



# TECHNICAL DATA SHEET

Product: PCB-4  
Version: 2.3  
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## **CARDEL™ SEPARATOR PLATES – PCB-4**

Cardel™ PCB-4 plates are high quality lamination plates used in PCB manufacturing as separator plates.

The plates are available in a range of surface finishes and can be supplied as standard or with additional surface coatings that enable our customers to gain technical performance and lifetime benefits in their production operations either from lifetime extension or through reduction of contaminants on the plates after lamination.

Cardel offers a re-surfacing and / or re-coating service for all plates we produce in order to extend plates lifetime, reduce the cost of replacement and also reduce the environmental impact caused by replacement.

All plates are supplied with deburred edges and rounded corners to minimise any risk of operator handling injuries.

### **Properties**

Material	hardened and tempered stainless steel (1.4021 / AISI 420)
Hardness	48 – 52 HRC
Heat conductivity	30 W/m·K
Thermal expansion (CTE)	$11 \times 10^{-6} \text{ 1/K}$ (20°C-200°C)
Thickness	1 mm, 1.2mm, 1.6 mm (+/- 0.1mm). Other thicknesses available on request.
Size tolerance	+/- 0.5 mm
Squareness	+/- 1 mm per m
Parallelism	≤ 0.05 mm
Flatness	3 mm/m
Surface finish options:	<ul style="list-style-type: none"><li>- #4 (Ra ≤0.25µm; Rz ≤2.4µm)</li><li>- #5 (Ra ≤0.14µm; Rz ≤1.5µm)</li><li>- #6 (Ra ≤0.12µm; Rz ≤1.2µm)</li><li>- custom finishes available on request</li></ul>
Optional extras:	<ul style="list-style-type: none"><li>- holes / slots / chamfered corners</li><li>- Diaplus – extra hard (&gt;900HV) anti-scratch surface coating (gloss only)</li></ul>

### **Packaging**

Plate protection	residue free self-adhesive low tack film on both sides
Shipping	high quality durable export boxes with screwed lid and front

### **Safety / Regulatory approvals**

There are no hazards associated with the normal use of Cardel™ lamination plates, therefore our products **do not require safety data sheets**. For the most up-to-date information and technical data sheets please visit [www.cardel.co.uk](http://www.cardel.co.uk)

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