SORBI INSTRUMENTS

Description
SORBI is a line of modern automated instruments manufactured by the META company (Novosibirsk) under a license by the Institute of Catalysis, Siberian Branch of the Russian Academy of Sciences. The instruments are intended for single-point and multipoint BET measurements of the specific surface area of dispersed and porous materials using the thermal desorption of argon (SORBI A.1.1 single-point instrument) and nitrogen (SORBI N.1.1 single-point instrument and SORBI N.4.1 four-point instrument).

Technical specifications
| Amount of adsorbers in an instrument [piece] | 1 |
| Range of measured specific surfaces [m²/g] | 2-600 |
| Relative measurement error [%] | ± 6 |

Technical appraisal and economic benefits
• provision of highly reliable data due to automation of the entire measurement run and the possibility of multiple measurements of adsorbed gas volumes;
• display of the adsorption-desorption dynamics on the monitor screen, which considerably simplifies the development of a measuring procedure for a particular type of dispersed or porous material;
• the original adsorber design allows all operations of measuring gas volumes to be performed automatically;
• incorporation of a system for automatic preparation and proportioning of gas mixtures;
• ultrastable detector in terms of thermal conductivity;
• full automation of measurements;
• original software;
• the instrument is supplied with state reference standards of specific surface areas for rapid and reliable check and calibration;
• the instrument incorporates a SorbiPrep station for sample preparation.

Application areas
Measurements of the specific surface area of dispersed and porous materials by the method of thermal desorption of argon or nitrogen according to a number of standards (GOST, ISO, ASTM).

**Development stage**
Small-batch production of the instruments was launched in Novosibirsk. The SORBI instruments were certificated and included under №18930-99 in the State Register of Measuring Instruments of the Russian Federation (RU.C.31.007.A №7014 certificate).

**Patent situation**

**Commercial offers**
Sale of licenses; joint production.
Instrument supply.

**Estimated cost**
The license price is to be negotiated.
The instrument price is specified by the producer.

**Contacts**
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