENERATION LEAVING AIR	5940	157.2	105.3	266.9	19.1
ADSORPTION, GRAIN DEPRESSION				49.4	

CONFIG 2: 95/78 ENT AIR (W/POST-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	18000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	18000	136.9	80.7	68.1	8.5
PROCESS AIR LEAVING SYSTEM	18000	54.5	53.8	60.4	95.7
REGENERATION ENTERING AIR	5940	95	78	117.5	47.3
REGENERATION LEAVING AIR	5940	157.2	105.3	266.9	19.1
ADSORPTION, GRAIN DEPRESSION				57.1	

CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	18000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	18000	98.5	59.4	13.6	5
REGENERATION ENTERING AIR	5940	95	78	117.5	47.3
REGENERATION LEAVING AIR	5940	153.3	103.6	251.4	19.9
ADSORPTION, GRAIN DEPRESSION				103.9	

CONFIG 4: 95/78 ENT AIR (W/PRE/POST)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	18000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	18000	52.4	52.2	57.7	98.7
PROCESS AIR LEAVING DESICCANT WHEEL	18000	95.5	58.3	13.6	5.5
PROCESS AIR LEAVING SYSTEM	18000	54.9	39.7	13.6	18.9
REGENERATION ENTERING AIR	5940	95	78	117.5	47.3
REGENERATION LEAVING AIR	5940	157.2	105.3	266.9	19.1
ADSORPTION, GRAIN DEPRESSION				103.9	

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	271	1339	11.7	15
CONFIGURATION 2	271	1489	15.9	20
CONFIGURATION 3	271	1430	15.3	20
CONFIGURATION 4	271	1515	17.9	20

REGENERATION AIR BLOWER				
	SIZE	RPM	BHP	HP
CONFIGURATION ALL	220	1750	7.5	10

DESICCANT ROTOR 2190 mm X 200 mm	
WHEEL DIAMETER / DEPTH	86.3/7.9 (IN)
PROCESS AIR FACE VELOCITY	664.6 (FPM)
DELTA P FOR PROCESS / REGENERATION	1.1/1.5 (IN WC)
REGENERATION AIR FACE VELOCITY	657.9 (FPM)
HEATER OUTPUT	1332 (MBH)

STATIC PRESSURE	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	2.05	1	3.05	2.45	1	3.45
CONFIG 2	3.27	1	4.27	2.45	1	3.45
CONFIG 3	3.07	1	4.07	2.45	1	3.45
CONFIG 4	3.81	1	4.81	2.45	1	3.45

COIL DATA	CONFIG 2	CONFIG 3	CONFIG 4
	POST	PRE	PRE POST
FACE AREA (SQ FT)	33.65	39.58	39.58 33.65
FIN HEIGHT X LENGTH (IN)	51x95	60x95	60x95 51x95
FACE VELOCITY (FPM)	534.98	454.74	454.74 534.98
NUMBER OF ROWS	6	6	6 4
CAPACITY (MBH)	1779.9	1607.8	1607.8 872.93
FLUID VELOCITY (GPM)	363.2	332.59	332.59 189.11
FLUID PRESSURE DROP(IN WC)	20.8	23.26	23.26 26.61
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.