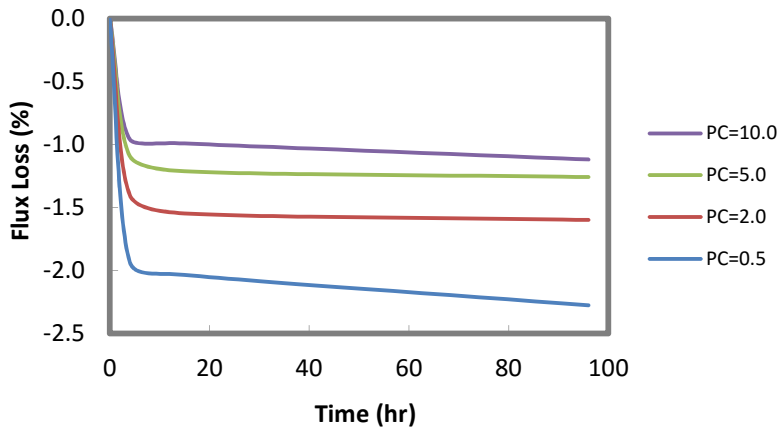


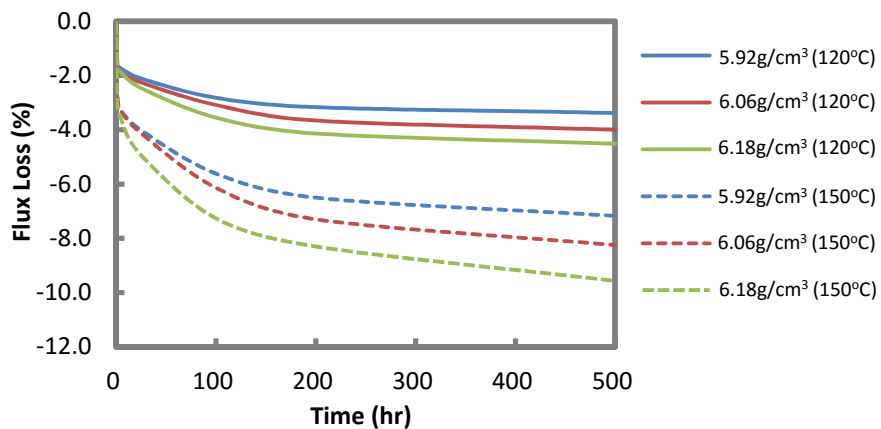
FACTORS AFFECTING MAGNET AGING

Permeance coefficient (PC) value of magnet



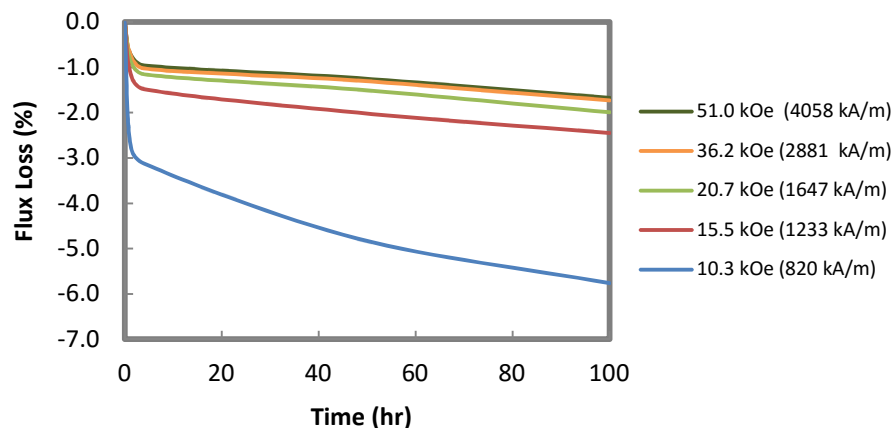
- Magnets with higher PC values have either same diameter with longer length or same length with smaller diameter.
- Magnets with higher PC values have better self demagnetization characteristics and hence lower aging loss.

Density of magnet



- To achieve higher density, magnets are pressed with higher tonnage. This causes additional powder fracturing which creates fresh surfaces.
- Exposed fresh surfaces lead to higher aging loss.

Saturation of magnet



- Insufficient saturation of the magnet results in
 - Reduced squareness of hysteresis loop
 - Lower H_{ci}
- Reduced squareness and lower H_{ci} leads to higher aging loss.