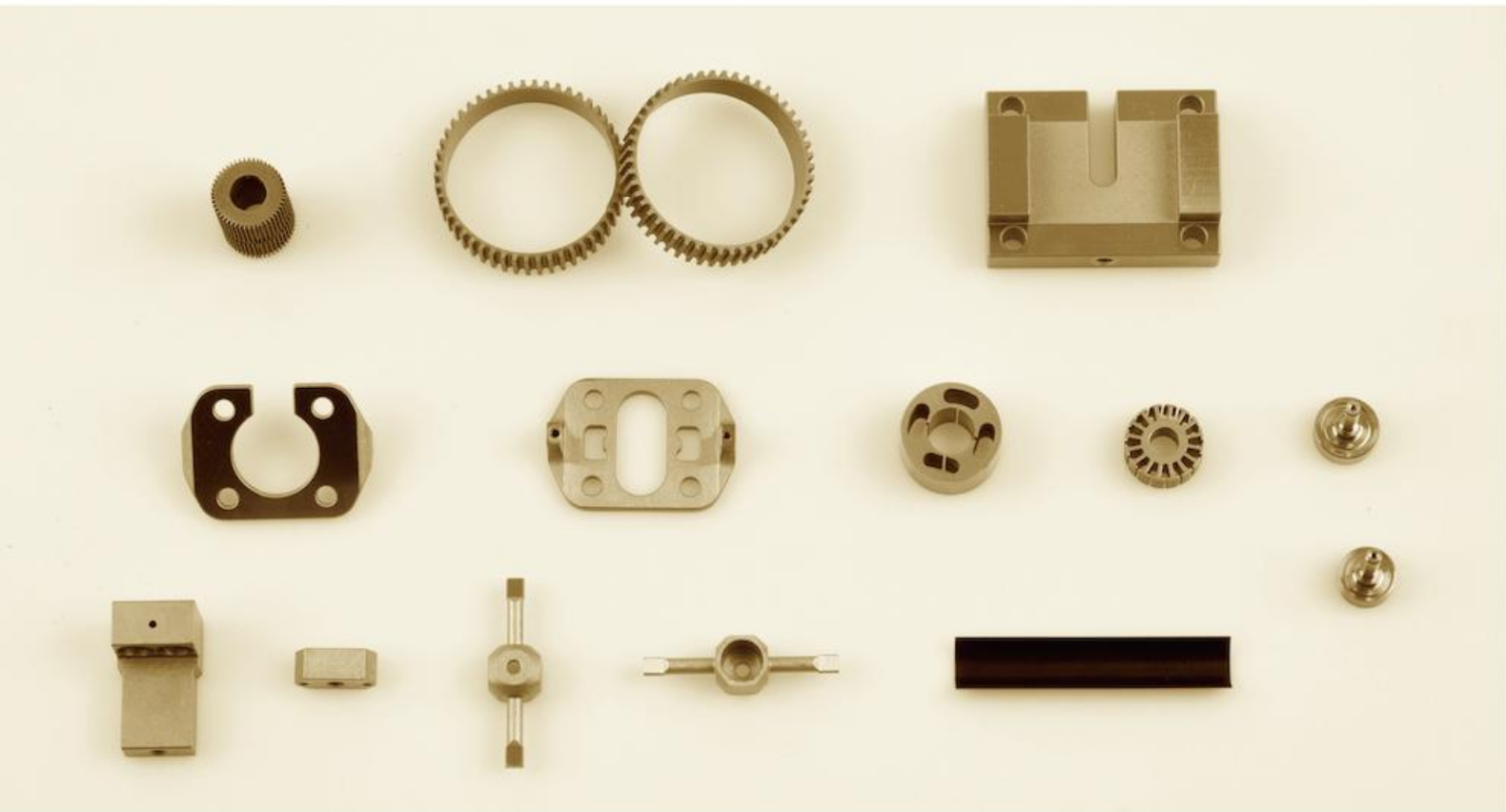


Soft Magnetic Materials

FeNi/FeCoV Alloy

A magnetic material is considered "soft" when its resistance to demagnetization less than or equal to the earth's magnetic field (about 40A/m). A soft magnetic material can be employed as an efficient enhancer of the working flux in a large variety of devices including: transformers, generators, motors, and power distribution equipment. FeNi & FeCoV alloys are utilized in and a wide array of apparatus, from household appliances to scientific equipment.



Materials of Soft Magnetic Materials

FeCoV Soft Magnetic Alloy	Grade		Level	Magnetic induction					Coercive force		
				B400	B800	B1600	B2400	B4000	B8000	Hc	
	1J21		I	1.8	2	2.1	2.3	2.4	–	80	
	1J22		–	1.6	1.8	2	2.1	2.2	2.2	128	
FeCoV Magnetic Hysteresis Alloy	Grade	Intermediate species	Level	B(m)±1.23T		B(m)±1.36T		B(m)±1.42T			
				Hm	Pro (10 ⁶ erg/ cm ³ Hz)	Hm	Pro (10 ⁶ erg/ cm ³ Hz)	Hm	Pro (10 ⁶ erg/cm ³ Hz)		
				I	≤4400	≥1.44	≤4800	≥1.65	≤5200	≥1.85	
	2J4	Cold rolled strip	II	5174A/m			9552A/m				
				Br (T)	Hc (A/m)	Pro (10 ⁶ erg/ cm ³ Hz)	Br (T)	Hc (A/m)	Pro (10 ⁶ erg/cm ³ Hz)		
				≥1.1	≥3582	≥1.8	≥1.1	≥3582	≥2.6		
FeNi Soft Magnetic Alloy	Grade	Intermediate species	Level	Thickness/Diameter (mm)	U _{0.4}		Hc	Bs			
					mH/m(Min)				A/m(Max)	T(Min)	
	1J50	Cold rolled strip	II	0.10-0.19	3.8	43.8	12	1.5			
				0.20-0.34	4.4	56.3	10.4				
				0.35-0.50	5	65	8.8				
				0.51-1.00	5	50	10				
	1J85	Cold rolled strip	I	1.10-2.50	3.8	44	12	0.7			
				0.20-0.34	50	225	1.2				
0.35-1.00				62.5	312.5	0.8					
1.10-2.50				50	187.5	1.2					
				2.51-3.00	43.8	150	1.4				
Anti- corrosion Soft Magnetic Alloy	Magnetic induction					Remanence induction			Um	Hc	
	Grade	B240	B400	B800	B2400	B3200	Br240	Br2400	Br3200	mH/m(Min)	A/m(Max)
	T(Min)					T(Max)					
	1J117	0.9	–	1	–	1.25	–	–	–	–	80
Cr17NiTi	–	0.9	1	1.2	–	–	0.95	–	3.75	80	