

AEB-1 - Barkhausen effect analyser



The unit provides a comprehensive analysis of Barkhausen effect (BE) voltage signal properties. The user can choose the frequency and amplitude of magnetising current, the amplification and frequency band of BE voltage signal analyser. The threshold of BE pulses counter is equally adjustable. Envelopes of BE effective voltage, count rate of BE pulses and magnetising control voltage are store in function of time and hysteresis loop of these quantities are shown on the screen. The user can store a selected part of BE voltage signal so as

to analyse its frequency spectrum. Residual biaxial stress level components are calculated by unit from two measurements of BE intensity using stored biaxial stress calibration function . The unit allows characterization of steel microstructure change and calculates components of residual biaxial stress