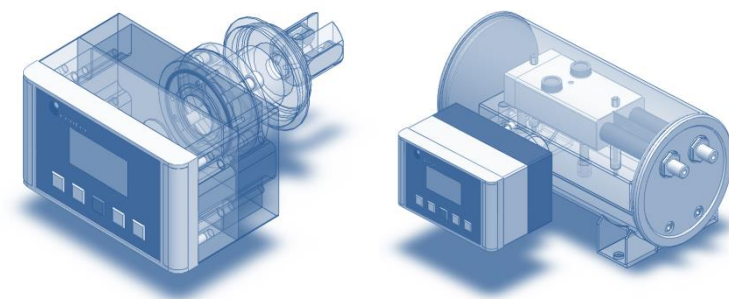


The Centec Group

Centec is a privately owned group of companies. From conventional power plants to solar energy and biofuel – there is a broad range of applications for our automated process skids. We are a leading supplier of water purification and deaeration technologies. Automated CIP-systems designed and manufactured by Centec are installed around the globe. Centec technology includes a range of high precision process sensors for accurately measuring critical product properties such as the concentration of acidic and caustic solutions and O₂ content. The largest energy groups in the world and numerous power plants are among our key customers.



Accuracy. Reliability. Centec.

Germany
Centec GmbH
Wilhelm-Röntgen-Strasse 10
63477 Maintal
Tel.: +49 6181 18 78 0
Fax: +49 6181 18 78 50
info@centec.de

Czech Republic
Centec automatika s.r.o.
Pekařská 8/601
155 00 Praha 5
Tel.: +420 257 084 111
Fax: +420 235 518 701
prodej@centec.cz

USA
Centec LLC
P. O. Box 820
Germantown, WI 53022-0820
Tel.: +1 262 251 8209
Fax: +1 262 251 8376
info@centec-usa.com

UK
Centec UK
Stalworths, The Street
Great Tey, Colchester, Essex, CO6 1JS
Tel.: +44 1206 21 19 21
Fax: +44 1206 21 19 16
info@centec-uk.com

Serbia
Centec Serbia
Bogdana Žerajića 34/III
11000 Beograd
Tel.: +381 11 358 11 24
Fax: +381 11 358 11 24
info@centec.rs

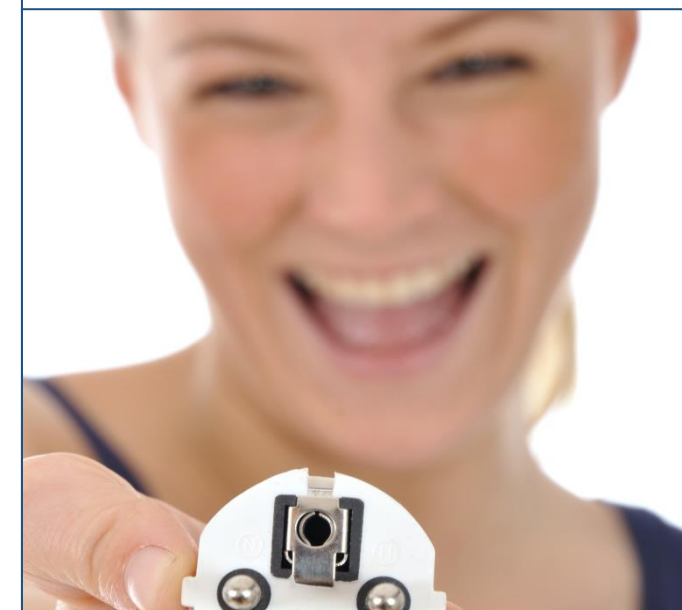
India
Centec RRR Systems & Sensors Pvt Ltd
RRR House, Plot 80, Sector 23
Turbhe Naka, Navi Mumbai - 400 705
Tel.: +91 22 2783 3655 & 2783 1348
Fax: +91 22 2783 4814
mail@centecrrr.com

Brazil
Centec América Latina Ltda
Largo de Sao Francisco de Paula nº 26
Centro Cep. 20051 070 Rio de Janeiro
Tel.: +55 21 2223 2066
Fax: +55 21 2223 0324
centelatina@terra.com.br

DeGas-H

Hot Column Deaeration

Centec Energy Systems



Automated
process skids
and high precision
sensors from a
single source.
Centec.

DeGaS-H

The Principle

The Centec column deaeration system DeGaS-C is a modular skid for removing oxygen from water heated to about 75 °C. The presence of even low O₂ levels can cause serious corrosion damage by forming oxides. For treatment in DeGaS-C, the liquid is injected at the top of the column. The column contains a matrix of structured packing comprising thin corrugated metal plates arranged so that the liquid takes multiple paths as it flows downwards through the column. This maximizes the transfer surface and the contact time between the liquid and the strip gas; CO₂ or N₂ may be used. The strip gas is fed into the bottom and flows upwards inside the column. The large partial pressure difference of O₂ forces the oxygen out of the liquid into the gas phase. This fundamental scientific principle is described by “Henry’s Law”. At the top of the column the removed O₂ leaves the system together with the undissolved CO₂ or N₂. The resultant deaerated liquid is slightly carbonated or nitrogenated depending on the strip gas used. O₂ content monitoring can be done with accurate OXYTRANS optical sensing technology developed and manufactured by Centec.

Technical Data

Capacity	1 - 200 t/h
Residual Oxygen	< 10 ppb
Pressure of Operation	0 - 8 bar
Temperature of Operation	8 - 95 °C
Temperature of CIP	max. 95 °C
Material	1.4301/1.4404 AISI 304/316L
Heating Medium	steam
Cooling Medium	glycol, ice water, ammonia, brine
PLC	SIMATIC S7
Options	in-line O ₂ measurement pre-filtration disinfection

The Centec production is certified according to ISO 9001.



- **Application Specific and Energy Efficient**
reduced solubility of oxygen in hot water
simultaneous disinfection of liquid
excellent heat regeneration performance
- **Modular Design with Standard PLC**
skid mounted for easy installation and start-up
- **Hygienic Execution and Full CIP Capability**
- **Outstanding Price-Performance-Ratio**

Experience. Expertise. Centec.

Particle Pre-Filtration · Disinfection · Water Softening & Demineralization · Ultrafiltration · Reverse Osmosis
Electro Deionization · WFI Distillation · Membrane Deaeration · Column Deaeration · Vacuum Deaeration
Multi Component Mixing · Additive Dosing · Flash Pasteurization · Cleaning-in-Place · Pure Steam Generation

