Judging Lubricating Oil Degradation Based on Insulation Resistance

Degradation of lubricating oil used with machine tools and other equipment is judged by measuring its insulation resistance.

About 25 ml of new machine tool lubricating oil is placed in an SME-8330 liquid sample electrode, and the SME-8330's connection cable is connected to the Super Megaohm Meter SM-8220. The measurement voltage is set to a value of up to 1000 V. Since the insulation resistance of the oil varies initially during measurement, the measured value is read after setting the timer to count down a fixed interval (for example, 1 min.). Next, the SME-8330 is emptied and loaded with used lubricating oil, which is measured in the same manner as the new oil.



Products used

ULTRA MEGOHMMETER SM-8220

LIQUID SAMPLE ELECTRODE SME-8330