

ADG AMMONIA GAS DISSOCIATOR

ADG Ammonia Dissociator

The Gasbarre ADG Series Ammonia Dissociators are designed to be an economical source of pure, dry, highly reducing atmosphere. The product gas of hydrogen-nitrogen is produced by dissociation of anhydrous ammonia vapor.

Dissociated ammonia provides an excellent reducing atmosphere for a variety of applications that include brazing and/or bright annealing of stainless steel, copper, brass, beryllium copper, nickel, nickel alloys and silicon iron. Other applications include bright hardening of tool and martensitic stainless steels, and powder metal sintering.

The Gasbarre ADG Series Ammonia Dissociators range from 150 scfh to 5000 scfh at a standard outlet line pressure of 10 psig. The resulting dissociated product gas is comprised of 75% hydrogen and 25% nitrogen. When utilizing a high quality "metallurgical grade" of ammonia vapor as the supply gas, a dissociated product of 99.7% purity will be maintained. The moisture content of the product will be less than 40 ppm, or a minimum dew point of -50°F. Lower dew points and lower residual ammonia content may be obtained with the addition of the Gasbarre MSA Series Molecular Sieve Dryer.



**RELIABILITY, EXPERTISE,
SERVICE & SELECTION**

MSA Gas Dryer

The Gasbarre MSA Series desiccant "Molecu-Dryers" are designed to produce consistently low dew points in a wide variety of gases. The units are safe for use in drying flammable gases such as hydrogen, dissociated ammonia, and forming gas.

The compact dryer contains two adsorption chambers mounted on a base and encased in a ventilated metal housing. With two chambers, the dryer is capable of continuous operation - while one chamber is adsorbing, the other is regenerated, cooled and made ready for the next adsorption cycle. Molecular sieve parts are used as the desiccant.

The Gasbarre Molecu-Dryer will produce dew points of -100°F, or lower, in most gas drying applications when properly sized. For exothermic gas, the dryer is operated in conjunction with a refrigeration unit. The latter reduces the dew point of the exothermic gas to about +40°F before the gas enters the dryer.



ADG AMMONIA GAS DISSOCIATOR					
MODEL NO.	CFH	KW	Height	Width	Depth
ADG-150	150	7.5	55"	27"	19"
ADG-500	500	13.5	72"	38"	42"
ADG-1000	1000	28.0	73"	49"	45"
ADG-1500	1500	32.0	76"	46"	62"
ADG-2000	2000	48.0	76"	56"	63"
ADG-3000	3000	64.0	80"	70"	67"
ADG-4000	4000	84.0	82"	79"	67"
ADG-5000	5000	140.0	98"	79"	77"

MSA MOLECULAR SIEVE GAS DRYER					
MODEL NO.	CFH	KW	Height	Width	Depth
MSA-6	250	0.6	32"	28"	22"
MSA-11	500	1.2	40"	28"	25"
MSA-30	1500	3.6	40"	28"	32"
MSA-60	3000	7.5	46"	37"	32"
MSA-90	4500	11.0	53"	47"	37"
MSA-120	6000	16.0	60"	50"	43"