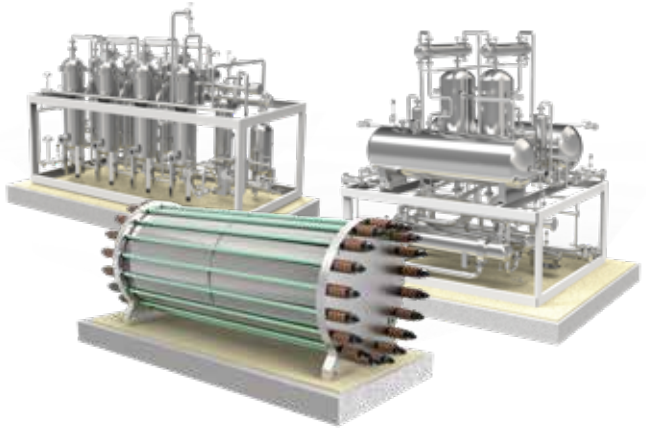
PURE POWER
PURE HYDROGEN

RCT GH hydrogen

Technology & Design
Made in Germany



Hydrogen Generation System

PRODUCT NAME
RCT HyMax

PRODUCT TECHNOLOGY
Alkaline

PRODUCT PACKAGE
Electrolyzer Stack, Gas-Liquid Separator, Purification, Auxiliary system, Power supply unit

Definition of the System

Single stack systems offer production capacities up to 1000 Nm^3/h.

For higher production capacities, multiple modules can be connected, achieving outputs up to 20 MW each.

Small production capacity needs less then 20 Nm^3/h can be purchased upon request.

System & Product Certificates

IATF, CE, ASME, EC-79, ATEX, PED CERTIFIED

EFFICIENT, RELIABLE & SCALABLE HYDROGEN PRODUCTION

Key Features

High Efficiency
Industry-leading efficiency in converting electricity to hydrogen.

Comprehensive Integration
Combines electrolyzer stack, gas-liquid separators, purification systems, and auxiliary units in one solution.

Scalable Design
Modular architecture allows easy scaling from small to large production capacities.

High Purity
Produces hydrogen with >99.999% purity.

The details and main characteristics outlined in this datasheet may exhibit minor variations. In light of continuous innovation and research and development improvements, RCT GH retains the authority to modify the information provided here at any time without prior notice. It is recommended to consistently acquire the latest version of the datasheet, which will be considered an integral part of the contractual agreement governing all transactions associated with the acquisition and sale of the described products.

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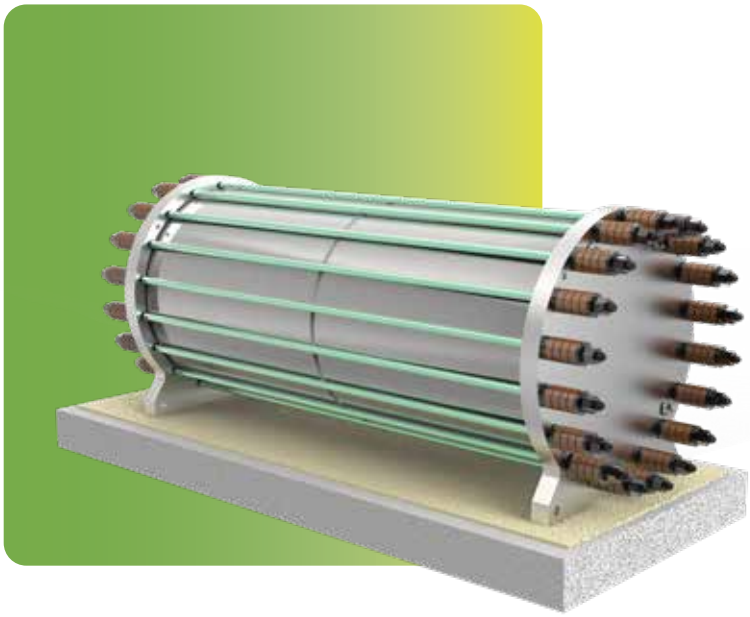
Electrolyzer Stack

RCT HyMax



The electrolyzer stack features a series structure with one positive and two negative connections, operating at a pressure of 1.6 MPa. The alkaline electrolyzer stack provides substantial hydrogen production, high purity hydrogen, extended equipment lifespan, reliable operation, and low operational and maintenance requirements.

Technical Parameters

Item	Unit	200/1.6	500/1.6	1000/1.6
Hydrogen production	Nm^3/h	200	500	1000
Operating pressure	MPa(G)	1.6	1.6	1.6
Operating temperature	°C	85~92	85~92	85~92
Rated current	A(DC)	3500	6500	13000
DC Power consumption(BOL)	$kWh/(Nm^3H_2)$	≤4.2	≤4.2	≤4.2
AC Power consumption*	kWh	1030	2575	5150
DI Water consumption	l/h	≤180	≤450	≤900
KOH electrolyte concentration	wt%	30	30	30
Electrolyzer weight	kg	14700	35200	50000
Dimensions of electrolyzer	m	3.20*1.65*1.64	4.20*2.45*2.36	6.90*2.45*2.36

*Total plant consumption incl. BoP, transformer & rectifier

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