

Surface Compression System



- **System Description:**

Two rings with slots for windings were manufactured to apply the uniform stress to the surface of ring samples. A bench press with a load of maximum 50 tons will be used to apply stress to this setup. The primary winding wound around the 14 big slots and the secondary in 4 small drilled holes are wound for field generation and loss measurement.

- **Magnetization Conditions**

- Sinusoidal flux density
Frequency range: 10 Hz - 20 kHz
Peak of flux density up to 2.3 T
- PWM
Switching frequency of 100 kHz
- High Harmonics and Free Curves

- **Mechanical Conditions**

- Applied stress
Surface compression: 350 MPa

- **Sample Type:**

- Silicon iron electrical steel with thickness of 0.2 - 0.5 mm
- Sample size: OD=120mm and ID=100mm

