

## ENGINEERING SPECIFICATIONS FOR MODEL AFD 17,000

<b>CONFIGURATION 1 : 75/62.5 ENTERING AIR</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	17000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	17000	114.7	67.3	24.6	5.7
REGENERATION ENTERING AIR	5610	95	78	117.5	47.3
REGENERATION LEAVING AIR	5610	170.8	104.9	238.7	12.5
ADSORPTION, GRAIN DEPRESSION				40	

<b>CONFIGURATION 1: 95/78 ENTERING AIR</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	17000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	17000	139.0	81.4	69.1	8.2
REGENERATION ENTERING AIR	5610	95	78	117.5	47.3
REGENERATION LEAVING AIR	5610	160.4	105.5	264.1	17.5
ADSORPTION, GRAIN DEPRESSION				48.4	

<b>CONFIG 2: 95/78 ENT AIR (W/POST-COOL)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	17000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	17000	135.8	80.6	69.1	8.9
PROCESS AIR LEAVING SYSTEM	17000	55.3	54.6	62.3	95.8
REGENERATION ENTERING AIR	5610	95	78	117.5	47.3
REGENERATION LEAVING AIR	5610	160.4	105.5	264.1	17.5
ADSORPTION, GRAIN DEPRESSION				55.2	

<b>CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	17000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	17000	98.2	59.7	15	5.6
REGENERATION ENTERING AIR	5610	95	78	117.5	47.3
REGENERATION LEAVING AIR	5610	158.7	104.3	251.2	17.4
ADSORPTION, GRAIN DEPRESSION				102.5	

<b>CONFIG 4: 95/78 ENT AIR (W/PRE/POST)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	16000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	16000	53	52.8	59	98.7
PROCESS AIR LEAVING DESICCANT WHEEL	16000	94.3	58.2	15	6.3
PROCESS AIR LEAVING SYSTEM	16000	55.2	40.4	15	23.4
REGENERATION ENTERING AIR	5610	95	78	117.5	47.3
REGENERATION LEAVING AIR	5610	160.4	105.5	264.1	17.5
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	271	1384	12.6	15
CONFIGURATION 2	271	1368	14.1	20
CONFIGURATION 3	271	1426	14.9	20
CONFIGURATION 4	271	1452	16.7	20

<b>REGENERATION AIR BLOWER</b>				
	SIZE	RPM	BHP	HP
CONFIGURATION ALL	220	1750	5.7	7 1/2

<b>DESICCANT ROTOR 1940 mm X 200 mm</b>	
WHEEL DIAMETER / DEPTH	76.4/7.9 (IN)
PROCESS AIR FACE VELOCITY	738.5 (FPM)
DELTA P FOR PROCESS / REGENERATION	1.2/1.8 (IN WC)
REGENERATION AIR FACE VELOCITY	731.2 (FPM)
HEATER OUTPUT	1257.3 (MBH)

<b>STATIC PRESSURE</b>	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	2.15	1	3.15	2.75	1	3.75
CONFIG 2	3.37	1	4.37	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

<b>COIL DATA</b>	CONFIG 2	CONFIG 3	CONFIG 4
	POST	PRE	PRE POST
FACE AREA (SQ FT)	31.67	36.67	36.67 31.67
FIN HEIGHT X LENGTH (IN)	57X80	66X80	66X80 57X80
FACE VELOCITY (FPM)	536.84	463.64	463.64 536.8
NUMBER OF ROWS	6	6	6 4
CAPACITY (MBH)	1635.92	1490.94	1490.94 800.86
FLUID VELOCITY (GPM)	333.06	314.12	314.12 174.97
FLUID PRESSURE DROP (IN WC)	25.54	26.42	26.42 20.37
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.