KASAG

Non-destructive testing

The experts at KASAG Swiss AG have a broad ranging understanding and many years of experience in the non-destructive testing of welded seams, welded structures, pressure vessels, apparatuses and plants. Non-destructive material testing examines the quality of a work piece without damaging the material itself. KASAG employs a wide range of test procedures for this purpose. The results are documented in a test report in accordance with your requirements. Play it safe – with KASAG.

X-ray, radiographic examinations RT

X-ray inspection of metallic welded seams, joints and castings

Approvals	RT2 in accordance with EN ISO 17636 / ASME Sec. V (SNT-TC-1A)
X-ray source	YXLON Y.XPO225 (225kV)
Material thickness	Up to 50 mm

Dye penetrant testing / surface crack testing PT

Dye penetrant testing of metallic welding seams / joints

Approvals	PT2 in accordance with EN ISO 3452 / ASME Sec. V

Visual inspection VT

Approvals	VT2 in accordance with EN ISO 5817 / ASME Sec. V

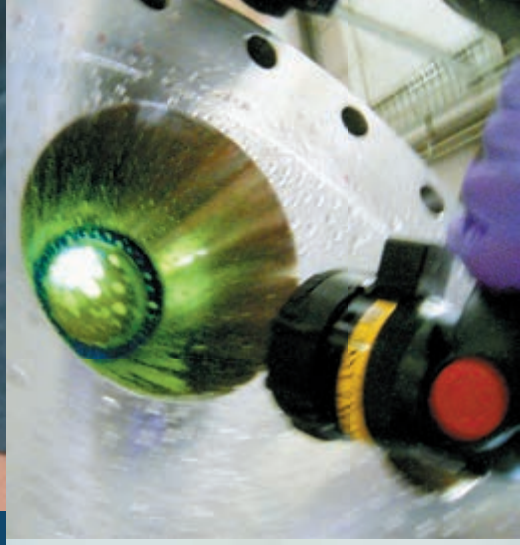
Material testing / Positive Material Identification PMI

Material testing of all metallic materials

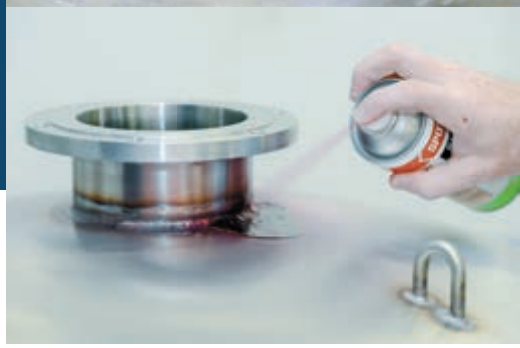
Type	PMI Positive Material Identification High-performance x-ray fluorescence analyser
Alloy classes	DIN, Military, ASTM
Alloy elements	Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, W, Hf, Ta, Re, Pb, Bi, Zr, Nb, Mo, Ag, Sn, Sb, Mg, Al, Si, P, S

Helium leakage testing LT

Leak detection, leak testing in accordance with EN 13185 with regard to EN 1593 using helium leakage testing (sniffer mode < $1x10^{-7}$ mbar l / s or vacuum mode < $5x10^{-12}$ mbar l / s) for targeted leak detection with high levels of sensitivity. Pores, cracks in the work piece, processing fault or incorrect assembly of components, valves as well as defective sealings can be detected.



We support you realise your projects



Riboflavin test, total outlet
The riboflavin test is a fluorescence test for testing cleanability. In vessels, this involves verifying that all areas are wetted by the cleaning medium, for example by using spray balls inside the vessel. For this purpose, the entire interior surfaces of the vessel are sprayed with a fluorescent substance and checked using an UV lamp following defined cleaning sequences.

Pressure testing
Pressure testing, inspection of containers, tanks, vessels and apparatuses on site or in our test laboratory

Hydrostatic	Water
Max. hydrostatic pressure	1000 bar
Pneumatic	Nitrogen, air
Max. pneumatic pressure	Dependent on volume

Surface roughness testing Ra / Rz , Ferrite measurement Fe
Surface roughness testing and ferrite measurement are required for vessel construction, for example in the pharmaceuticals sector.

Wall thickness measurement
Wall thickness measurements can for example be used to check the vessel shell or tank bottom of a container.

Video endoscopy
Video endoscopy can for example be used to check heating / cooling jackets, piping, etc.

Pressure loss testing
Pressure loss testing in pipes, heat exchangers and vessel jackets (liquid media).

Further test methods
Additional conventional non-destructive test methods in the metals sector such as ultrasonic testing are performed in conjunction with external partners.

Certifications, manufacturer approvals
ISO 9001 / ISO 3834-2
PED (EN13445 / AD-2000)
ASME (U-Stamp, Code Section VIII Div. 1)
China Stamp (A1), China License
TP TC 032/2013 (EAC), Customs Union
In addition to our existing manufacturing approvals, we are able to perform the respective approval procedures for almost every country around the world (e.g. Singapore, Japan, Malaysia, Canada, etc.)

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