

**INFLUENCE OF MILLING AND COMPACTION PROCESSES  
ON MAGNETIC PROPERTIES OF FeCo POWDER**

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Magnetic and structural studies were performed on Fe<sub>50</sub>Co<sub>50</sub> material. The samples (disk-shaped, diameter: 10 mm, thickness: 2.5 mm) were fabricated by compaction of powder under pressure of 800 MPa for 5 minutes at 500°C. The powder was obtained by milling of Fe<sub>50</sub>Co<sub>50</sub> alloy swarf in high-energy planetary RETSCH PM4000 mill (ball to powder mass ratio: 6:1, rate per minute: 180). The milling time varied from 1 hour to 40 hours. In course of milling process the mean size of alloy pieces was decreasing from about 0.5 mm to 0.05 mm (SEM), what provided more compact structure after compression. Coercive field is minimal (1200 A/m) in the case of 10 hour milling time. Parameters of CEMS Mössbauer spectra are almost the same for all samples, what points to not significant changes of internal magnetic structure after milling and compacting.

←————— 13.4 cm —————→

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9.7 cm