S+D METALS
A BIBUS GROUP COMPANY

ALLOYS FOR HYDROGEN APPLICATIONS

Hydrogen applications - bipolar plates

The functions of bipolar plates are removing heat, supplying mechanical strength to the stacks and distributing and separating oxygen and hydrogen. Stainless steel bipolar plates have desirable mechanical properties however are subject to corrosion and untreated stainless steels are not suitable for use in PEM fuel cells. Nickel and titanium metal bipolar plates have several benefits when used in fuel cells such as low gas permeability, good electrical and thermal conductivity, stability in low pH environments and corrosion resistance combined with good mechanical properties. They are also highly formable and well suited for mass production.

Titanium Grade 1

COIL	Gauge:	0,3 mm - 3,0 mm
	Width:	1000 mm | 1250 mm
	Availability:	ex stock

Titanium Grade 1+2

FOIL	Gauge:	75 µm to 0,3 mm (down to 50 µm on demand - depending on technical definition)
	Width:	max 450 mm
	Availability:	6 - 8 weeks after order receipt
	Service:	+ precision slitting + cut to length from coil | strip + full control and full traceability of material + full mill test certificate

Titanium Grade 2

PLATE	Gauge:	4 - 60 mm
	Width:	1000 x 2000 mm | 2000 x 6000 mm
	Availability:	ex stock
	Service:	+ waterjet cut to size (DXF, CAD) + standard, quality or fine cut + full control and full traceability of material + full mill test certificate

Pure Nickel 201

COIL	Gauge:	0,2 mm - 2,0 mm
	Width:	500 mm | 1000 mm | 1220 mm
	Availability:	ex stock

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