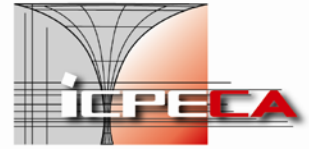




Nr. Registrul Comerțului  
J40/3800/2001  
Cod Fiscal RO 13827850  
Capital Social: 381.108 Lei  
Trezorerie M.B.:  
RO24TREZ7005069XX002740

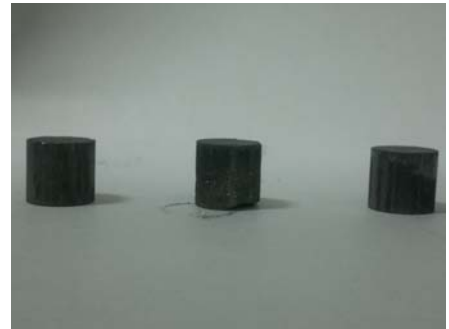
Cont : ROL  
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## RARE EARTH BASED NANOCOMPOSITE MAGNETS, ISOTROPIC MAGNETIC

**Description:** biphasic nanocomposite materials consisting of a phase with high magnetic anisotropy (so-called hard magnetic phase) and a phase with reduced magnetic anisotropy (so-called soft magnetic phase), between phases occurring exchange interaction phenomena and hardening of the soft magnetic phase. The global interaction effect is a smaller magnetic anisotropy of the resulting nanocomposite, simultaneously with increasing its saturation magnetization  $M_s$ , therefore its remanent magnetisation  $M_r$ .

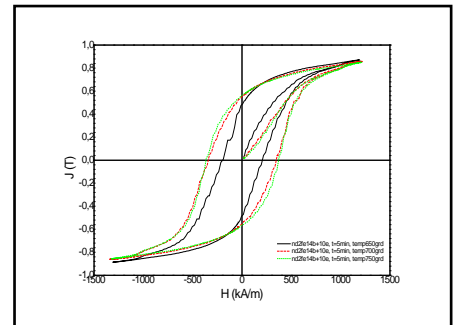


### Characteristics:

- ◆ remanence induction:  $B_r > 0.7$  T
- ◆ coercivity:  $H_{cJ} > 500$  kA/m;
- ◆  $M_r/M_s$  ratio:  $> 0.58$

### Advantages:

- ◆ lower content of rare earth, therefore a high corrosion resistance as compared to rare earth based magnets, sintered or bonded;
- ◆ lower production cost;
- ◆ high magnetic performance;
- ◆ good mechanical resistance.



### Applications:

- ◆ electrical machines and special transducers;
- ◆ magnetic circuits.