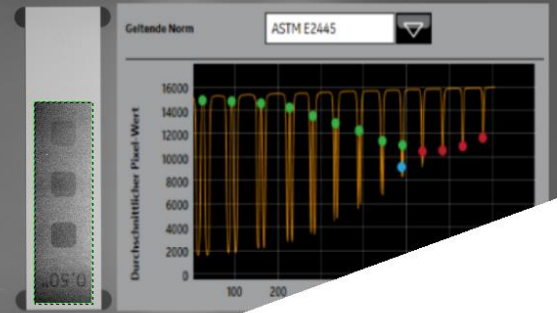


# Calibration and Evaluation Service for CR-Systems



## Features

- ASTM / ISO / EN compliant qualification of Computed Radiography (CR) scanners
- According to ASTM E2445(M)-20 (in line with ISO 16371-1, EN 14784-1)
- Test Phantom for comprehensive determination of spatial resolution BSR, contrast CS (at 2% AL), CNR, jitter, slipping, shading and SNRn, edge
- Calibration for scanners of type CR<sup>Flex</sup> or CR<sup>Vision</sup> included. Maintenance intervention in addition, if required

## Benefits

Next to conformity to international standards and ensuring inspection requirements according to norms, periodic calibration and performance evaluation service enables process control and long-term stability of the CR system. During a one-day site service, the fundamental parameters of CR systems will be measured to determine baseline performance and to track the long-term stability of the system. Performed tests enable customers to monitor the system performance degradation and identify actions to be taken when the system degrades by a certain level. Well-performing and maintained systems reduce downtime and rework in case of rejected parts because of unknown image artefacts. Useful combination to this calibration service is our periodic maintenance program.

## Calibration

Exact mechanical movement of the phosphor image plate during scan and for some scanner types the cassette opening mechanism need to be checked and adjusted to ensure proper operation and to avoid blocking of the system. Next to adjustments of stepper motors, the shading effect of the laser line needs to be calibrated to produce a correct image according to the real x-ray exposure. Image artefacts related to the scanner can be identified and mitigated to ensure correct inspection and detection of defect indications.

## Performance Evaluation

Customers in Oil & Gas or Aerospace need to ensure inspection according to norms like ASTM / ISO / EN. Baseline for a good inspection quality and performance is a correct image read-out of the digitizer scanner. Different image quality indicators can be used to check scanner typical values and identify wear on the hardware that hides the visibility of defects, even if the regular IQI tests during inspection shifts are within normal limits.