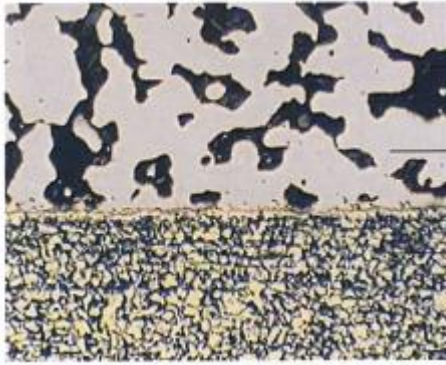


Metal Backed FeNi Powder With Solid Lubricants-CWX

STRUCTURE



Solid lubricants
固體潤滑劑

Fe-Ni alloy
with graphite
鐵鎳合金

Steel backing
碳鋼基板

Fig. 15



CWX is a composite multi-layer bearing composed of a special sintered material which forms the sliding surface and steel material forms the backing. Sintered layers are of a special ferrous-nickel alloy containing uniformly dispersed solid lubricant, the main component of which is graphite. The solid lubricant will be released at the bearing surface and easily form a firmly adhesive solid lubricant film as wear occurs. In addition, the sintered layers have been processed by oil impregnation treatment this ensures a lower dynamic coefficient of friction as well as static which obtains smoothly sliding property. While the steel backing provides a high mechanical strength and dimensional stability.

APPLICATION CHARACTERISTICS

- 1 · Allows maintenance-free and long-life operation.
- 2 · Suitable for high static and dynamic loads.
- 3 · With low and smoothly coefficient of friction and without stick-slip effects.
- 4 · Suitable for dirt, corrosion, impact load and edge loading.
- 5 · Has good conductivity and thermal conductivity properties.
- 6 · Can be used over a large temperature range.
- 7 · Suitable for reciprocating, rotating and oscillating movement with start frequency and difficulty to form oil film occasions.
- 8 · With low wear rate and long life service.

Max. load	Static	100N/mm ²	Temp.	-40°C~+120°C
	Dynamic	50N/mm ²	Coefficient of friction μ	0.03~0.20
Max speed	Dry	0.5m/s	Alloy hardness	> 45HB
	Lubrication	> 1m/s	Coefficient of thermal expansion	14×10 ⁻⁶ ×K ⁻¹
Max. PV	Dry	1.5N/mm ² *m/s	Oil volume	> 10%
	Lubrication	2.5N/mm ² *m/s		