Crofer 22H & Nickel M_Grid™

Crofer 22H M_Grid™ is used to increase the cathode current collection in planar or tubular stack. A protective layer of MnCo2O4 or CuMn2O4 is applied in order to decrease the chromium evaporation and improve the electrical contact. With the latter, contact resistance less than 10 (mOhm*cm²) are obtained. Crofer 22H M_Grid™ can also be used as air diffuser welded on a Crofer plate.

Contact resistance at 822 (°C), lower than 10 (mOhm*cm²), is obtained with Crofer 22H and CuMn2O4 spinel as protective layer. Crofer 22H M_Grid™ coated with 5-10 µm of CuMn2O4 for interconnect improvement. M_Grid™ for tubular systems. The micro grid is generally waved for stacking bank of tubes.

! New Nickel M_Grid™ is used both in planar or tubular stack system to collect the current and also as gas diffuser. In this latter case, a calendered Nickel M_Grid™ is welded on a coarser micro grid to ensure fuel diffusion.

Cell-Connex™ for stack prototyping

Cell-Connex™ has been engineered for low pressure drop and optimal electrical contact.

The pattern structure of the Cell-Connex™ is very fine (<1 mm between each pin). It thus provides optimal current collection. Crofer 22 APU Cell-Connex™ contact resistance measured at 822 (°C) for a hundred of hours. With the CuMn2O4 spinel protective layer, the contact resistance is lower than 10 (mOhm*cm²).