

We are your reliable partner
from planning
to commissioning
and qualification
of your plant.

Centec offer fully automated, skid-mounted process systems and high precision measurement technology from a single source.

For more than 50 years we have been specialized in customized turnkey solutions for the soft drink and brewery industry.

Centec OXYSTEAM / OXYGUARD

Steam Boiler Water Degassing with OXYTRANS TR

To generate steam, water is heated up in a steam boiler. Oxygen in the water can lead to dangerous corrosion. Therefore the water is thermally degassed by boiling and the oxygen dissolved in the boiling stripping steam vapors is blown off 24/7 via a valve into the free environment.

There is a loss of steam:

0.3 - 0.5 % of the nominal steam boiler capacity
output per year



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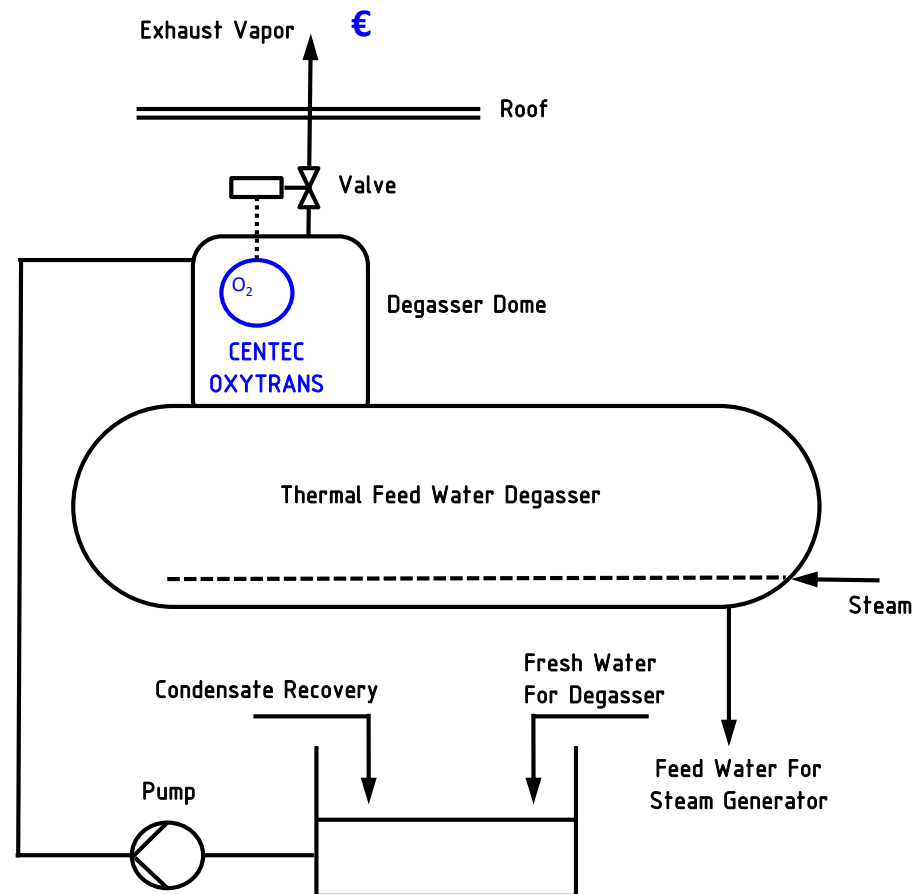
Steam Boiler Water Degassing with OXYTRANS TR

- The optical O₂ sensor Centec OXYTRANS TR can be used to measure the degassed O₂ content in the dome head chamber of the thermal degasser
- The measurement allows a precise control of the valve for discharging the steam.
- The closing time of the valve is a strong indicator of steam savings
- Steam losses can be reduced by up to 95 %



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Installation Examples



Centec OXYSTEAM / OXYGUARD

Example for Savings:

Steam boiler parameters:

Boiler with 10 t / h // 8,760 h / year // steam loss: 0.4% // 50 € / t of steam

Calculated steam loss (0.4 %): 350 tons

Saved steam loss using OxySteam (80 %): 280 tons

Annual savings (steam x cost of steam): 14,000 EUR

Cost of Investment (Sensor, Valve, Inst.): 10,000 – 15,000 EUR

ROI: approx. 1 year (significantly shorter for 20t, 30t, 40t steam generators)

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Some References:

- Licher Brewery – Bitburger Group
- Sternburg Brewery Leipzig – Radeberger Group
- Berliner-Kindl-Schultheiss-Brewery – Radeberger Group
- Brasserie Nationale Bofferdung
- Warsteiner Brewery
- Paderborner Brewery – Warsteiner Group
- Cölner Hofbräu Früh
- Privatbrauerei Gaffel
- Mecklenburgische Brauerei Lübz – Carlsberg Group
- Refresco Germany Calvörde
- Rauch Juice Hungary

