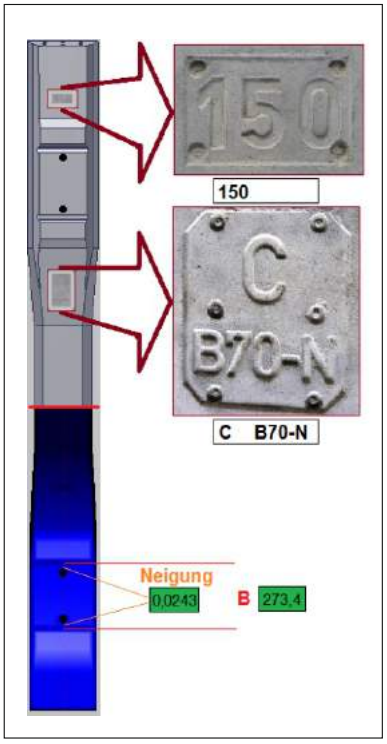
IAB – Institut für Angewandte Bauforschung Weimar gGmbH

100% Scanning of Railway Sleepers

State of the Art

- Depending on requirements 1.5 % to 2.0% of the produced sleepers will be calibrated mechanically
- Calibration will be carried out manually in most of the times
- Until now, no electronic measurement of the reinforcement position has been possible



Task

- Contact free measurement of bearing positions, dimensions and reinforcement positions in fresh and settled sleepers
- Label detection for backtracking and documentation
- Identification of all necessary parameters following DIN EN 13230 and specific requirements

Sensors

- Contact free measurement of all significant dimensions using laser scanning technology
- Reinforcement position detection based on magneto-resistive recognition
- Recording documentation relevant characters found on profiled labels

Reporting

- Determination of relevant dimensions based on image processing
- Position detection of reinforcements
- OCR based scanning of labeling areas for retraceable quality records

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