

## MAGNA SACMP-H

STRONG ACID CATION

POLYSTYRENIC MACROPOROUS  
HYDROGEN FORM

ResinTech SACMP-H is a tan-colored highly cross-linked macroporous strong acid cation resin in hydrogen form. SACMP-H is optimized for waters that punish other cation resins. ResinTech SACMP is intended for high flow rate and high-temperature polishing applications, and for other applications that require a hydrogen form cation resin and the highest possible physical strength and chemical durability.

### APPLICATIONS

- Demineralization
- High Temperature Applications
- Chemical Processing

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS	
<b>Polymer Matrix</b>	Styrenic Macroporous
<b>Ionic Form</b>	Hydrogen
<b>Functional Group</b>	Sulfonic Acid
<b>Physical Form</b>	Spherical Beads
<b>Particle Size</b>	16 to 50 US Mesh (297 - 1190 µm)
<b>% &lt; 50 mesh (300µm)</b>	< 1%
<b>Minimum Sphericity</b>	95%
<b>Uniformity Coefficient</b>	1.6
<b>Reversible Swelling</b>	H to Na -4% to -6%
<b>Temp Limit</b>	285°F (141°C)
<b>Capacity (meq/mL)</b>	1.7
<b>Moisture Retention</b>	45% to 55%
<b>Shipping Weight</b>	47 - 49 lbs/ft <sup>3</sup> (753 - 785 g/L)
<b>Color</b>	Tan
<b>Regenerability</b>	Yes

### PACKAGING OPTIONS

- 1 ft<sup>3</sup> bags
- 1 ft<sup>3</sup> boxes
- 1 ft<sup>3</sup> drums
- 7 ft<sup>3</sup> drums
- 42 ft<sup>3</sup> supersacks

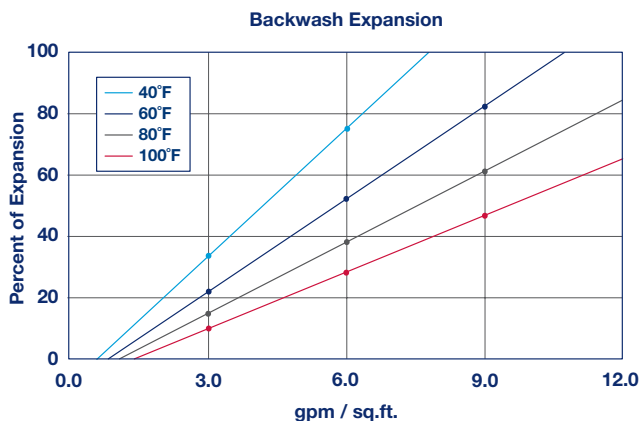
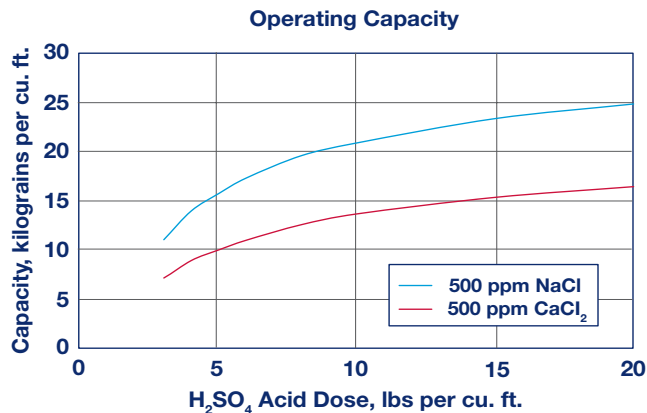
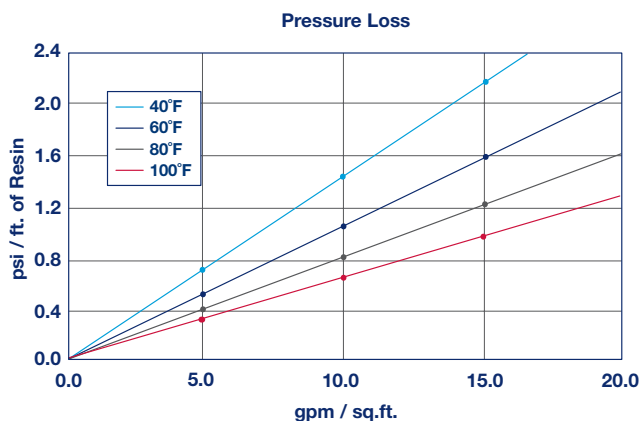
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Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO<sub>3</sub>, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.

### SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	280°F
Hydrogen form	
Minimum bed depth	24 inches
Backwash expansion	25 to 50 percent
Maximum pressure loss	25 psi
Operating pH range	0 to 14 SU
Regenerant Concentration	
Hydrogen cycle	5 to 10 percent HCl
Hydrogen cycle	1 to 8 percent H <sub>2</sub> SO <sub>4</sub>
Salt cycle	10 to 15 percent NaCl
Regenerant level	4 to 15 lbs./cu.ft.
Regenerant flow rate.	0.5 to 1.5 gpm/cu.ft.
Regenerant contact time	>20 minutes
Displacement flow rate	Same as dilution water
Displacement volume	10 to 15 gallons/cu.ft.
Rinse flow rate	Same as service flow
Rinse volume	35 to 60 gallons/cu.ft.
Service flow rate	1 to 10 gpm/cu.ft.

### DEMINERALIZATION

ResinTech SACMP-H can be used as the cation component in demineralization configurations where a hydrogen form cation resin is coupled with a hydroxide form anion resin. SACMP-H is ideal for high flow rate polishers and where high resistance to mechanical, thermal, and oxidative stresses is required.

Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums. For operation outside these guidelines, contact ResinTech Technical Support

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