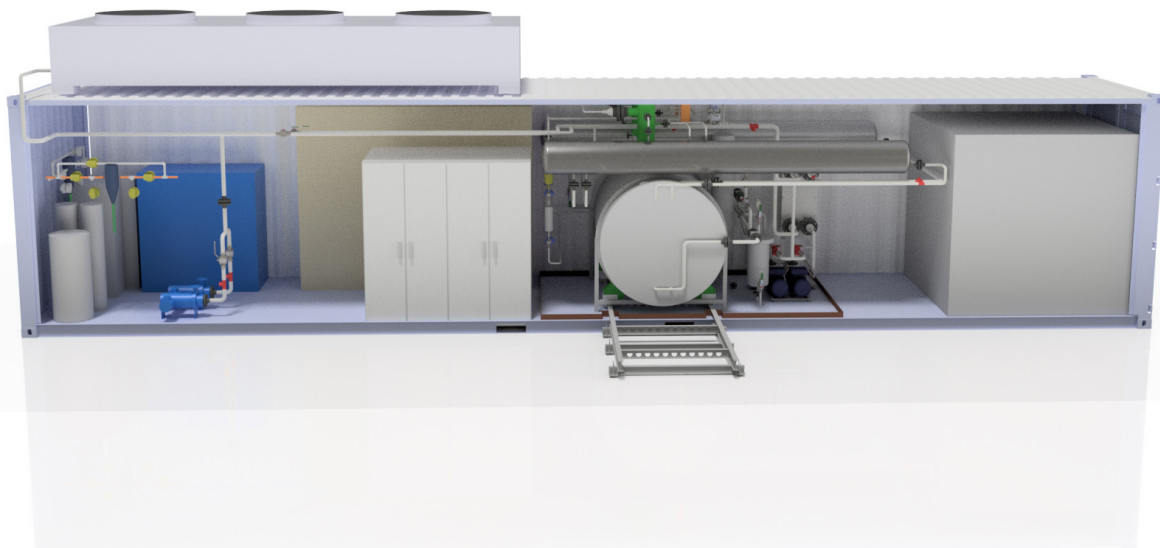


DQ100

Containerized Alkaline Electrolyser

100 Nm³/h

H₂
Green Hydrogen



DQ100, Alkaline Electrolyser | 100 Nm³/h

Medium Scale Applications

John Cockerill's technology

More than 200 years of history.

Active in the hydrogen sector for more than 25 years of R&D and production of electrolysis systems.

Pressure

Green hydrogen is delivered at 30 bar (g)

Scalability

The DQ100 is a 500kW stack easily duplicable.

High H₂ purity

Our purification system can deliver 99.999% purity H₂ purity. This H₂ is suitable for fuel cell vehicles, Natural gas blending and Turbine injection applications.

The purification system is autonomous and does not consume any gases

DQ100 ELECTROLYSER

H₂ gas production

Nominal H ₂ flow	100 Nm ³ /h (2136 kg/day)
Flow range	40% - 100%
Delivery pressure	30 bar (g) without compression
H ₂ purity before purification system	99.8%
H ₂ purity after purification system	99.999% suitable for fuel cell, gas blending application

Electrical requirements

Plant power consumption (AC)	500 kW
Stack consumption (DC)	4.16 – 4.6 kWh/Nm ³ H ₂
Electrical converter power factor	≥ 96%
Total Harmonic Distortion (THD)	≤ 5%
Primary voltage	3.3 – 20 kV (typical 10 kV) (optional up to 34 kV) 400 V

Feed water and electrolyte

Water required	Tap Water
Water consumption	1.3 – 1.6 L/Nm ³ H ₂
Electrolyte	30% KOH aqueous solution

Stack lifetime

Expected lifetime	≥ 20 years
Optimal runtime	Approx. 10 years
Degradation rate	Approx. ≤ 1% /year

Dimensions & weight

Plant footprint	Approx. 36 m ²
Stack dimensions (LxWxH)	13.7 x 2.5 x 2.9 m

Norms & standards

Marking	CE
Norms compliancy	European PED, ATEX, EMC