

ENGINEERING SPECIFICATIONS FOR MODEL AFD 14,000

CONFIGURATION 1 : 75/62.5 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	14000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	14000	118.5	68.3	23.4	4.8
REGENERATION ENTERING AIR	4620	95	78	117.5	47.3
REGENERATION LEAVING AIR	4620	161.3	103.9	242.2	15.8
ADSORPTION, GRAIN DEPRESSION				41.2	

CONFIGURATION 1: 95/78 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	14000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	14000	139.7	81.3	67.4	7.8
REGENERATION ENTERING AIR	4620	95	78	117.5	47.3
REGENERATION LEAVING AIR	4620	154.7	105.2	269.3	20.5
ADSORPTION, GRAIN DEPRESSION				50.1	

CONFIG 2: 95/78 ENT AIR (W/POST-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	14000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	14000	137.7	80.8	67.4	8.2
PROCESS AIR LEAVING SYSTEM	14000	52.5	51.8	56	95.7
REGENERATION ENTERING AIR	4620	95	78	117.5	47.3
REGENERATION LEAVING AIR	4620	154.7	105.2	269.3	20.5
ADSORPTION, GRAIN DEPRESSION				61.5	

CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	14000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	14000	101.0	60.5	14	4.8
REGENERATION ENTERING AIR	4620	95	78	117.5	47.3
REGENERATION LEAVING AIR	4620	147.5	103	254.8	23.2
ADSORPTION, GRAIN DEPRESSION				103.5	

CONFIG 4: 95/78 ENT AIR (W/PRE/POST)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	14000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	14000	53	52.9	59.4	99.4
PROCESS AIR LEAVING DESICCANT WHEEL	14000	98.1	59.4	14	5.3
PROCESS AIR LEAVING SYSTEM	14000	54.9	40.4	14	22.1
REGENERATION ENTERING AIR	4620	95	78	117.5	47.3
REGENERATION LEAVING AIR	4620	154.7	105.2	269.3	20.5
ADSORPTION, GRAIN DEPRESSION				103.5	

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	241	1444	8.31	10
CONFIGURATION 2	241	1604	11.3	15
CONFIGURATION 3	241	1560	11.2	15
CONFIGURATION 4	241	1647	13	15

REGENERATION AIR BLOWER				
	SIZE	RPM	BHP	HP
CONFIGURATION ALL	200	1750	5.2	7.5

DESICCANT ROTOR 1940 mm X 200 mm	
WHEEL DIAMETER / DEPTH	76.4/7.9 (IN)
PROCESS AIR FACE VELOCITY	608.2 (FPM)
DELTA P FOR PROCESS / REGENERATION	.9/1.4 (IN WC)
REGENERATION AIR FACE VELOCITY	602.1 (FPM)
HEATER OUTPUT	1019 (MBH)

STATIC PRESSURE	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	1.85	1	2.85	2.35	1	3.35
CONFIG 2	2.97	1	3.97	2.35	1	3.35
CONFIG 3	2.92	1	3.92	2.35	1	3.35
CONFIG 4	3.57	1	4.57	2.35	1	3.35

COIL DATA	CONFIG 2	CONFIG 3	CONFIG 4	
	POST	PRE	PRE	POST
FACE AREA (SQ FT)	28.33	30	30	28.33
FIN HEIGHT X LENGTH (IN)	51x80	54x80	54x80	51x80
FACE VELOCITY (FPM)	494.12	466.67	466.67	494.1
NUMBER OF ROWS	6	6	6	4
CAPACITY (MBH)	1462.54	1225.3	1225.3	698.43
FLUID VELOCITY (GPM)	298.02	258.68	258.68	151.02
FLUID PRESSURE DROP (IN WC)	20.75	21.04	21.04	18.09
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.