

More than 10 years of experience in various gas diffusion electrodes. A dry mixture of catalyst and PTFE powder is extruded to a self supporting foil. In a second step this foil is laminated onto a woven material. Nickel, high alloyed steel and carbon cloth are the woven materials. A microporous, hydrophobic layer is recommended if using the gas diffusion electrode in liquid electrolytes and dry gas.

We supply our customers also with the complete production line, PTFE mixer, Electrode calander.



Electrode calander

Ordering number:
RM100



GDE
Rolled good
Ordering number:
see table below



GDE with PTFE-
layer
Ordering number:
+ PTFE

	Raney Nickel & Carbon	Mangeneses dioxide & carbon	Silver oxide & Silver	Raney Nickel & Nickel	Platinum & Carbon
Ordering number	Ranic	Moc	Oxag	NIH33	PlaC, PlaXC
Zn air		●	○		○
Alkaline water electrolysis	○			● ●	○
Alkaline fuel cell		●	●	●	○ ○
Acidic or neutral electrolyte					● ●

●: recommended Anode, ○: suitable as Anode, ●: recommended Cathode, ○: suitable as Cathode

	Units	Method	Ranic	Moc	Oxag	NIH33	PlaC ^{***}	PlaXC ^{****}
Reference number			#769	#779	#659	#771	#780	#781
Typical Thickness*	Microns		330	350	350	440	370	
Basis weight*	g/m ²		350	380	1550	1200	330	
Density*	g/cm ³	Calculated	1.06	1.09	4.43	2.67	0.89	
Electrical resistivity*	mΩ*cm ²	4-probe @0.3N/mm ²	29	11	n.a.	60	20	
Air permeability**	cm ³ /(cm ² *min*bar)	Gurley	200	220	540	800	1100	
Bubble point**	mbar	DIN 58 355	900	1000	440	300	600	
Web material			Woven Nickel	Woven gold plated Nickel	Woven gold plated Nickel	Woven Nickel	Woven gold plated high alloyed steel	Carbon cloth
Sample piece €	100x100 mm		20	30	40	35	200	200

*: data without woven, ** data with woven, *** standard loading 2.5 mg/cm² Pt on activated carbon, **** standard loading 2.5 mg/cm² Pt on Carbon black

Contact: Dr. Hans-Joachim Kohnke
Gaskatel GmbH
Holländische Str. 195
34127 Kassel

E-mail: kohnke@gaskatel.de
Phone: +49 561 59190