

ENGINEERING SPECIFICATIONS FOR MODEL AFD 3,000

CONFIGURATION 1 : 75/62.5 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING	3000	75	62.5	64.6	50
PROCESS AIR LEAVING SYSTEM	3000	122.1	69.3	22.8	4.3
REGENERATION ENTERING AIR	990	95	78	117.5	47.3
REGENERATION LEAVING AIR	990	155.7	103.3	244.2	18.2
ADSORPTION, GRAIN DEPRESSION				41.8	

CONFIGURATION 1: 95/78 ENTERING AIR	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	3000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	3000	143.5	82	66.5	7
REGENERATION ENTERING AIR	990	95	78	117.5	47.3
REGENERATION LEAVING AIR	990	151.5	104.9	272.2	22.4
ADSORPTION, GRAIN DEPRESSION				51	

CONFIG 2: 95/78 ENT AIR (W/POST-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	3000	95	78	117.5	47.3
PROCESS AIR LEAVING DESICCANT WHEEL	3000	138.7	80.9	66.5	7.9
PROCESS AIR LEAVING SYSTEM	3000	51.9	51.2	54.8	95.5
REGENERATION ENTERING AIR	990	95	78	117.5	47.3
REGENERATION LEAVING AIR	990	151.5	104.9	272.2	22.4
ADSORPTION, GRAIN DEPRESSION				62.7	

CONFIG 3: 95/78 ENT AIR (W/PRE-COOL)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	3000	95	78	117.5	47.3
PROCESS AIR LEAVING SYSTEM	3000	104.9	61.7	13.3	4.1
REGENERATION ENTERING AIR	990	95	78	117.5	47.3
REGENERATION LEAVING AIR	990	141.7	102.3	255.9	27
ADSORPTION, GRAIN DEPRESSION				104.2	

CONFIG 4: 95/78 ENT AIR (W/PRE/POST)	SCFM	°FDB	°FWB	GR/LB	%RH
PROCESS AIR ENTERING, OUTSIDE AIR	3000	95	78	117.5	47.3
PROCESS AIR LEAVING PRECOOL COIL	3000	53.1	52.8	58.9	98.3
PROCESS AIR LEAVING DESICCANT WHEEL	3000	100.1	59.9	13.3	4.7
PROCESS AIR LEAVING SYSTEM	3000	55.0	39.7	13.3	20.9
REGENERATION ENTERING AIR	990	95	78	117.5	47.3
REGENERATION LEAVING AIR	990	141.7	102.3	255.9	27
ADSORPTION, GRAIN DEPRESSION				104.2	

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.

PROCESS AIR BLOWER				
	SIZE	RPM	BHP	HP
CONFIGURATION 1	121	2987	2.08	3
CONFIGURATION 2	121	3332	2.81	5
CONFIGURATION 3	121	3154	2.55	5
CONFIGURATION 4	121	3340	3.03	5

REGENERATION AIR BLOWER				
	SIZE	RPM	BHP	HP
CONFIGURATION ALL	SPB-12	3450	1.57	2

DESICCANT ROTOR 965mm X 200mm	
WHEEL DIAMETER / DEPTH	38/7.9 (IN)
PROCESS AIR FACE VELOCITY	533 (FPM)
DELTA P FOR PROCESS / REGENERATION	0.8/1.2 (IN WC)
REGENERATION AIR FACE VELOCITY	527.7 (FPM)
HEATER OUTPUT	222 (MBH)

STATIC PRESSURE	PROCESS			REGENERATION		
	UNIT	ESP	TOTAL	UNIT	ESP	TOTAL
CONFIG 1	1.75	1	2.75	2.15	1	3.15
CONFIG 2	3	1	4	2.15	1	3.15
CONFIG 3	2.58	1	3.58	2.15	1	3.15
CONFIG 4	3.31	1	4.31	2.15	1	3.15

COIL DATA	CONFIG 2	CONFIG 3	CONFIG 4	
	POST	PRE	PRE	POST
FACE AREA (SQ FT)	5.67	6.49	6.49	5.67
FIN HEIGHT X LENGTH (IN)	24X34	27.5X34	27.5X34	24X34
FACE VELOCITY (FPM)	529.41	462.03	462.03	529.4
NUMBER OF ROWS	6	6	6	4
CAPACITY (MBH)	325.2	263.12	263.12	163.74
FLUID VELOCITY (GPM)	66.79	56.94	56.94	35.9
FLUID PRESSURE DROP(IN WC)	13.48	15.48	15.48	19.28
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.