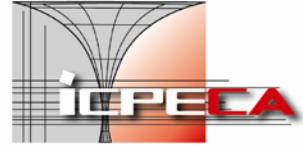




Nr. Registrul Comerțului  
J40/3800/2001  
Cod Fiscal RO 13827850  
Capital Social: 381.108 Lei  
Trezorerie M.B.:  
RO24TREZ7005069XXX002740

Cont : ROL  
RO52RNCB0076029424690001  
BCR SMB  
Splaiul Unirii no. 313, sector 3  
Bucharest, 030138, Romania

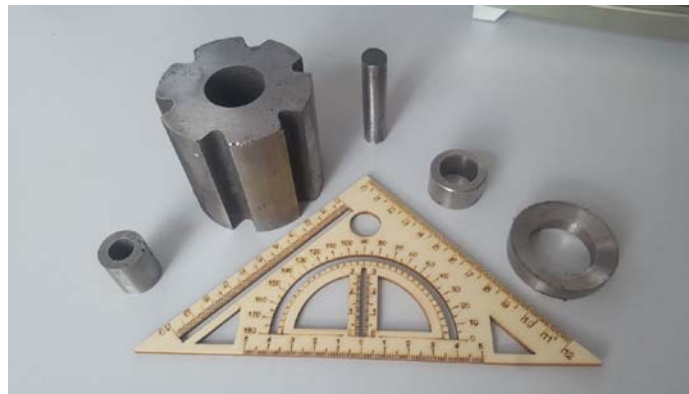
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## AINiCo PERMANENT MAGNETS

**Description:** permanent magnets composed mainly of aluminum, nickel, cobalt and iron mixtures, but may also contain other elements: copper, titanium, niobium.

ICPE-CA can manufacture AINiCo permanent magnets both in isotropic and anisotropic types. The isotropic magnets can be magnetized in any direction, while AINiCo anisotropic magnets can be magnetized in one predefined direction and shows higher magnetic performance.



### Magnetical and physical properties:

Specific properties	Anisotropic magnets	Isotropic magnets	
Remanent induction $B_r$ (T)	0.70 - 1.22	0.50 - 0.65	0.29 - 0.31
Coercive force $H_{cB}$ (kA/m)	40 - 105	37 - 86	79 - 87
Maximum specific energy $(BH)_{max}$ (kJ/m <sup>3</sup> )	13 - 56	8 - 18	7 - 9
Temperature coefficient for $B_r \propto (B_r)$ %/K	-0.02	-0.02	-0.02
Temperature coefficient for $H_{cJ} \propto (H_{cJ})$ %/K	+0.03...-0.07	+0.03...-0.07	+0.03...-0.07
Density $\rho$ (g/cm <sup>3</sup> )	7.1 - 7.3	6.7 - 7.2	5.5
Maximum operating temperature $T_{max}$ (°C)	500	500	80
Manufacturing methods	moulded		bonded

**Shape, size:** complex geometries.

### Advantages

- high thermal stability;
- good mechanical strength.

**Applications:** electrical machines, transducers, different gripping devices, couplings, sensors, bearings, military and aerospace applications etc.