Datum Data Sheet
Datum FG 304 Stainless Steel

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Datum FG (Fine Grain) The Best Material for the Best Stencil

Datums fine grain 304 material has been specifically developed for manufacturers to purchase the same grade material as the market standard PhD material with additional benefits of a finer grain structure. These benefits allow more complex and dense patterns to be cut in the stencil more accurately with no distortion.

- Grain size less than 5 microns (typically 2-3 micron)
- Stress relief annealed for increased flatness and reduced internal stress
- Tightest thickness tolerance in the market
- Produced to Datum's stringent flatness specifications
- Perfect for etching or laser cutting
- Used in production of step stencils with no distortion
- Ideal for high density or fine feature printing with area ratios down to 0.50

Typical Chemical Composition (%)

Chemical Composition %	FG 304
Carbon (C)	0.08
Manganese (Mn)	2.0
Silicon (Si)	1.0
Phosphorous (P)	0.045
Sulphur (S)	0.030
Chromium (Cr)	18.0 - 20.0
Nickel (Ni)	8.0 - 10.50
Iron (Fe)	Balance

Specifications

Gauges:

- 0.05mm up to 0.25mm available from stock (other thicknesses available on request)

Widths:

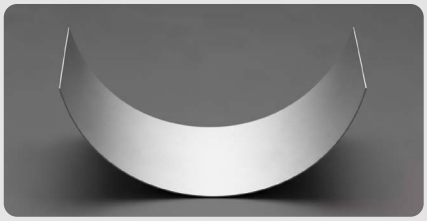
- up to 610mm

Formats:

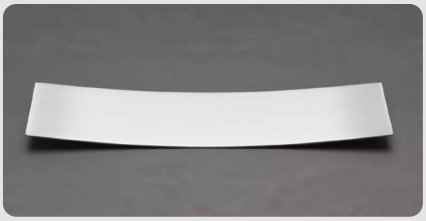
- Coils - 610mm wide
- Sheets – 610mm wide or below at any length
- Frames – mounted into any frame
- Border holes – cut as required

Application:

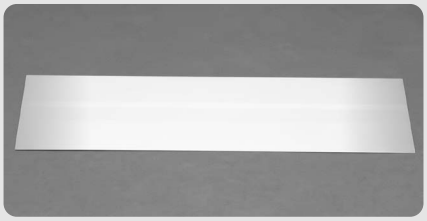
- Miniaturised or high- density assembly
- Area ratios <0.66
- Stepped stencil for: µBGA, CSP, QFN, BTC
- Solder Paste Type: 3,4,5,6



Standard Cold Rolled



Tension Annealed



Datum FG

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