

## ENGINEERING SPECIFICATIONS FOR MODEL AFD 12,000

<b>CONFIGURATION 1 : 75/62.5 ENTERING AIR</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	12000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	12000	117.5	68	23.9	5
REGENERATION ENTERING AIR	3960	95	78	117.5	47.3
REGENERATION LEAVING AIR	3960	165.4	104.4	240.72	14.3
ADSORPTION, GRAIN DEPRESSION				40.7	

<b>CONFIGURATION 1: 95/78 ENTERING AIR</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	12000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	12000	140.3	81.5	68.1	7.8
REGENERATION ENTERING AIR	3960	95	78	117.5	47.3
REGENERATION LEAVING AIR	3960	157.2	105.4	267.09	19.2
ADSORPTION, GRAIN DEPRESSION				49.4	

<b>CONFIG 2: 95/78 ENT AIR (W/POST-COOL)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	12000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	12000	136.9	80.7	68.1	8.5
PROCESS AIR LEAVING SYSTEM	12000	52.6	51.9	56.4	95.7
REGENERATION ENTERING AIR	3960	95	78	117.5	47.3
REGENERATION LEAVING AIR	3960	157.2	105.4	267.09	19.2
ADSORPTION, GRAIN DEPRESSION				61.1	

<b>CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	12000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	12000	100.1	60.3	14.7	5.2
REGENERATION ENTERING AIR	3960	95	78	117.5	47.3
REGENERATION LEAVING AIR	3960	152.1	103.5	253.59	20.6
ADSORPTION, GRAIN DEPRESSION				102.8	

<b>CONFIG 4: 95/78 ENT AIR (W/PRE/POST)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	12000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	12000	53.2	53	59.6	99
PROCESS AIR LEAVING DESICCANT WHEEL	12000	96.7	59	14.7	5.8
PROCESS AIR LEAVING SYSTEM	12000	55.0	40.7	14.7	23
REGENERATION ENTERING AIR	3960	95	78	117.5	47.3
REGENERATION LEAVING AIR	3960	157.2	105.4	267.09	19.2
ADSORPTION, GRAIN DEPRESSION				102.8	

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.

<b>PROCESS AIR BLOWER</b>				
	SIZE	RPM	BHP	HP
CONFIGURATION 1	241	1397	7.45	10
CONFIGURATION 2	221	1813	10.1	15
CONFIGURATION 3	241	1521	10.1	15
CONFIGURATION 4	221	1851	11.5	15

<b>REGENERATION AIR BLOWER</b>				
	SIZE	RPM	BHP	HP
CONFIGURATION ALL	150	3500	7.4	10

<b>DESICCANT ROTOR 1740 mm X 200 mm</b>	
WHEEL DIAMETER / DEPTH	68.5/7.9 (IN)
PROCESS AIR FACE VELOCITY	664 (FPM)
DELTA P FOR PROCESS / REGENERATION	1.1/1.5 (IN WC)
REGENERATION AIR FACE VELOCITY	657.3 (FPM)
HEATER OUTPUT	888 (MBH)

<b>STATIC PRESSURE</b>	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	2.05	1	3.05	2.45	1	3.45
CONFIG 2	3.14	1	4.14	2.45	1	3.45
CONFIG 3	3.08	1	4.08	2.45	1	3.45
CONFIG 4	3.71	1	4.71	2.45	1	3.45

<b>COIL DATA</b>		CONFIG 2	CONFIG 3	CONFIG 4	
		POST	PRE	PRE	POST
FACE AREA	(SQ FT)	24.67	26.21	26.21	24.67
FIN HEIGHT X LENGTH	(IN)	48x74	51x74	51x74	48x74
FACE VELOCITY	(FPM)	486.49	457.87	457.87	486.5
NUMBER OF ROWS		6	6	6	4
CAPACITY	(MBH)	1248.93	1045.89	1045.89	587.26
FLUID VELOCITY	(GPM)	255.49	221.73	221.73	127.37
FLUID PRESSURE DROP	(IN WC)	16.07	16.12	16.12	11.94
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.