Ideal for semiconductor-related products that need to avoid thermal effects!

Low Thermal Expansion Materials

LEX-SF1 Cut Plate (Equivalent to Super Invar)

Low carbon, low thermal expansion material

The average thermal expansion coefficient×10-6/°C(10-40°C) is **0.8 or less**

Material properties (example) *Reference

Average thermal expansion coefficient xppm/°C (10-40°C)	≦0.8
Applicable lower limit temperature (°C)	-50
0.2% yield strength (N/mm²)	227
Tensile strength (N/mm²)	372
Elongation (%)	30
Hardness (HB)	133
Young's modulus (GPa)	128
Thermal conductivity W/(m·k)	13.1

Stock Item Size

Thickness (mm)	New material dimensions Width x Length (mm)	Thickness tolerance Our standard (mm)
10-60	500×520	0-+5
150	500×free	–

●Applications
Semiconductor manufacturing equipment, optical parts, etc.

●Features
Super invar (equivalent), extremelylow thermal expansion

LEX15 Cut Plate (Equivalent to Invar)

High carbon, low thermal expansion material

The average thermal expansion coefficient x 10-6/°C (10-40°C) is **1.0 to 2.0** [representative value], and the applicable lower limit temperature is -196°C.

Material properties (example) *Reference

Average thermal expansion coefficient xppm/°C (10-40°C)	1.0-2.0
Applicable lower limit temperature (°C)	-196
0.2% yield strength (N/mm²)	260
Tensile strength (N/mm²)	440
Elongation (%)	15
Hardness (HB)	135
Young's modulus (GPa)	130
Thermal conductivity W/(m·k)	14.0

Stock Item Size

Thickness (mm)	New material dimensions Width x Length (mm)	Thickness tolerance Our standard (mm)
10-60	500×520	0-+5
150	500×free	–

●Applications
Semiconductor manufacturing equipment, etc.

●Features
Invar (equivalent), low thermal expansion

Providing the foundation for creation.

Hakudo

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