Non-destructive material testing

thyssenkrupp

Our check-up for preventive maintenance and quality control

Our experts use non-destructive material testing (NDT) methods to test the current material properties of plant components that are particularly exposed to stress. This minimizes the risk of unplanned machine downtime and the associated costs in the area of preventive maintenance.

With non-destructive-testing, we examine the structural material properties of mill end walls, supporting rollers, tyres, pinions and similar plant components. In this way, cracks and inhomogeneity are reliably detected in order to prevent costly and lengthy production downtime.

Our many years of experience of magnetic-particle testing, ultrasonic testing and eddy current testing go into our non-destructive testing: Magnetic-particle testing is used to detect surface imperfections even on components with complex geometry. Ultrasonic testing reveals internal and external imperfections, particularly in the case of weld seams, forged pieces and castings. Eddy current testing locates surface imperfections or subsurface imperfections, particularly at the tooth flanks of girth gear and pinion drives.

With conventional ultrasonic testing, we can locate volume deficiencies inside a work piece in welds, forgings and castings. As a special inspection technique, we offer you to produce an imaging representation of the test object in addition to the A-scan using the phased array method.

Our experienced and qualified NDT inspectors ensure service of the highest quality. Our expertise as an OEM also means in-depth knowledge of the entire plant and not just the testing technology used.

If damage is found by means of our various testing methods, countermeasures can be initiated in good time. Our experts provide decision guidance with regard to further operation, refurbishment or the best time to replace components. – This is to ensure the operational reliability and availability of your plant.

Our experts are qualified and certified in all necessary NDT procedures, according to DIN EN ISO 9712.

Take advantage of our knowledge and flexibility in the field of NDT.

Your service advantages

- Preventive checking of weld joints, end walls and manholes
- Preventive crack testing on crushers and hammer mill shafts, on stressed plates, tooth gearing, tyres and on cast components
- Prior cleaning of the tooth gearing is not necessary
- No contamination of the lubricants by testing media
- Assessment of the measurement results by our design experts
- Decision guidance with regard to further operation, refurbishment or the best time to replace components

service.polysius@thyssenkrupp.com
www.thyssenkrupp-polysius.com