Metallic Interconnector Materials

Materials Mag!c
Hitachi Metals Group

ZMG™ 232L, ZMG™ 232G10

Now Available

Solid oxide fuel cell (SOFC) is a promising fuel cell with high efficiency operated at high temperatures in the range of about 650 to 900 degrees C.

■Good properties are required for the interconnector (separator) material of SOFC as follows;
(1)good electrical conductivity at operating temperature,
(2)good oxidation resistance at operating temperature for a long time,
(3)coefficient of thermal expansion close to electrolyte material YSZ (zirconia ceramics).

■There are some problem for conventional heat-resistant alloys as follows;
(1)430SS does not have sufficient oxidation resistance,
(2)austenitic alloys with good oxidation resistance(ex.Inco600) have much higher thermal expansion than YSZ,
(3)Al-containing ferritic alloys with better oxidation resistance than austenitic alloys have low electrical conductivity of oxide layer.

ZMG232L is a Fe-22%Cr ferritic alloy with a small addition of special elements for SOFC interconnector which is alloy-designed and developed to obtain these required properties at the same time. **ZMG232G10** has better oxidation resistance and better electrical conductivity and has lower Cr evaporation than those of ZMG232L.

Our Stock Delivery System : ZMG232L, ZMG232G10

Stock Products Dimension:

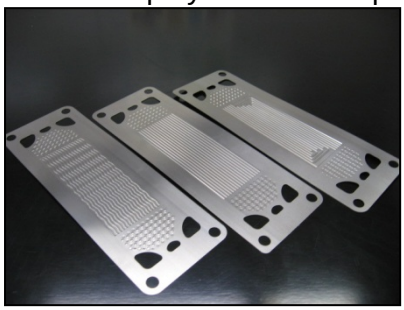
Thickness (mm)	Width (mm)	Length (mm)
0.1	300	600
0.3	300	600
0.5	300	600
1.0	300	600
2.0	300	600
3.0	300	600
10.0	300	1000
15.0	300	1000
25.0	300	1000

We, **Hitachi Metals , Ltd.,** as being your beneficial supplier, always keep ZMG232L, ZMG232G10 stock and Instant Delivery System mainly, for your “R&D”.

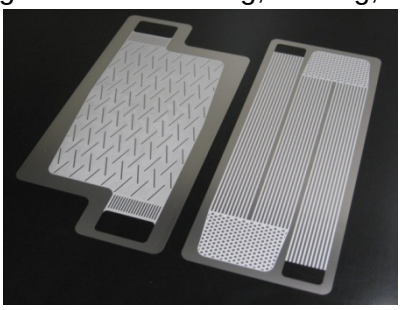
Concerning the dimension of our stock inventory might be changed without prior notice. As to the reason, we do sincerely ask you to get in touch with us and confirm our stock inventory in each case base.

Promotional Sales for Fuel Cell Related Material

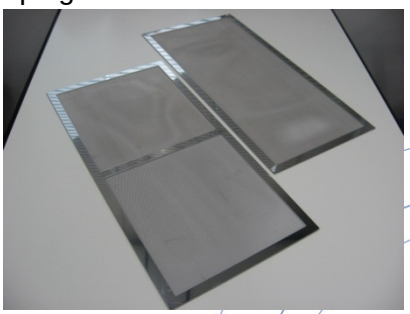
We can accept your material processing such as “Pressing, Etching, Mesh-shaping and Surface treatment”.



Sample 1 Pressing



Sample 2 Etching



Sample 3 Mesh-shaping

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