

# Water Removal Estimator

*Estimated Pint Removal Based on Grain Depression and CFM*

DrizAir Refrigerant Dehumidifiers						Desiccants			HVAC Systems					
Model	80/110	1200	120	2000	2400	200	150	325	1 Ton	2 Ton	3 Ton	4 Ton	5 Ton	
CFM	150	227	250	320	365	450	110	250	600	1200	1800	2400	3000	
Grain Depression (in GPP)	1	2	3	4	5	5	6	2	4	8	17	25	34	42
	2	4	6	7	9	10	13	3	7	17	34	51	68	85
	3	6	10	11	14	15	19	5	11	25	51	76	101	127
	4	8	13	14	18	21	25	6	114	34	68	101	135	169
	5	11	16	18	23	26	32	8	18	42	85	127	169	211
	6	13	19	21	27	31	38	9	21	51	101	152	203	254
	7	15	22	25	32	36	44	11	25	59	118	178	237	296
	8	17	26	28	36	41	51	12	28	68	135	203	271	338
	9	19	29	32	41	46	57	14	32	76	152	228	304	381
	10	21	32	35	45	51	63	16	35	85	169	254	338	423
	11	23	35	39	50	57	70	17	39	93	186	279	372	465
	12	25	38	42	54	62	76	19	42	101	203	304	406	507
	13	27	42	46	59	67	82	20	46	110	220	330	440	550
	14	30	45	49	63	72	89	22	49	118	237	355	474	592
	15	32	48	53	68	77	95	23	53	127	254	381	507	634
	16	34	51	56	72	82	101	25	56	135	271	406	541	677
	17	36	54	60	77	87	108	26	60	144	288	431	575	719
	18	38	58	63	81	93	114	28	63	152	304	457	609	761
	19	40	61	67	86	98	121	29	67	161	321	482	643	803
	20	42	64	70	90	103	127	31	70	169	338	507	677	846
	21	44	67	74	95	108	133	33	74	178	355	533	710	888
	22	47	70	78	99	113	140	34	78	186	372	558	744	930
	23	49	74	81	104	118	146	36	81	195	389	584	778	973
	24	51	77	85	108	123	152	37	85	203	406	609	812	1015
	25	53	80	88	113	129	159	39	88	211	423	634	846	1057
	26	55	83	92	117	134	165	40	92	220	440	660	880	1099
	27	57	86	95	122	139	171	42	95	228	457	685	913	1142
	28	59	90	99	126	144	178	43	99	237	474	710	947	1184
	29	61	93	102	131	149	184	45	102	245	491	736	981	1226
	30	63	96	106	135	154	190	47	106	254	507	761	1015	1269

## Formula for Estimating the Rate of Water Removal

Begin with CFM of Equipment		CFM (Cubic Feet processed per minute)
Multiply by 60 (CFM x 60)		= CFH (Cubic Feet processed per hour)
Multiply by 24 (CFH x 24)		= CFD (Cubic Feet per Day)
Divide CFD by 14 (CFD ÷ 14)		= Pounds of Dry Air processed per day
Grain Depression (GD)		= GD (Ambient GPP minus Equip. Output GPP)
Multiply GD by pounds of Dry Air		= Total Grains of Moisture Removed per Day
Divide Total Grains Removed by 7000		= Pounds of Water Removed per Day
Divide Pounds of Water Removed by 8.34		= Gallons of Water Removed per Day
Multiply Gallons of Water Removed by 8		= Estimated Rate of Removal in Pints per Day

