

OMEGA® SERIES 41 DETENTION SLAKERS

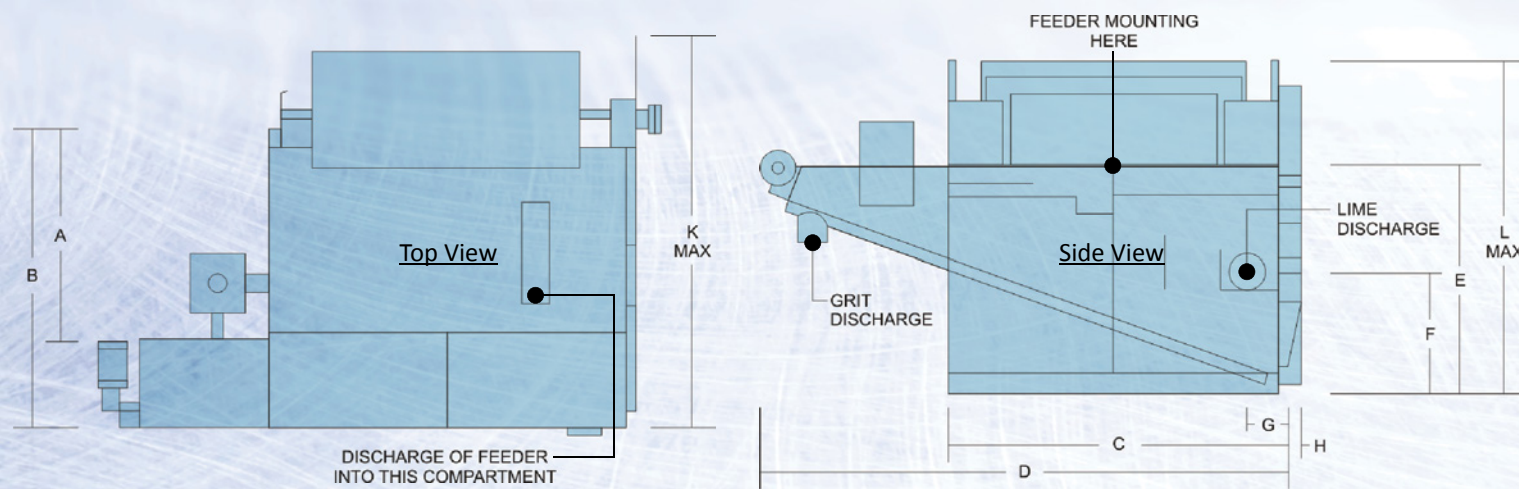
MORE RESPONSIVE PH CONTROL



OMEGA® Series 41-22 Detention Slaker

The Series 41 Slaker is designed for use in any pH control system ensuring complete compatibility with other system components such as feeder, flow metering device, transmitter and recorder. It has proven its reliability in hundreds of municipal and industrial pH control applications.

SPECIFICATIONS



MAX SLAKING RATE* LBS/HR	SLAKER SIZE	A	B	C	D	E	F	G	H	K	L	MIXER MOTOR	GRIT MOTOR	SLAKER CAPACITY GAL.
500	20	22½"	30¾"	40½"	66"	20"	10"	3¾"	3¾"	42"	3'-6"	1/3 HP	¼ HP	44
1,250	22	34¾"	48¾"	52¼"	74"	33"	15"	5"	3¾"	64½"	4'-7½"	1½ HP	¼ HP	100
2,500	23	42¼"	56 3/8"	52¼"	86"	44 7/8"	26"	5 1/8"	3½"	76 7/8"	5'-6¾"	2 HP	¼ HP	200
5,000	25	46 7/8"	66 9/16"	77 3/8"	117"	50½"	27"	8½"	3"	86¾"	6'-1½"	3 HP	¼ HP	400
10,000	28	53"	76¾"	90"	137¼"	63½"	33"	12"	4"	100"	7'-2½"	5 HP	¼ HP	800

* Rating based on slaking quicklime having an available CaO content of 75% or more and soft or normal burned. Request capacity chart and lime grade bulletin for ratings when slaking poor quality limes.

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DYNAMIC INNOVATIONS SINCE 1908
WEIGHING, FEEDING, CONTROLS & ENVIRONMENTAL SOLUTIONS

OMEGA® SERIES 41 DETENTION SLAKERS



LIME SLAKING MADE SIMPLE AND EFFICIENT



EFFICIENT SLAKING

The MERRICK OMEGA® Series 41 Lime Slaker is a compact, self-contained slaker and feeder package that requires simple, straightforward on-off control. Only inlet and discharge piping and motor connections are required for installation. The Series 41 Slaker holds a performance-proven record for economical use of lime. It is highly efficient on grades ranging from high calcium, soft burned, highly reactive quicklimes with low oxide impurities content, to slow reacting quicklimes with high percentages of oxide and other impurities. The reason: it is engineered to provide the right agitation, water-to-lime ratio and temperature for each individual grade.



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THE RUGGED RELIABLE ONE

Low maintenance has been designed throughout the Series 41 Slaker. For example: the impeller is the only moving part in the slaking compartment subject to wear. The main housing is protected by thick wear plates in every slaking compartment. And, there are no packing glands or bearings below the liquid level.

SYSTEM PROTECTION

After slaking, the slurry overflows into the grit removal section. Here the abrasive grit separates from the slurry, protecting the slurry handling system from excessive wear. Removal of the grit is completed automatically, with washing jets returning adhering lime particles to slurry, ensuring maximum yield of hydrated lime.

