

ELECTROCHEMICAL FLOW CELL DN-FC

Besides rotating disks, flow cells are a means to operate electrodes at controlled laminar flow. Since the counter electrode is placed in parallel and opposite close to the working electrode, appreciable currents can be achieved. So, flow cells play their strength best when used for galvanic deposition experiments.

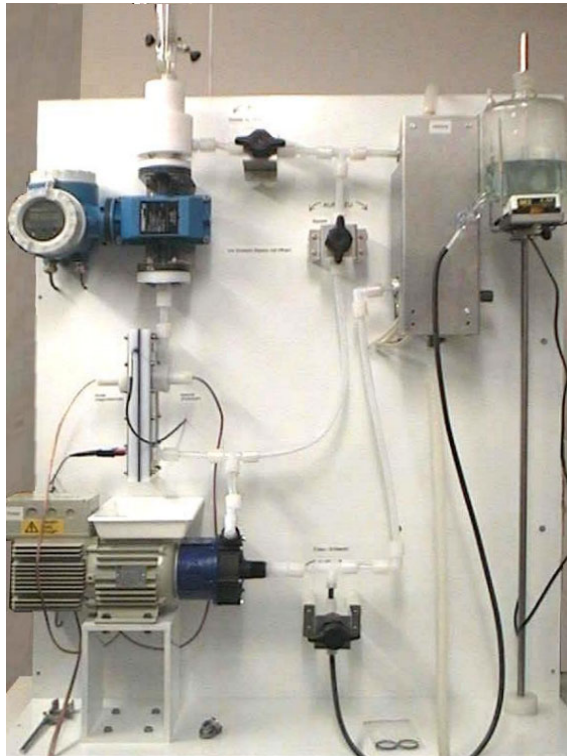


Fig. 1: Test loop with DN-FC. Design flow rate up to 10 m/s, operating limit 120 °C.



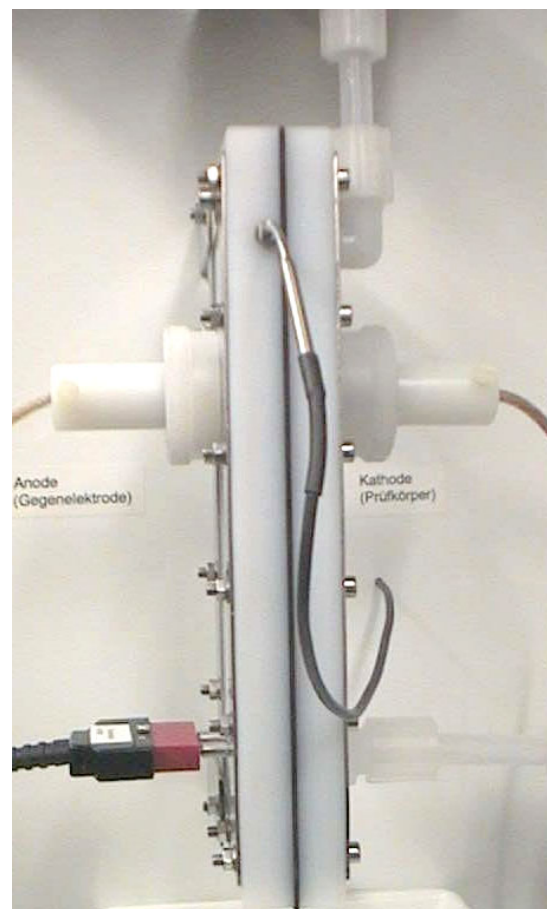
On the other hand, laminar flow along a surface is the typical model for a flow in tubes.

Corrosion in flow systems therefore can be well characterised by using flow cells.

One essential of flow cells is the absence of edges causing turbulence. DN-FC strictly obeys the rules for laminar flow channels. In addition, both working electrode and counter electrode fit smooth in the channel surface due to the adjustable plug-in.

The DN-FC can be manufactured from perspex glass, PVC, PVDF, PTFE or even PFA, depending on the environmental demands.

Bank Elektronik – Intelligent Controls supplies all necessary parts for complete test loops, including pumps, heat exchangers, flow meters and controls.



Upper: DN-FC, mounted

Left: Working electrode of DN-FC, 24 mm dia