SHAANXI BOGAO NEW MATERIAL TECHONOLGY Co., LTD

Magnetic and mechanical properties of Expansion alloys

Material		4J9	4J32	4J36	4J29	4J33	4J34	4J42	4J50	4J6	4J49
Main Components		FeCoCr			FeNiCo			FeNi		FeNiCr	
Forms of Supply	Wire	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
	Strip		◎	◎	◎	◎	◎	◎	◎	◎	◎
	Plate	◎	◎	◎	◎	◎	◎	◎	◎		
	Bar	◎	◎	◎	◎	◎	◎	◎	◎		
Expansion coefficient x 10-6	$\alpha_{20\sim100℃}$	≤0.8	≤1.0	≤1.5							
	$\alpha_{20\sim200℃}$										
	$\alpha_{20\sim300℃}$							4.0~5.0	9.2~10.0	7.6~8.3	8.6~9.3
	$\alpha_{20\sim400℃}$				4.6~5.2	6.0~6.8	6.3~7.1		9.2~9.9	9.5~10.2	9.4~10.1
	$\alpha_{20\sim450℃}$				5.1~5.5			6.5~7.5			
	$\alpha_{20\sim500℃}$					6.6~7.4					
	$\alpha_{20\sim600℃}$						7.8~8.5				
Density （g/cm3）			8.1	8.1	8.25	8.3	8.3	8.1	8.2	8.15	8.18
Curie Temp. （℃）			220	230	430	440	470	360	500	270	340
Saturation Magnetostrictive Coefficient （10-6）											
Resistivity （uΩ・m）		0.64	0.77	0.78	0.48	0.45	0.45	0.61	0.44	0.92	0.90
Vickers Hardness HV	cold							240			
	annealed		150	140		158		135		128	130
Tensile strength MPa	cold							> 820		> 820	
	annealed	830	470	450	520	540	540	490	550	500	550
Yield strength MPa	cold										
	annealed	390	310	270	330	340	340	230	270	177	206
Elongation %	cold										
	annealed	45	25	35	30	32	32	35	35	33	33

ADD：NO.158 Hancheng North Road Xi'an City China　TEL：+86+29+84621375　FAX：+86+29+83170510

URL：http://www.bogaomat.com　E--mail:　sale@bogaomat.com