OPADEN™ is a reliable and safe solution for drinking water treatment that meets World Health Organization’s (WHO) recommendations. The OPADEN™ units use well-known and efficient technologies such as ion exchange resin and counter-current upflow regeneration.

High quality potable water: Nitrate < 50 mg/L

Flow rates: from 10 up to 130 m³/h per unit

Features & Benefits
- Complete treatment line including all necessary equipment and reagents
- Proven technology using ion exchange resin
- Upflow counter-current resin regeneration process
- Certified ACS French Health Compliance
- Flexible; can treat different flows and nitrate concentration
- Simplex, duplex or triplex units
- Modular systems; can be combined to treat larger volumes
- Remote control device; easy to operate
- Skid-mounted systems; short lead-time; quick installation and commissioning; can be integrated into concrete plants
- Several options available

Applications
- Nitrate removal for drinking water
- Small sized cities

Related Services
- Support for installation and commissioning
- Local after-sales service for preventative and corrective maintenance program
- Tailor-made design according to project
# OPADEN™ Nitrate removal system

**System Dimensions & Performances**

<table>
<thead>
<tr>
<th></th>
<th>Exchanger Diameter (mm)</th>
<th>Shell Height (mm)</th>
<th>Area (m²)</th>
<th>Treated water per unit (m³/h)</th>
<th>NO₃ in Raw water (mg/l)</th>
<th>NO₃ in Treated water (mg/l)</th>
<th>By pass flowrate (m³/h)</th>
<th>Resin Capacity (eq/l)</th>
<th>Resin volume (liters)</th>
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*Design based on resin capacity of 0.3 eq/l

The OPADEN standard unit includes one or several skid-mounted ion exchangers fitted with their respective pipe work, valving, feed pump, electrical control cabinet and brine preparation tank.

- Stainless steel and PVC manifold
- Electrical or pneumatic valves
- Specific adapted ion-exchange resin for eliminating nitrates
- Brine silo
- Prefabricated modular unit to be placed on a concrete slab
- Operating pressure from 0 to 16 bars
- The unit may be housed in a heated container to make it frost-proof
- Continuous nitrate monitoring and remote process control

For higher flow rates or other processes, consult your local Veolia Water Technologies representative.

Visit our website: www.veoliawatertechnologies.com/opaden/en/