

ENGINEERING SPECIFICATIONS FOR MODEL AFD 4,000

CONFIGURATION 1 : 75/62.5 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	4000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	4000	116.6	67.9	24.4	5.3
REGENERATION ENTERING AIR	1320	95	78	117.5	47.3
REGENERATION LEAVING AIR	1320	168.8	104.7	239.5	13.1
ADSORPTION, GRAIN DEPRESSION				40.2	

CONFIGURATION 1: 95/78 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	4000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	4000	140.0	81.6	68.7	7.9
REGENERATION ENTERING AIR	1320	95	78	117.5	47.3
REGENERATION LEAVING AIR	1320	159.2	105.4	265.3	18.1
ADSORPTION, GRAIN DEPRESSION				48.8	

CONFIG 2: 95/78 ENT AIR (W/POST-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	4000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	4000	136.2	80.7	68.7	8.7
PROCESS AIR LEAVING SYSTEM	4000	51.8	51.1	54.5	95.5
REGENERATION ENTERING AIR	1320	95	78	117.5	47.3
REGENERATION LEAVING AIR	1320	159.2	105.4	265.3	18.1
ADSORPTION, GRAIN DEPRESSION				63	

CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	4000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	4000	99.9	60.1	14.3	5.1
REGENERATION ENTERING AIR	1320	95	78	117.5	47.3
REGENERATION LEAVING AIR	1320	156.7	104	251.2	18.3
ADSORPTION, GRAIN DEPRESSION				103.2	

CONFIG 4: 95/78 ENT AIR (W/PRE/POST)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	4000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	4000	52.6	52.5	58.5	99.4
PROCESS AIR LEAVING DESICCANT WHEEL	4000	94.6	58.2	14.3	6
PROCESS AIR LEAVING SYSTEM	4000	54.9	40	14.3	22.6
REGENERATION ENTERING AIR	1320	95	78	117.5	47.3
REGENERATION LEAVING AIR	1320	156.7	104	251.2	18.3
ADSORPTION, GRAIN DEPRESSION				103.2	

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	131	2830	3.05	5
CONFIGURATION 2	131	3139	4.12	7 1/2
CONFIGURATION 3	131	3016	3.94	7 1/2
CONFIGURATION 4	131	3181	4.59	7 1/2

REGENERATION AIR BLOWER				
	SIZE	RPM	BHP	HP
CONFIGURATION ALL	120	3500	1.31	2

DESICCANT ROTOR 965 mm X 200 mm			
WHEEL DIAMETER / DEPTH	38/7.9	(IN)	
PROCESS AIR FACE VELOCITY	710.7	(FPM)	
DELTA P FOR PROCESS / REGENERATION	1.2/1.7	(IN WC)	
REGENERATION AIR FACE VELOCITY	703.6	(FPM)	
HEATER OUTPUT	296	(MBH)	

STATIC PRESSURE	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	2.15	1	3.15	2.65	1	3.65
CONFIG 2	3.41	1	4.41	2.65	1	3.65
CONFIG 3	3.18	1	4.18	2.65	1	3.65
CONFIG 4	3.92	1	4.92	2.65	1	3.65

COIL DATA		CONFIG 2	CONFIG 3	CONFIG 4	
		POST	PRE	PRE	POST
FACE AREA	(SQ FT)	7.5	8.75	8.75	7.5
FIN HEIGHT X LENGTH	(IN)	27X40	30X42	30X42	27X40
FACE VELOCITY	(FPM)	533.33	457.14	457.14	533.3
NUMBER OF ROWS		6	6	6	4
CAPACITY	(MBH)	426.8	354.41	354.41	196.64
FLUID VELOCITY	(GPM)	87.39	75.92	75.92	43.46
FLUID PRESSURE DROP	(IN WC)	20.63	12.85	12.85	8.79
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.