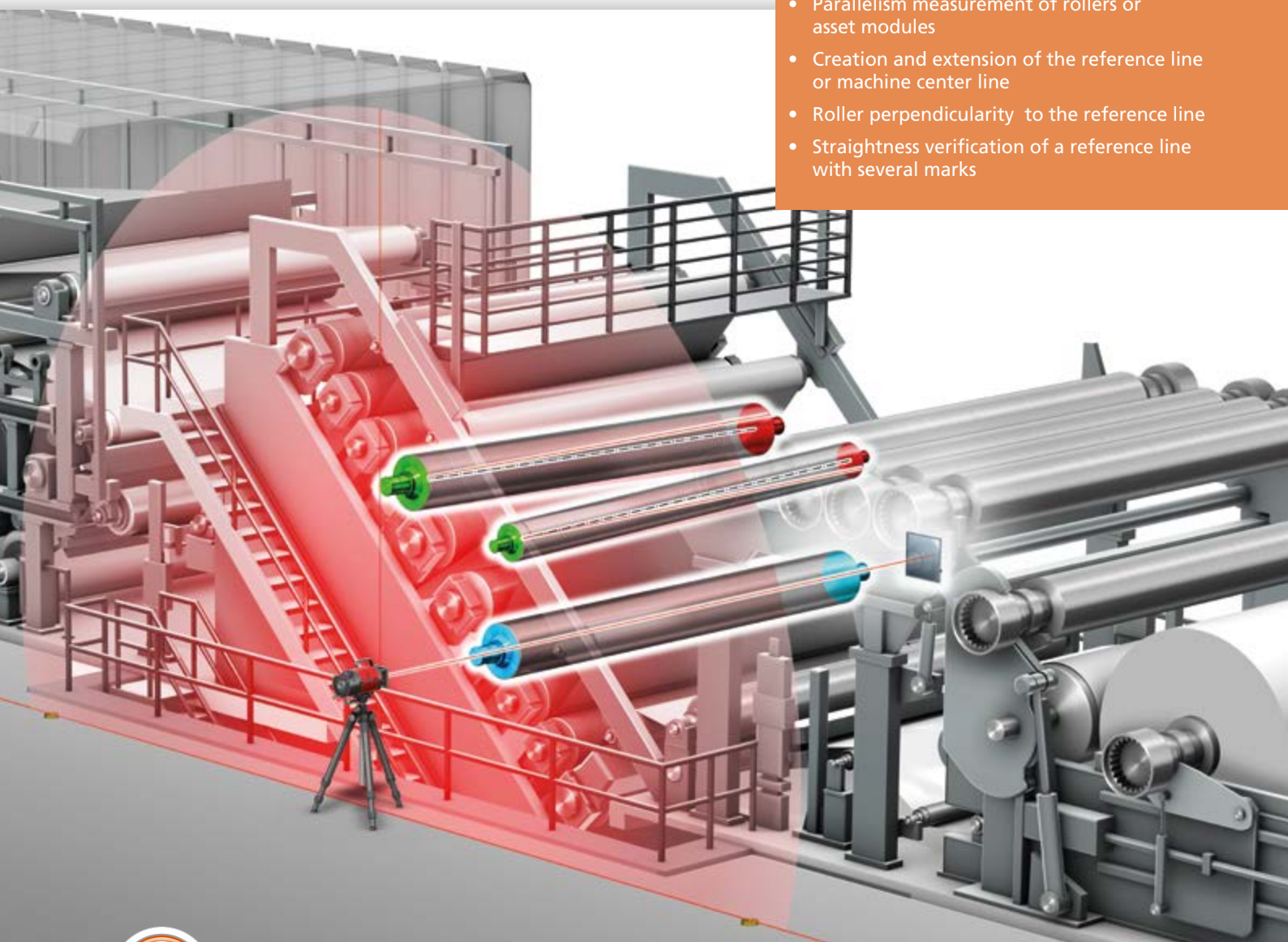


PRUFTECHNIK Service Center

Laser-based Scribed Line Measurement and Reference Definition

- Parallelism measurement of rollers or asset modules
- Creation and extension of the reference line or machine center line
- Roller perpendicularity to the reference line
- Straightness verification of a reference line with several marks



How is a web-conveying asset installed?

A straight machine center line is drawn and the asset component installed on this line. Next, this line is extended in parallel from the asset and marked with points for possible conversions later on.

But, how straight is this line made of several points that may have changed after several operating years due to foundation and machine movements? Does this reference line actually still represent the actual reference in the asset? And above all are the rollers perpendicular to the reference axis? The experts of the Pruftechnik Service Center can answer that.



Measurement in a paper machine

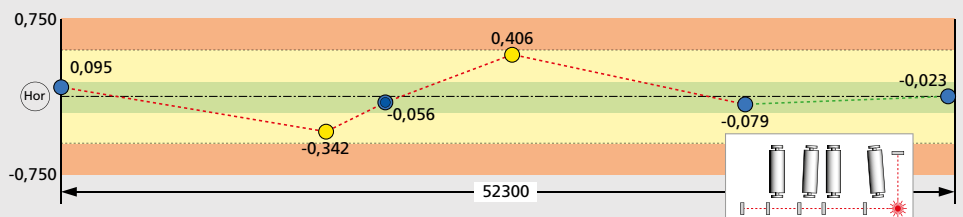


Placing a PRUFTECHNIK reference mark

SERVICE 1

Checking the straightness of existing reference marks

A precise, self-leveling rotating laser is used for straightness and perpendicularity measurements. The figure below shows the result of a straightness measurement of a reference line. It is clear that the line is not straight. To assess the usability of individual points, the angle deviations of individual segments can be illustrated using defined tolerance limits. In this case, the scribed line is best represented using a best-fit line.



Result of a straightness measurement

SERVICE 2

Measuring a roller relative to the line

Starting from this line, the vertical, self-leveling beam of the rotation laser was used to record the position of a roller to this line. If the result of this measurement is implemented in the known PARALIGN® report, the positions of all rollers measured with PARALIGN® relative to the reference axis and the horizontal are obtained.

ADDITIONAL SERVICES

Creation, extension, and parallel shift of a reference line or machine center line

Would you like to extend an existing line or route a new line vertically to a roller or in parallel to the existing line? No problem! The rotation laser has a default range of up to 200 m. Once calibrated to the existing points or a roller, the rotating beam can be used for placing new points. Special PRUFTECHNIK reference marks are placed into the holes drilled by the Pruftechnik employees. These marks are marked using the rotating laser.

LEVALIGN® and PARALIGN® are registered trademarks of PRUFTECHNIK Dieter Busch GmbH. Copying or reproduction of the information in this document, in whatever form, is only permitted with express written approval by PRUFTECHNIK Dieter Busch GmbH. The information in the brochure is subject to change without notice, as PRUFTECHNIK products are continuously further developed. PRUFTECHNIK products are covered by issued or pending patents registered worldwide.

© Copyright 2019 by PRUFTECHNIK Dieter Busch GmbH.



PRUFTECHNIK
 Condition Monitoring GmbH
 Oskar-Messter-Str. 19-21
 85737 Ismaning, Germany
 Tel.: +49 89 99616-0
 Fax: +49 89 99616-200
 service@pruftechnik.com
 www.pruftechnik.com
 A member of PRUFTECHNIK group