

ENGINEERING SPECIFICATIONS FOR MODEL AFD 20,000

CONFIGURATION 1 : 75/62.5 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	20000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	20000	115.0	67.4	24.6	5.6
REGENERATION ENTERING AIR	6600	95	78	117.5	47.3
REGENERATION LEAVING AIR	6600	170.8	104.9	238.8	12.5
ADSORPTION, GRAIN DEPRESSION				40	

CONFIGURATION 1: 95/78 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	20000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	20000	138.5	81.3	69.1	8.3
REGENERATION ENTERING AIR	6600	95	78	117.5	47.3
REGENERATION LEAVING AIR	6600	160.4	105.5	264.2	17.5
ADSORPTION, GRAIN DEPRESSION				48.4	

CONFIG 2: 95/78 ENT AIR (W/POST-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	20000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	20000	135.8	80.6	69.1	8.9
PROCESS AIR LEAVING SYSTEM	20000	54.4	53.7	60.2	95.7
REGENERATION ENTERING AIR	6600	95	78	117.5	47.3
REGENERATION LEAVING AIR	6600	160.4	105.5	264.2	17.5
ADSORPTION, GRAIN DEPRESSION				57.3	

CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	20000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	20000	100.1	61.1	18.1	6.4
REGENERATION ENTERING AIR	6600	95	78	117.5	47.3
REGENERATION LEAVING AIR	6600	155.6	104.3	256.5	19.2
ADSORPTION, GRAIN DEPRESSION				99.4	

CONFIG 4: 95/78 ENT AIR (W/PRE/POST)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	20000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	20000	55.2	55	64.1	98.8
PROCESS AIR LEAVING DESICCANT WHEEL	20000	97.4	60.1	18.1	6.9
PROCESS AIR LEAVING SYSTEM	20000	55.7	42.1	18.1	27.7
REGENERATION ENTERING AIR	6600	95	78	117.5	47.3
REGENERATION LEAVING AIR	6600	160.4	105.5	264.2	17.5
ADSORPTION, GRAIN DEPRESSION				99.4	

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	301	1168	13.1	15
CONFIGURATION 2	301	1315	18	20
CONFIGURATION 3	301	1262	17.4	20
CONFIGURATION 4	271	1581	20.6	25

REGENERATION AIR BLOWER				
	SIZE	RPM	BHP	HP
CONFIGURATION ALL	240	1750	6.3	7.5

DESICCANT ROTOR 2190 mm X 200 mm	
WHEEL DIAMETER / DEPTH	86.3/7.9 (IN)
PROCESS AIR FACE VELOCITY	738.4 (FPM)
DELTA P FOR PROCESS / REGENERATION	1.2/1.8 (IN WC)
REGENERATION AIR FACE VELOCITY	731 (FPM)
HEATER OUTPUT	1479 (MBH)

STATIC PRESSURE	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	2.15	1	3.15	2.75	1	3.75
CONFIG 2	3.36	1	4.36	2.75	1	3.75
CONFIG 3	3.2	1	4.2	2.75	1	3.75
CONFIG 4	3.94	1	4.94	2.75	1	3.75

COIL DATA	CONFIG 2		CONFIG 3		CONFIG 4	
	POST	PRE	PRE	POST	PRE	POST
FACE AREA (SQ FT)	18.75(2)	21.56(2)	21.56(2)	18.75(2)	21.56(2)	18.75(2)
FIN HEIGHT X LENGTH (IN)	30x90(2)	34.5x90(2)	34.5x90(2)	30x90(2)	34.5x90(2)	30x90(2)
FACE VELOCITY (FPM)	533.33	463.77	463.77	533.3	463.77	533.3
NUMBER OF ROWS	6	6	6	4	6	4
CAPACITY (MBH)	1963.26	1635.5	1635.5	977.04	1635.5	977.04
FLUID VELOCITY (GPM)	430.08	378.72	378.72	215.05	378.72	215.05
FLUID PRESSURE DROP(IN WC)	10	10.82	10.82	15.04	10.82	15.04
EWV/LWT (°F)	45/55	45/55	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.