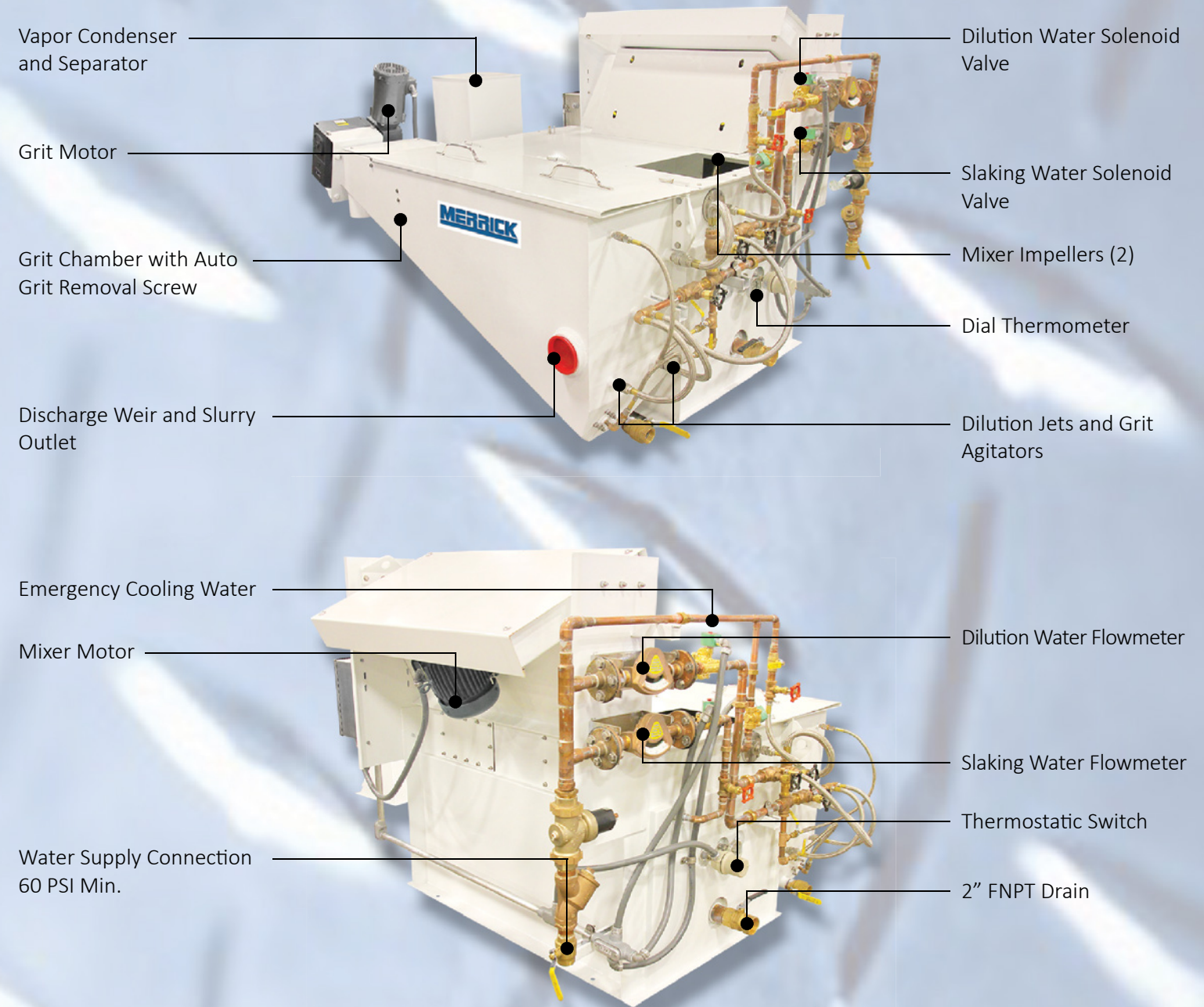
SIMPLE, SURE OPERATION

Slaking is a simple, efficient process with the MERRICK OMEGA® Series 41 Slaker. Water and lime are added to the first compartment in the proper proportions (3.5:1 to 6:1 by weight) required for complete chemical reaction at the correct temperature, independent of apparent viscosity. The mixture is thoroughly blended by impeller-type mixers at the proper degree of agitation to provide a uniform reaction. This ensures that there are no localized “hot spots” that promote crystal growth and decrease the specific surface and reactivity of the lime.

UNIVERSAL CAPABILITY

For less reactive limes not meeting AWWA (American Water Works Association) standards, such as a low calcium oxide, dolomitic or over-burned lime, warmer slaking water will compensate for poor slaking characteristics. A heat exchanger is available for installation in the last compartment of the slaker. The exchanger coils absorb the heat of reaction and preheat the incoming slaking water. This feature is the result of years of testing of all types of limes from the United States, Canada and other countries. It has enabled users to obtain efficient slaking without being dependent on supplies of expensive, premium-grade quicklimes.

STANDARD FEATURES



KEY COMPONENT IN ANY PH SYSTEM

In the plant, performance has proven that the MERRICK on-off control system provides better response. This concept relies on simple level indication in the slurry tank to start and stop the slaker on demand. Such straight-forward control of slaker feeder and water supplies assures reliability and simplified maintenance. A transfer pump recirculates the slurry to the feeding device, an arrangement that prevents settling of solids in suspension and resultant blockage of piping. Thus, the slurry feeding/metering device can be close to the point of application, reducing control system lag.