

July 5, 2016

TruTank DR System

Stasuk Testing & Inspection Ltd., Vancouver (Canada)

Stasuk Testing & Inspection Ltd is now providing automated tank scanning with digital radiography. The system can operate at high speed acquisition rates. With strategic radiation shielding, the system produces extremely low dose radiation for the operator and allows adjacent work to continue without interruption. The company provides specialized scanners complete with operators, procedures and techniques which meet or exceed code requirements. The TruTank DR System operates with tracking for horizontal or vertical weld imaging.



Advantages

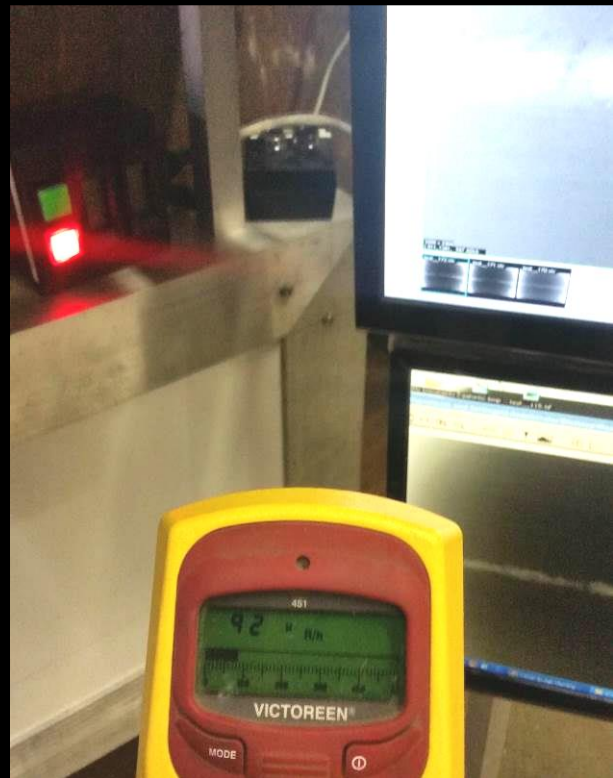
The TruTank DR is designed to be used on large storage tanks or large diameter vessels where 100% testing is required by code such as ASME VIII UW 51 or API 620 and 625 tanks but is adaptable for spot locations as well. With quick setup, mobility and the ability to keep up with erection and welding schedules, the production gains are significant. Unlike Rayscan RTR type systems, the TruTank DR can scan within 4" of the bottom floor on the first course verticals. The Stasuk TruTank DR operates similar to conventional methods and moves in 250mm-300mm exposure segments at a 2s exposure rate. It is not influenced by tank movement, shell travel chatter or defect stretching sequences plagued by real-time RTR scanners. Our work on austenitic and high nickel vessels and tanks has brought a unique level of experience in this market. The TruTank DR system now allows us to easily show a welder or customer exactly what the technician is evaluating. Although digital image enhancement can be done with our evaluation software, the initial image meets the penetrameter and sensitivity requirements and therefor reduces the amount of miss-calls on weld images which are common on other systems requiring image enhancement to view.



**15mm Plate Vertical weld with significant incomplete penetration, undercut and porosity.
Shown in Raw acquisition format with no image enhancement.**

Ultra Low Dose Radiography

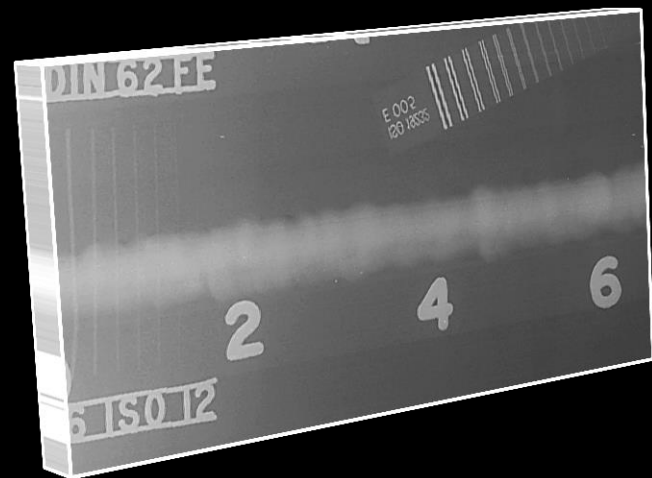
Worker Safety while maintaining an environment where workers are not worried about receiving radiation doses provides a new aspect to “low-dose” radiography operations. Working next to an x-ray system and panel was previously impossible and Radiographers would be required to be working with a certain level of radiation and the radiation dose was always considered a necessary evil. TruTank DR systems now allow workers to be adjacent to the tube, panel or control system for direct monitoring in fields of less than half the regulation limit. The operator can safely ride with the scanner in a weld-buggy style carriage. The technician evaluates weld images as it travels for quick results and minimal impact on construction schedules. Radiation boundaries are not required beyond the buggy envelope as the dose levels are far below the regulation levels. Welding carts or erection operations can continue to be working adjacent to the scanner buggy without restrictions.



**92 µR/hr at the operators station within
12in of the weld face**

Compliance

TruTank DR systems meet the requirements of ASME V, VIII and IX. ASTM E2698, API 620, 625 and 650. Files are saved in a RAW and DICOM format for review and archiving. All evaluating technicians are trained in Digital Radiography to the supplemental requirements of ASNT SNT-TC-1A.



Adam Stasuk, General Manager at Stasuk, said: “While being involved with our field technicians in various industries, our team of engineers have a real understanding of the difficult problems faced with modern construction projects and their timelines. We are able to recognize the needs and solve real industry problems for our clients. With any new technology; cost, repeatability and code compliance are questions that are always foremost on the minds of our clients and these new scanners meet those concerns head on. After our initial testing phases in 2015 and early 2016, the refinement and experience gained will allow our systems to excel in today’s market. Our TruTank DR system allows for quick unobtrusive results and a cost effective alternative to the historical slow radiographic or complicated automated ultrasonic norms. I am excited to see where we go next and look forward to introducing our ongoing R&D projects as they are released.”

For further information see www.nde.net