On-site Sodium Hypochlorite Generators

ClorTec®
100 to 3000 lb/d (45 kg/d to 1360 kg/d)

ClorTec® Makes Electrochlorination Easy
The latest generation of De Nora ClorTec® brine electrochlorination technology offers simple operation and maintenance as well as unrivaled performance, efficiency, low lifecycle cost, durability, reliability and safety advantages.

The large ClorTec® systems generate from 100 - 3,000 lb/day (45 - 1,360 kg/day) sodium hypochlorite using three common consumables: water, salt and power.

Using just water, salt and power to generate sodium hypochlorite on site eliminates the storage and handling of hazardous chemicals while providing chlorine residual.

All ClorTec® designs use the highest efficiency DSA® electrodes pioneered by De Nora and include a range of operator-driven features including:

- Remote monitoring and communication options available
- Unique cell design and flow control features for simplified maintenance and operation
- Patented split flow system ensures efficiency and minimized hypochlorite production by-products production
- NSF/ANSI 61 Certified

ClorTec® 100-300
Skid Dimensions

60”
17”
28”
# ClorTec®
## On-site Sodium Hypochlorite Generators

**100 to 3000 lb/d (45 kg/d to 1360 kg/d)**

### Product Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Cell Config.</th>
<th>Salt Conversion</th>
<th>Energy Conversion</th>
<th>Water</th>
<th>Output Capacity* (chlorine equivalent)</th>
<th>Total Flow**</th>
<th>Softwater</th>
<th>Brine Flow</th>
<th>Salt</th>
</tr>
</thead>
<tbody>
<tr>
<td>ClorTec® 100</td>
<td>1 x 100</td>
<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
<td>108</td>
<td>49</td>
<td>1.04</td>
<td>5.67</td>
<td>0.96</td>
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<tr>
<td>ClorTec® 150</td>
<td>2 x 75</td>
<td>3.0 kg salt/kg FAC</td>
<td>4.4 kW-hr/kg FAC</td>
<td>125 L water/kg</td>
<td>160</td>
<td>73</td>
<td>1.56</td>
<td>8.50</td>
<td>1.44</td>
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<td>ClorTec® 200</td>
<td>2 x 100</td>
<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
<td>216</td>
<td>98</td>
<td>2.08</td>
<td>11.34</td>
<td>1.92</td>
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<td>ClorTec® 225</td>
<td>3 x 75</td>
<td>3.0 kg salt/kg FAC</td>
<td>4.4 kW-hr/kg FAC</td>
<td>125 L water/kg</td>
<td>240</td>
<td>109</td>
<td>2.34</td>
<td>12.75</td>
<td>2.16</td>
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<td>ClorTec® 300</td>
<td>3 x 100</td>
<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
<td>324</td>
<td>147</td>
<td>3.13</td>
<td>17.06</td>
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<td>ClorTec® 450</td>
<td>1 x 450</td>
<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
<td>500</td>
<td>227</td>
<td>4.69</td>
<td>25.57</td>
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<td>ClorTec® 600</td>
<td>1 x 600</td>
<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
<td>625</td>
<td>283</td>
<td>6.25</td>
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<tr>
<td>ClorTec® 750</td>
<td>1 x 750</td>
<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
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<td>340</td>
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<td>ClorTec® 900</td>
<td>2 x 450</td>
<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
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<td>9.38</td>
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<td>ClorTec® 1200</td>
<td>2 x 600</td>
<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
<td>1250</td>
<td>567</td>
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<td>ClorTec® 1500</td>
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<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
<td>1500</td>
<td>680</td>
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<tr>
<td>ClorTec® 1800</td>
<td>2 x 450 + 2 x 450</td>
<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
<td>2000</td>
<td>902</td>
<td>18.75</td>
<td>102.21</td>
<td>17.31</td>
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<td>ClorTec® 2400</td>
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<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
<td>2500</td>
<td>1134</td>
<td>25.00</td>
<td>136.28</td>
<td>23.08</td>
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<td>ClorTec® 3000</td>
<td>2 x 750 + 2 x 750</td>
<td>3.0 lb salt/lb FAC</td>
<td>2.0 kW-hr/lb FAC</td>
<td>15 gal water/lb</td>
<td>3000</td>
<td>1360</td>
<td>31.26</td>
<td>170.40</td>
<td>28.84</td>
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</tbody>
</table>

### Specifications

**Control:** Automatic batch, controlled by hypochlorite storage tank level

**Sodium Hypochlorite:** 0.8% ± 0.05

**Water Supply:** Potable water @ 30 - 70 psi (1.2 - 4.8 bar)

**Temperature Range:** 65°F - 80°F (18°C - 29°C)

**Salt Quality:** 99.7% pure dry weight solar salt or equivalent for best efficiency

**PLC & Operator Interface:** 4”/7” PLC/HMI Touch Screen

(Other PLC & HMI options are also available)

**NOTES:**
* Output capacities are maximum values. For detail sizing please contact De Nora Water Technologies
* Note flow is for generator only, additional water flow will be required for softening system and may vary but generally +15% should be adequate. Contact De Nora for project specifics
*** Data logging and communications capability. Additional options are available - contact De Nora Water Technologies for your options
**** For lower salt purity usage, please contact De Nora Water Technologies

**Control Panel:** Grey polyester coated NEMA 4 welded steel enclosure UL 508A (Other materials are also available)

**Hydrogen Venting:** Waste hydrogen is diluted and vented to atmosphere by using air blower(s)

**Electrical Power:**
- **Rectifier:** 208 or 240 Vac 1 Phase, 60 Hz or 480 - 600 Vac, 3 Phase, 60 Hz (50 Hz also available)
- **Control Panel:** 208 or 240 Vac 1 Phase, 60 Hz (Any other voltages and 50 Hz are also available)

**Skid Dimensions:**
- **ClorTec® 100 - 300:** 28” W x 17” D x 60” H
- **ClorTec® 450 - 1500:** 133” W x 26” D x 60” H
- **ClorTec® 1800 - 3000:** 152” W x 48” D x 60” H

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