CORE ADVANTAGES

+ **Highest efficiency** in hydrogen production (82% LHV) compared to legacy technologies like PEM or Alkaline, leading to lowest hydrogen production cost
+ **Modular design** to meet customer demand for hydrogen up to megawatt scale
+ **Flexible hydrogen output** between 0% and 125%
+ **High reliability** for secured on-site hydrogen production
+ **High quality hydrogen** for multiple use (99.999 Vol.-%)

APPLICATIOnS

Hydrogen is essential for a variety of industrial applications.

Industry
- Metallurgy
- Float glass
- Electronics and chemicals

Mobility
- Refineries
- Fueling stations

REFERENCES

Salzgitter Flachstahl GmbH
- 1 × 150 kW electrolyser power input to provide 40 Nm³/h hydrogen output
- Electrolyser efficiency of > 80% LHV
- Installed at an industrial steel plant
- Meeting hydrogen quality standards of steel industry

The Boeing Company
- 2 × 100 kW electrolyser power input to provide 50 Nm³/h hydrogen output
- Option: reversible operation to produce 2 × 20 kW electricity from hydrogen (roundtrip efficiency approx. 45%)
- Electricity storage with hydrogen for autonomous power supply during day and night (PV connected)
SCALABLE ELECTROLYSER FOR INDUSTRIAL USERS

SUNFIRE-HYLINK HL200

- Electrolyser module:
  - Electricity input: up to 150 kW
  - Hydrogen output: up to 40 Nm³/h

- Standard container:
  - Electricity input: up to 750 kW
  - Hydrogen output: up to 200 Nm³/h
  - Low footprint of 6.7 Nm³H₂/m²
  - Hydrogen drying unit
  - Hydrogen compression

SUNFIRE-HYLINK HL40

- Rated electrical power: 150 kW
- Load variation (H₂ output): 0% ... 125%
- Electric efficiency based on LHV: 82%
- Specific electric energy: 3.7 kWh/Nm³
- H₂ production: 40 Nm³/h
- H₂ pressure (after compression): 10 bar (g)
- H₂ purity (after gas cleaning): 99.999 Vol.-%
- Atm. dew point temperature: - 60 °C
- Steam input: Saturated steam: 150 °C; 3 bar (g); Mass Flow: 40 kg/h
- Electrical interface: 3 phase, 380/400/480 V AC/50 Hz/60 Hz
- Noise: < 60 dB @ 3m distance
- Ambient temperature: - 20 °C ... + 40 °C
- Communication: Communication for remote monitoring and control

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