

AT 500



The abrasion tester **AT 500** delivers qualitative information about the abrasive properties of fibers and yarns by a unique measurement process.

Many parameters like yarn twist, yarn count, wax levels are reasons for unintended abrasion.

The **AT 500** testing instrument for the continuous measurement of abrasion along the length of the yarn offers quick and qualitative information and requires only a small amount of yarn.

It offers stable and standardized conditions of measurements atline and just within a few minutes.

The abrasive characteristics of a product, respectively the positive, abrasion-reducing properties of a spin finish oil can be exactly quantified.

The abrasion tester is suitable for many purposes:

- analyzing the influence of the concentration and composition of finishes, dyes delustring, agents, polymer additives.
- isolating the effects of individual substances in spin finish oil
- examining the effects of the sectional form of fibers and their titers
- production control
- investigating the causes of abrasive properties of fibers and yarns
- preventive identification of yarns, which cause abrasion, prior to further processing
- quick, clear analysis of the potential for abrasion
- determining the anticipated needle service lives

Description

The **AT 500** abrasion testing instrument for the examination of coefficients of friction is the result of continuous and consistent product improvement through conscious feedback from the market.

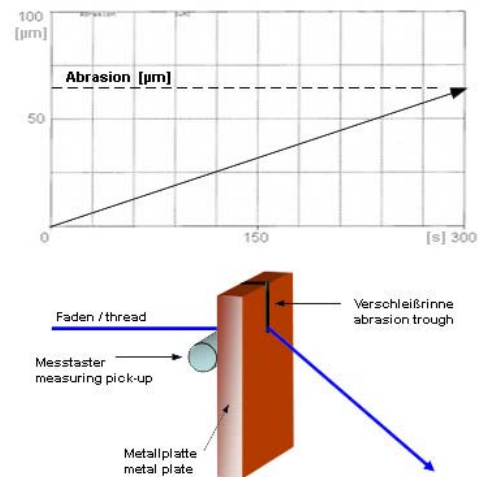
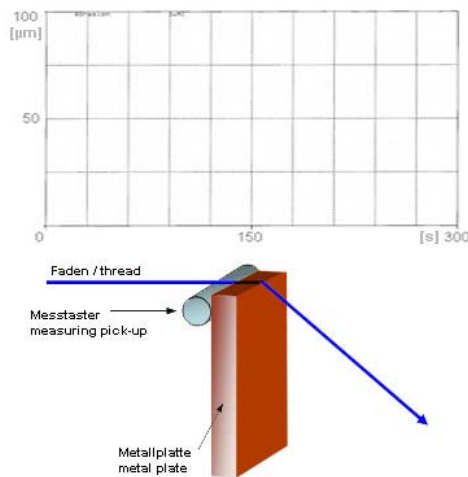
It represents a flexible system which permits effective use with respect to the particular measurement tasks and offers the basis for easily adaptable extensions.

The software, used in combination with the abrasion tester AT 500, provides precision measurement of the abrasion characteristics of fibers and yarns.

Running on the Windows operating system platform the software offers complete, high-level functionality for

- online measurement data acquisition and evaluation,
- automatic documentation and output of the results.

The concept behind the overall system is consistently targeted on working to the specific testing standards and quality standards (e.g. DIN/ISO 900x). When recording the individual measurements not only the final results will be stored but all the peripheral parameters, as well, such as the F1 tensile force, abrasion, take-off speed, measurement period, date, operator identification, temperature, relative humidity etc.



The measured data are captured at a sampling rate of 200 measurements per second, at resolution of 16 bits.

Shown in parallel, during the measurement, are the set-point values and

- the actual value for tensile force F1
- the abrasion value calculated online
- the actual values of the following parameters
- information on the momentary software operation status

All the measured values are stored as the original values, without data compression, together with the associated measurement parameters, the comments and the statistical values. This makes it possible to call these data once again, whenever it may be required, and to carry out further assessments – in accordance with the state of the art valid at any given date. In addition, this makes for simple reconstruction of the measurements at any time.

Technical data and pictures are subject to change!