KRK KUMAGAI RIKI KOGYO

PPS Tester (Print-Surf Tester)

Model No. 2039

Paper smoothness, one of the most important printing characteristics, has since long been measured with the Oken procedure, Sheffield procedure, Bendtsen tester, Gurley SPS tester or the like, depend upon air permeability and change in air inner pressure. However, these procedures resorting to physical properties involve difficulty in evaluating printing aptitude of paper. Parker Print-Surf (P.P.S.), a 1965's development by John Parker M.A. in the U.K., was highly appreciated by many researchers, to test the aptitude of paper for gravure printing. In 1985, this procedure was adopted as an English standard (BS) and in 1992 as an ISO standard.

The principle is as follows: an extremely thin measurement ring is pressed over the surface of a specimen with a certain level of pressure, and air of stable low pressure is fed from the inside of the ring. The air leaks out from the surface at the extremity where the measurement ring and the paper contact each other. The leak air volume varies with the roughness of a paper sheet, and the amount of leaked air volume is represented as an indicator of paper surface roughness in micron meters.

Specifications

Measurement Items:	smoothness, compression
Measurement Range:	smoothness 0.6 to 6.0 µm
Measurement Time:	smoothness 4 seconds in standard (able to be set in the range of 3 to 60 seconds)
Width of the Measurement Ring:	51 µm
Diameter of the Measurement Ring Center:	31.2mm
Air Gap Width:	51 µm
Measurement Air Pressure:	smoothness 19.6kPa
Clamp Pressure:	490, 980, 1960kPa (5, 10, 20kgf/cm^2)
Backing:	soft and hard
Calculation Items:	maximum and minimum values, average, standard deviation, variance coefficient, specific compression
Data Output:	RS-232C
Referential Standards:	JIS P-8151, ISO 8791-4:1992, BS 6563:1985, TAPPI T555-om99
Power Source:	100/110VAC 50/60Hz 2A
Air Source:	0.5 MPa
Outer Dimensions:	340 x 550 x 500mm
Instrument Weight:	42kg