

# ElectroFlow™ MTF

## Multi-cell Electrolyser Test Fixture

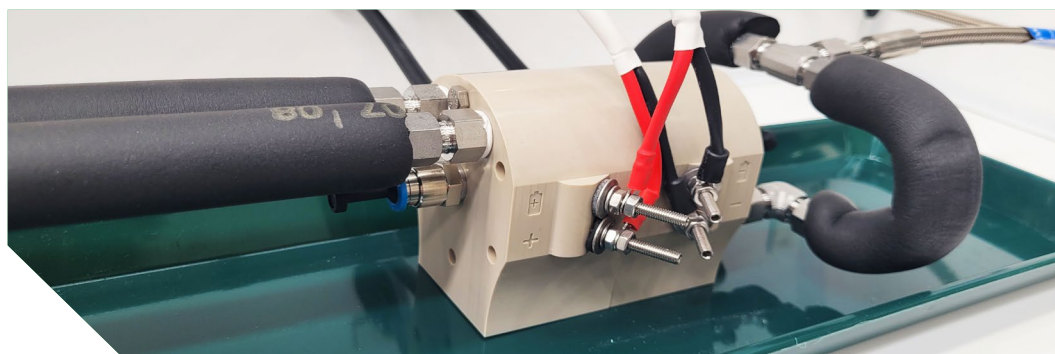
### Key Features

- Multi-cell test fixture allows performance comparison of membranes, electrodes and coatings
- Fully compatible with ElectroFlow ETS20
- Available in two sizes: 4.9cm<sup>2</sup> and 15.9cm<sup>2</sup> active cell areas
- Supplied with two cells, expandable to 8 cells
- N<sub>2</sub> pressurised cell compression
- Stainless steel flow field with serpentine pattern
- Operating temperature up to 95°C (203F)
- Kit includes all hoses and cables for connection to ElectroFlow ETS20
- Electrode, membrane and other consumables available

The **ElectroFlow MTF** is a multi-cell electrolyser test fixture that is fully compatible with the ElectroFlow ETS20. The advanced design of the ElectroFlow MTF supports concurrent operation and test of multiple electrolyser cells.

Available in two sizes (4.9cm<sup>2</sup> and 15.9cm<sup>2</sup> active cell areas), the ElectroFlow MTF enables evaluation and performance comparison of key components, such as membranes, electrodes and coatings. Multiple test cells operate simultaneously, under common conditions, all within an integrated multi-cell system. The ElectroFlow 20 is also ideal for gaining familiarity with electrolyser cell components and assembly.

The ElectroFlow MTF integrates directly with the power supply, electrolyte circulation system and transducer interfaces of the ElectroFlow ETS20. Compression of cell electrodes and membranes is achieved via pressurised nitrogen, also under control of the ElectroFlow ETS20.



## ElectroFlow MTF Specifications

### Electrolyser Test Cell Details:

Type	Alkaline water
Electrolyte	Potassium hydroxide [KOH], up to 30% (not supplied)
Active area	4.9cm <sup>2</sup> or 15.9cm <sup>2</sup> per cell
Operating pressure	Atmospheric
Cell compression	N <sub>2</sub> based, up to 5 bar <sub>g</sub>
Number of cells	2 (expandable to 5+ cells with optional upgrades)
Cell body and end plates	PEEK with threaded fittings
Electrode supplied	Nickel mesh, 2.5cm diameter
Flow field	Serpentine pattern, stainless steel
Operating temperature	Up to 95°C (203F)
Electrolyte heater	Thermostatically controlled
Electrolyte path	Re-circulating
Product gas handling	Condensate separation, N <sub>2</sub> dilution prior to expulsion

### External Interfaces:

Electrical supply	M4 screw connection
Electrolyte inlet and outlets	1/4" double ferrule compression fitting (female)
Cell compression (N <sub>2</sub> )	8mm pneumatic push fitting (female)
Cell voltage measurement	M4 screw connection

### Accessories Included:

3 x flexible hoses	PTFE-lined stainless-steel braided hose assembly 1/4" tube adapter ends
2 x pneumatic hoses	8mm pneumatic push fitting (male-to-male)
2 x electrical supply cables	M4 ring to 4mm banana (male)
2 x voltage measurement cables	M4 ring to 4mm banana (male)
Spill tray	Co-polymer polypropylene

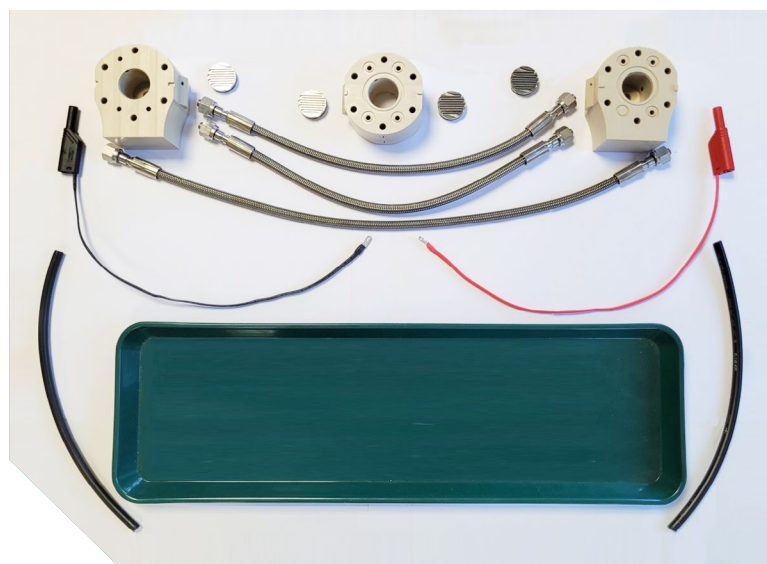
### Options (available for purchase separately):

Additional cell (includes 2 x voltage measurement cables)	4.9cm <sup>2</sup> active area cell 15.9cm <sup>2</sup> active area cell
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### Consumables (available for purchase separately):

Zirfon 500 membranes	50 pcs
Zirfon 220 membranes	50 pcs
Nickel mesh electrodes	100 pcs, pre-cut to size
Cell O-ring Sets, 4.9cm <sup>2</sup> active area cell	50 sets
Cell O-ring Sets, 15.9cm <sup>2</sup> active area cell	50 sets


## Test Fixture kit contents



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