

## ENGINEERING SPECIFICATIONS FOR MODEL AFD 16,000

<b>CONFIGURATION 1 : 75/62.5 ENTERING AIR</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	16000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	16000	116.8	67.9	24.3	5.3
REGENERATION ENTERING AIR	5280	95	78	117.5	47.3
REGENERATION LEAVING AIR	5280	167.6	104.5	239.9	13.5
ADSORPTION, GRAIN DEPRESSION				40.3	

<b>CONFIGURATION 1: 95/78 ENTERING AIR</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	16000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	16000	139.8	81.5	68.5	7.9
REGENERATION ENTERING AIR	5280	95	78	117.5	47.3
REGENERATION LEAVING AIR	5280	158.5	105.3	265.7	18.4
ADSORPTION, GRAIN DEPRESSION				49	

<b>CONFIG 2: 95/78 ENT AIR (W/POST-COOL)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	16000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	16000	136.4	80.7	68.5	8.6
PROCESS AIR LEAVING SYSTEM	16000	54.9	54.2	61.5	95.8
REGENERATION ENTERING AIR	5280	95	78	117.5	47.3
REGENERATION LEAVING AIR	5280	158.5	105.3	265.7	18.4
ADSORPTION, GRAIN DEPRESSION				56	

<b>CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)</b>	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	16000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	16000	98.9	59.9	14.7	5.4
REGENERATION ENTERING AIR	5280	95	78	117.5	47.3
REGENERATION LEAVING AIR	5280	154.9	103.9	252.5	19.2
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	16000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	16000	52.9	52.8	59.2	99.4
PROCESS AIR LEAVING DESICCANT WHEEL	16000	95.5	58.6	14.7	6
PROCESS AIR LEAVING SYSTEM	16000	55.9	40.7	14.7	20.4
REGENERATION ENTERING AIR	5280	95	78	117.5	47.3
REGENERATION LEAVING AIR	5280	158.5	105.3	265.7	18.4
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	1278	10.2	15
CONFIGURATION 2	271	1444	14.1	20
CONFIGURATION 3	271	1382	13.5	20
CONFIGURATION 4	271	1476	16	20

<b>REGENERATION AIR BLOWER</b>				
	SIZE	RPM	BHP	HP
CONFIGURATION ALL	220	1750	7.1	7.5

<b>DESICCANT ROTOR 1940 mm X 200 mm</b>	
WHEEL DIAMETER / DEPTH	76.4/7.9 (IN)
PROCESS AIR FACE VELOCITY	695.1 (FPM)
DELTA P FOR PROCESS / REGENERATION	1.1/1.6 (IN WC)
REGENERATION AIR FACE VELOCITY	688.2 (FPM)
HEATER OUTPUT	1184 (MBH)

<b>STATIC PRESSURE</b>	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	2.05	1	3.05	2.55	1	3.55
CONFIG 2	3.26	1	4.26	2.55	1	3.55
CONFIG 3	3.08	1	4.08	2.55	1	3.55
CONFIG 4	3.82	1	4.82	2.55	1	3.55

<b>COIL DATA</b>	CONFIG 2	CONFIG 3	CONFIG 4	
	POST	PRE	PRE	POST
FACE AREA (SQ FT)	30	35	35	30
FIN HEIGHT X LENGTH (IN)	54x80	63x80	63x80	54x80
FACE VELOCITY (FPM)	533.33	457.14	457.14	533.3
NUMBER OF ROWS	6	6	6	4
CAPACITY (MBH)	1570.35	1406.13	1406.13	751.06
FLUID VELOCITY (GPM)	340.73	295.64	295.64	166.98
FLUID PRESSURE DROP (IN WC)	17.68	17	17	11.88
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.