

On-site Sodium Hypochlorite Generation System

Comparison of High Strength 12.5% to Low Strength 0.8%

Product/Design	12% Hypo Solution High Strength System	0.8% Hypo Solution Low Strength System
Sodium Hypochlorite Degradation U.L. Certifiable	<ul style="list-style-type: none"> Usage and production are "on demand" thus degradation does not apply 	<ul style="list-style-type: none"> Usage and production are "on demand" thus degradation does not apply
pH	<ul style="list-style-type: none"> 11 - 13 	<ul style="list-style-type: none"> 9 - 9.5
Chlorate in Hypochlorite	<ul style="list-style-type: none"> Approx 1gm/L in 12.5% or 64 ppm at 0.8% equivalent hypo 	<ul style="list-style-type: none"> 310 ppm chlorate in 0.8% hypo solution
Sodium Contribution per mg/L of Chlorine Dosage	<ul style="list-style-type: none"> 0.6 ppm 	<ul style="list-style-type: none"> 1.7 ppm (due to salt in hypo product)
Production	<ul style="list-style-type: none"> Production is scalable with 10:1 turndown ratio 	<ul style="list-style-type: none"> Production is not scalable – preset to single production rate
Brine	<ul style="list-style-type: none"> Spent brine is recovered 	<ul style="list-style-type: none"> Only 1/3 of NaCl is converted to hypo, 2/3 of the salt ends up in the weak hypo solution product
Electrolyzer Design	<ul style="list-style-type: none"> State of the art membrane cell design - anode and cathode reactions are separated 	<ul style="list-style-type: none"> No membrane separator - anode and cathode reactions are intermixed
Storage	<ul style="list-style-type: none"> 1 gallon of solution per lb of chlorine at 12% concentration. 	<ul style="list-style-type: none"> 15 gallons of solution per lb of chlorine

Consumption Per lb of chlorine generated	12% Hypo Solution High Strength System	0.8% Hypo Solution Low Strength System
Power (kWh)	1.75	2.5
Water (gal)	0.95	15.0
Salt, food grade (lb)	1.65	3.5

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