

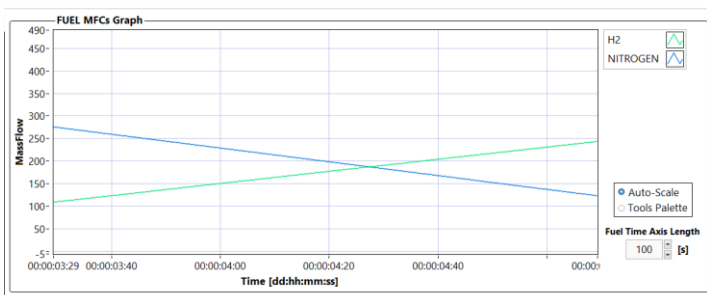
Gas Panels & Control Software

Intuitive control over the gas flow



Gas Panel with 3 MFC and 2 rotameters

The **Control Software** is used to monitor the gas panel from a computer. The user sets specific flow rates (S.P.) and can read their instant values (M.P.). The software also allows the use of ramps, so that flow rates can simultaneously increase and decrease at a specified rate (see picture below).



End of purging (H2 increasing, N2 decreasing)

Water electrolysis: software is also able to control at the same time a peristaltic pump for SOEC experiments.

Gas Management Panels provide a compact solution for controlling the flow rates of gases for all SOFC/SOEC testing rigs. The panels are usable for either multi gas use for single cell or short stack or with multi cell testing (Multi-Flanges™). Up to 5 mass flow controllers can be installed on the same panel, with rotameters on an additional smaller panel.

MFC Control		Data Acquisition, Control Modes, Gas Change	
FUEL MFCs			
Gas Type	SP	MP	Ramp
H2	400,0 ml/min	243,9 ml/min	100,0 ml/min/min
Gas Fuel	Full Scale : 1000 ml/min		Ramp=0 : No Ramp
NITROGEN	0,0 ml/min	123,62 ml/min	100,0 ml/min/min
Gas Purge	Full Scale : 400 ml/min		Ramp=0 : No Ramp
	0,0 ml/min	ml/min	0,0 ml/min/min
	Full Scale : 0 ml/min		Ramp=0 : No Ramp
Apply Fuel Changes			
Auto Purge Fuel Side		STOP FUEL SIDE GASES	

Control interface of the program

Gas Change: The target gas of each MFC can be switched to another one from a preset selection. This allows to change experiments and gases without having to change MFCs.

MFC Calibration: The program is part of a complete package used to calibrate MFCs and correct potential drifting.