

## ENGINEERING SPECIFICATIONS FOR MODEL AFD 13,000

<b>CONFIGURATION 1 : 75/62.5 ENTERING AIR</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	13000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	13000	115.0	67.4	24.4	5.6
REGENERATION ENTERING AIR	4290	95	78	117.5	47.3
REGENERATION LEAVING AIR	4290	169.5	104.8	239.2	12.9
ADSORPTION, GRAIN DEPRESSION				40.2	

<b>CONFIGURATION 1: 95/78 ENTERING AIR</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	13000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	13000	138.3	81.2	68.8	8.3
REGENERATION ENTERING AIR	4290	95	78	117.5	47.3
REGENERATION LEAVING AIR	4290	159.6	105.6	264.95	18
ADSORPTION, GRAIN DEPRESSION				48.7	

<b>CONFIG 2: 95/78 ENT AIR (W/POST-COOL)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	13000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	13000	136.1	80.7	68.8	8.7
PROCESS AIR LEAVING SYSTEM	13000	52.8	52.1	56.7	95.8
REGENERATION ENTERING AIR	4290	95	78	117.5	47.3
REGENERATION LEAVING AIR	4290	159.6	105.6	264.95	18
ADSORPTION, GRAIN DEPRESSION				60.8	

<b>CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	13000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	13000	98.6	59.9	15.3	5.7
REGENERATION ENTERING AIR	4290	95	78	117.5	47.3
REGENERATION LEAVING AIR	4290	156.4	104	252.74	18.5
ADSORPTION, GRAIN DEPRESSION				102.2	

<b>CONFIG 4: 95/78 ENT AIR (W/PRE/POST)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	13000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	13000	53.3	53.2	60	99.4
PROCESS AIR LEAVING DESICCANT WHEEL	13000	95.4	58.7	15.3	6.2
PROCESS AIR LEAVING SYSTEM	13000	54.9	40.8	15.3	24.1
REGENERATION ENTERING AIR	4290	95	78	117.5	47.3
REGENERATION LEAVING AIR	4290	159.6	105.6	264.95	18
ADSORPTION, GRAIN DEPRESSION				102.2	

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.

<b>PROCESS AIR BLOWER</b>				
	SIZE	RPM	BHP	HP
CONFIGURATION 1	241	1446	8.36	10
CONFIGURATION 2	241	1617	11.4	15
CONFIGURATION 3	241	1566	11.2	15
CONFIGURATION 4	241	1658	13	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	719.3 (FPM)
DELTA P FOR PROCESS / REGENERATION	1.2/1.7 (IN WC)
REGENERATION AIR FACE VELOCITY	712.1 (FPM)
HEATER OUTPUT	962 (MBH)

<b>STATIC PRESSURE</b>	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	2.15	1	3.15	2.65	1	3.65
CONFIG 2	3.27	1	4.27	2.65	1	3.65
CONFIG 3	3.22	1	4.22	2.65	1	3.65
CONFIG 4	3.87	1	4.87	2.65	1	3.65

<b>COIL DATA</b>	CONFIG 2	CONFIG 3	CONFIG 4	
	POST	PRE	PRE	POST
FACE AREA (SQ FT)	26.21	27.75	27.75	26.21
FIN HEIGHT X LENGTH (IN)	51x74	54x74	54x74	51x74
FACE VELOCITY (FPM)	496.03	468.47	468.47	496.0
NUMBER OF ROWS	6	6	6	4
CAPACITY (MBH)	1342.72	1128.29	1128.29	616.44
FLUID VELOCITY (GPM)	275.62	240.21	240.21	133.77
FLUID PRESSURE DROP (IN WC)	17.49	17.97	17.97	16.59
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.