

# DiLiCo single cell test system

## Test of PEM electrolysis membranes

- ✓ reliable MEA testing for the next generation of electrolyzers
- ✓ quick membrane change on the baltic quickCONNECTfixture
- ✓ "ready to use" complete system
- ✓ optionally with current density and temperature distribution measurement



	DiLiCo single cell test system
membrane area	25 cm <sup>2</sup> (other area size on request)
operation pressure of the cell	0 to 8 bar (higher pressure on request)
electrical power supply	selectable up to 125 A or 250 A
external temperature control of the cell	20 °C to 80 °C
DI water preheating/ conductivity measurement	up to 80°C / yes
pressure and temperature measurement	at all inputs and outputs
cell voltage monitoring	0 V to 5 V
gas drying	for hydrogen and oxygen
compression force on active cell surface	adjustable by compressed air supply
flow measurement for H <sub>2</sub> , O <sub>2</sub> and DI water	yes
customer connections	DI water, water drain, electrical connection, gas extraction, compressed air
cross over measurement O <sub>2</sub> in H <sub>2</sub> / measurement H <sub>2</sub> in O <sub>2</sub>	yes / yes
connection for nitrogen flushing	yes

## PRODUCT DESCRIPTION

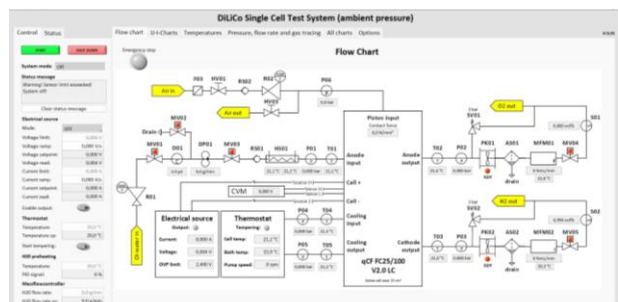
Insert the membrane, close the cell holder, start the software and begin the electrolysis measurement.

The easy handling of **DiLiCo single cell test system** characterizes the test stand for the analysis of PEM electrolysis membranes. The proven **baltic quickCONNECTfixture** system serves as the base for rapid membrane integration. With the help of compressed air, the compression force on the active cell surface can be variably adjusted, which is an important parameter for the operation of electrolysis membranes. The cell can be heated up or cooled down variably before and during operation. The DI water supply has conductivity measurement and preheating for an optimal electrolysis process. The gases produced, hydrogen and oxygen, are dried, the flow rates are measured and the proportions in the respective gas flow are determined.

**Test sequences**, such as the time recording of current and voltage characteristics and other parameters, can be programmed in the software and enable reproducible measurements to be carried out.

## DELIVERY

- ✓ test stand for PEM electrolysis membranes
- ✓ software for operation and analysis
- ✓ (opt.) DiLiCo CURR TEMP



User interface for operating the test stand