

Datum Laser PhD

Datasheet



Overview

Datum Laser PhD is the industry standard for high end (PCB) printing applications in the electronics industry. It is ideally suited to the production of laser cut solder mask stencils for use in the PCB industry. Its low residual stress means minimal deformation in high density areas and ensures the stencil remains flat after processing. This greatly improves stencil registration and print accuracy.

The material is a proprietary precision rolled strip manufactured from 304 grade of stainless steel. The material is produced by cold rolling previously hot rolled coils of stainless. Hot rolled coils are produced according to the specification JIS G4304.

Datum Laser PhD undergoes a tension levelling and annealing process to produce an exceptionally flat product and to remove internal stress.

Chemical composition (%)

C	Si	Mn	P	S	Ni	Cr	Fe
≤0.08	≤1.00	≤2.00	≤0.045	≤0.033	8.00 - 10.50	18.00 - 20.00	BAL

Mechanical properties

Hardness (HV)	Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Surface Roughness (Ra μm)	Grain Size (μm)
≥370	≥1130	Reported	Reported	≤0.25	≤5

Gauges available

0.10 to 0.25mm, tolerance ±3%.

Sizes available

- Width up to 610mm ±1mm
- Any sheet lengths available ±1mm, or available in coils on a variety of core sizes

Inspection

All incoming material is inspected and confirmed to conform to the above criteria. All orders are visually inspected prior to despatch.