Why measure roughness?
Good print quality and color reproduction requires a smooth surface. Depending on what print method is used, the requirement for surface roughness differs. The surface roughness will also affect how different surface treatments, such as lamination, perform on a specific paper. The surface characteristics of a sheet of paper or board are dependent not only upon the forming, coating and finishing processes, but also on many of the fundamental fiber properties.

Measurement results
L&W Autoline Bendtsen Roughness uses the same measuring technology as ABB’s L&W Bendtsen Tester, enabling you to achieve the same high-precision results faster. The module combines rapid routine measurement with compliance to ISO 8791-2 standards. The automatic and precise alignment of the measuring head on the upper side or both sides of the sample ensures correct and reliable results. Both traditional Bendtsen and pressure drop compensated Bendtsen values are presented.

Features
- Based on the proven L&W Bendtsen Tester
- Barometric pressure compensation
- Mechanism from lower side for precise parallelism
- Simultaneous measurements from upper and lower side
- Conforms to industry standards

Benefits
- No correlation needed
- Reliable and reproducible measurements
- Independent of errors from formation variances
- Fast test sequence
- High accuracy

A smooth surface is needed to ensure good printability. The Bendtsen method is well-known for measuring surface roughness, particularly on rougher grades. L&W Autoline Bendtsen Roughness automates the measurement of surface roughness of paper and board according to the Bendtsen method for precise results.
Definition:
Bendtsen surface roughness is calculated from the airflow in the contact surface between a flat, circular measurement land and a paper or board test piece.

The test piece is held securely between a glass disc and a circular measurement land. Air is passed through the space between the circular measurement land to the contact land between the measurement land and the test piece. The airflow, measured in ml/min, is a measure of the test piece’s surface roughness.