

# armstrong optical

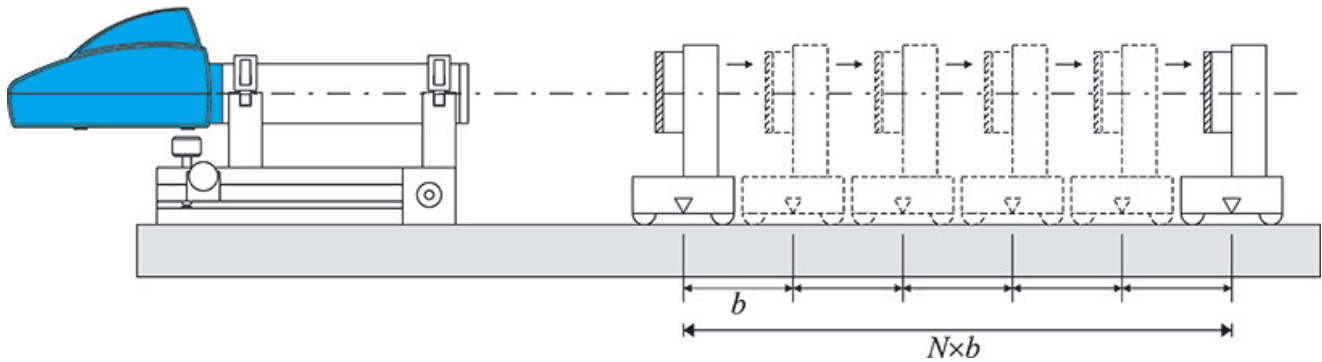
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## TriAngle Application: Straightness Measurement

The straightness measurement is the daily practice of manufacturers of linear stages, guides and rails whether in precision mechanics or machine tools. The travel of a moving carriage is investigated regarding angular motion errors square to the direction of movement, called yaw, pitch and roll errors.

A reference mirror mounted to the carriage is moved with a constant step length  $b$  along the stage or rail to be measured. For each step the angular output  $a_i$  of TriAngle® autocollimator is recorded. The software displays the angular measurement data as well as the straightness deviation  $\delta$  in  $\mu\text{m}$  units. Motor driver software modules for standard DC- and stepper motors are included which makes the measurement of motorized stages very convenient.



Straightness measurement with TriAngle®