



Controlled Dehumidification

5931 Ford Court Brighton, MI 48116 • 810.229.7900
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PSYCHROMETRIC CHART

Normal Temperature • Sea Level

I-P Units • Barometric Pressure 29.921 in. HG

Controlled Dehumidification provides equipment that delivers the deepest drying system available. Utilizing the power of desiccant dehumidification and vapor pressure reduction with optional discharge temperature control.

Your customers and your bottom line will benefit by adding equipment from the **Controlled Dehumidification** family. **ARID-Dry™** products for the mobile drying industry and **ARID-Ice™** products for indoor skating arenas.

Call **810.229.7900** for complete, controlled drying solutions.

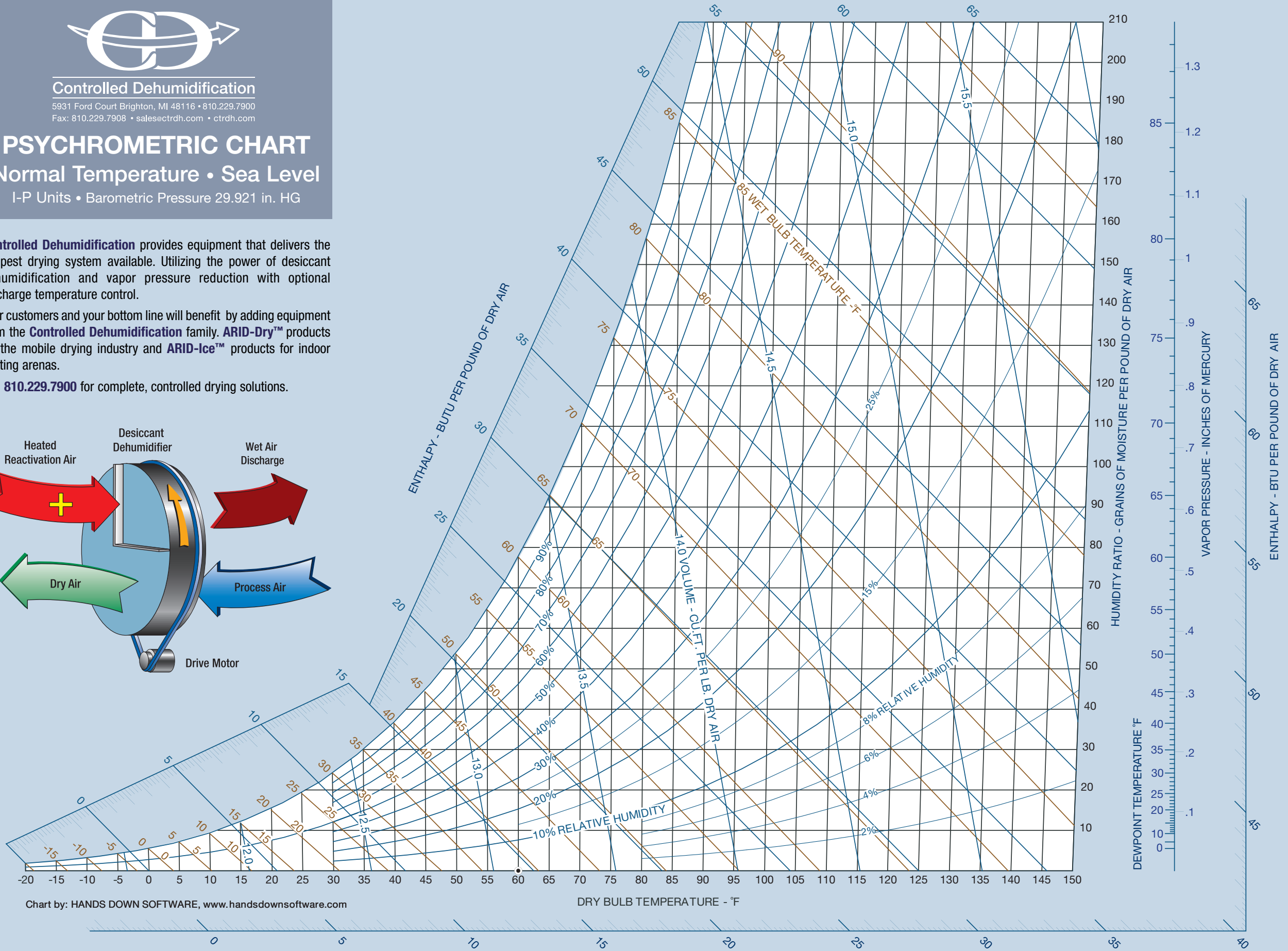
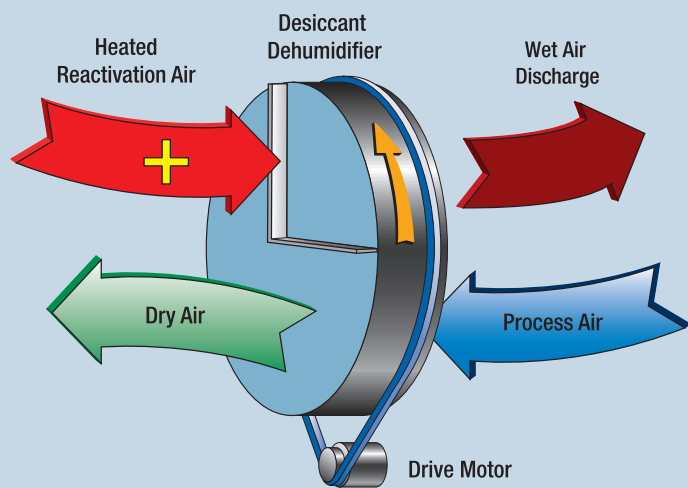


