METROLOGICAL SUPPORT MEANS OF MEASUREMENTS OF Q FACTOR AND INDUCTIVITY

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The article discusses the metrological support of enterprises with reference instruments for measuring the quality factor and inductance, which is very important for our country. The production of these measuring instruments (measures) and the approval of their type is currently an effective solution to this problem. Considered technical devices developed by the West Siberian branch of FSUE "VNIIFTRI", which act as a standard designed to reproduce a number of inductance and Q-factor values in the frequency range from 0.1 to 1000 kHz. The proposed range of frequencies for the developed measures is much higher than that of other tools designed to measure Q-factor and inductance. The reference means under consideration are included in the scope of government regulation. A comparative analysis of their characteristics with the characteristics known technical devices for this type of measurement is carried out. The results of tests are given, which showed that the frequency applicability of the LQ-2408-3 measure is significantly higher than the previously released measures P596 and 1482 and corresponds to the working standards of the 1st category in accordance with the verification circuit for inductance and Q-factor.

Keywords: quality factor, inductance, measuring instruments, measure, standard, calibration, measurement, metrological support

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