

## **E-Fill 2758**

### Standard Gold Clad Nickel Powder

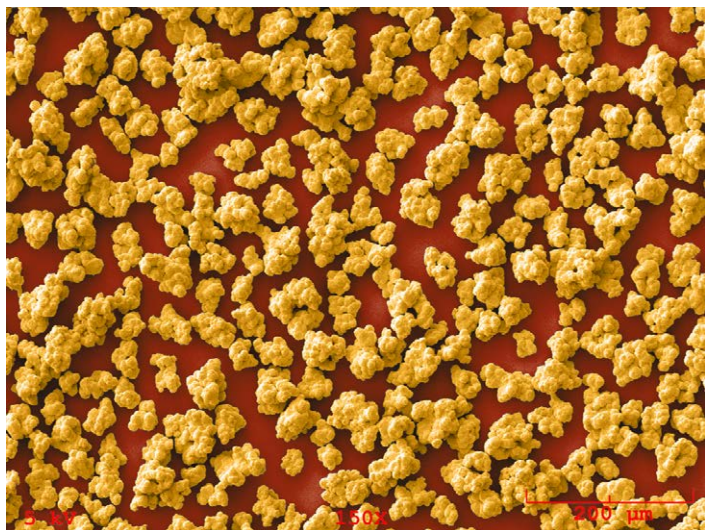
#### 1Au/99Ni 45µm

E-Fill™ composite materials offer significant cost savings over pure gold without reducing performance. A gold coating less than 0.1 µm thick is all that is required to increase the conductivity\* of a material by 10 million times. The gold has the additional benefit of environmental stability, since it does not oxidize.

Oerlikon Metco Canada's proprietary nickel coating process produces a ferromagnetic pure nickel coating. These properties are maintained through the gold coating process resulting in a coated composite material that can be magnetically manipulated to optimize the orientation and performance of the material.

The pure nickel substrate offers hardness, roughness and irregular shape that works well for conductive fillers in general.

E-Fill conductive fillers are excellent for any application that requires a stable highly conductive network. Uses include keypads, microphone holders, 'z-axis' connectors and specialty adhesives and inks.



SEM photomicrograph (color added digitally)

#### Additional Information

Specified Gold Content (wt. %)	0.8 to 1.2		
Microtrac Values – Typical (µm)	D10	D50	D90
	34	45	65 max.
Volume Resistivity (Ω·cm) *(dry powder)	< 0.001		
True Particle Density (gm/cm <sup>3</sup> )	~ 9.0		
Apparent Density – Hall (gm/cm <sup>3</sup> ) (ASTM B212)	~ 3.3 typical		
Standard Packaging	1 kg net in plastic jars		

\* based on internally developed measurement methods

Information is subject to change without prior notice.