Chart by: HANDS DOWN SOFTWARE, www.handsdownsoftware.com

MS Series Capacity Data

Series	Max Air Volume*	Electric Reactivation 220/1/60	FLA Load 460/3/60	Gas Reactivation 220/1/60	FLA Load 460/3/60	CFH Gas Max Usage Natural	Gallon/HR Max Usage LP
MS-600	600	24	8.2	NA	NA	NA	NA
MS-2400/2000	2,400	NA	51	30	NA	120	1.8
MS-5000/4000	5,000	NA	112	47	NA	359	3.9
MS-6000/5000	6,000	NA	138	NA	13	400	4.4
MS-12000/10000	12,000	NA	292	NA	42	718	7.6
MS-17500/15000	17,500	NA	335	NA	44	1,200	12.7
MS-27500/25000	27,500	NA	640	NA	82	1,724	18

Series	Max Air Volume*	Moisture Removal Lbs per hr. 80°/60% RH	Moisture Removal Gals per day 80°/60% RH	Moisture Removal Lbs per hr. 55°/80% RH	Moisture Removal Gals per day 55°/80% RH	Moisture Removal Lbs per hr. 40°/80% RH	Moisture Removal Gals per day 40°/80% RH
MS-600	600	8	23	6	18	5	16
MS-2400/2000	2,400	50	143	42	120	25	71
MS-5000/4000	5,000	102	295	87	251	56	161
MS-6000/5000	6,000	136	392	115	331	75	216
MS-12000/10000	12,000	295	851	253	729	169	486
MS-17500/15000	17,500	424	1,221	355	1,022	242	697
MS-27500/25000	27,500	678	1,953	568	1,635	387	1,115

Moisture removal is nominal only for reference; Actual Performance will be based on specified conditions. *Maximum volume rated at 0" ESP.

Air Calculations

Sensible Heating:	Btuh capacity	= Temperature Change x cfm x 1.08
	kW of heating capacity	= Btuh / 3,414
Sensible Cooling:	Btuh capacity	= Temperature Change x cfm x 1.08
	Tons of cooling capacity	= Btuh / 12,000
Sensible / Latent Cooling	Btuh capacity	= Enthalpy Change x cfm x 4.5
	Tons of cooling capacity	= Btuh / 12,000
Temperature Change:	ΔT	= Btuh / (cfm x 1.08)
(sensible only)		
Btuh Needed:	Btuh	= cfm x 1.08 x ΔT needed
(sensible only)		
Humidification:	Lbs. / Hr	= cfm x 4.5 x ΔM / 7,000
Blended Air Streams:	Tblend = ((TA x CFMA) + (TB x CFMB)) / (CFMA + CFMB)	
	Mblend = ((MA x CFMA) + (MB x CFMB)) / (CFMA + CFMB)	
	Where: T is temperature of the air stream (°F)	
	M is moisture of the air stream (gr/lb)	
Air Volume:	cfm:	= FPM x Face Area in Sq. Ft.
	Where: FPM = Velocity of airstream in feet/minute	
	Face Area in Sq. Ft. for:	18" duct = 1.7671 ft ²
		12" duct = .7854 ft ²
		8" duct = .3490 ft ²
Air Velocity:	FPM	= cfm / Face Area in Sq. Ft.



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