

ISONIC EXPERT A-Ring - Multiple Skip True-to-Geometry Shear Wave S-Scan coverage:

- detection and sizing of corrosion damages on both surfaces of annular ring plate in the critical zone and fillet weld area
- distinguishing position of the damage either at the product side or soil side or in the weld
- recording and 3D Mapping
- measuring of material thickness loss - MTL / remaining material thickness - RMT
- measuring of weld metal loss





Item	Order Code (Part #)
Inspection SW Application for ISONIC 3510T, ISONIC 3510 - Phased Array Modality: Expert A-Ring - Inspection of Annular Ring – Critical Zone and Fillet Weld Area In the Above Ground Storage Tanks for Corrosion Damages / Scanning above the Top Surface of the Protrusion (Outer Chime)	SWA 3510018
Inspection SW Application for ISONIC 2010 / ISONIC 2010 EL - Phased Array Modality: Expert A-Ring - Inspection of Annular Ring – Critical Zone and Fillet Weld Area In the Above Ground Storage Tanks for Corrosion Damages / Scanning above the Top Surface of the Protrusion (Outer Chime)	SWA 910818
Inspection SW Application for ISONIC 2009 UPA-Scope - Phased Array Modality: Expert A-Ring - Inspection of Annular Ring – Critical Zone and Fillet Weld Area In the Above Ground Storage Tanks for Corrosion Damages / Scanning above the Top Surface of the Protrusion (Outer Chime)	SWA 909818

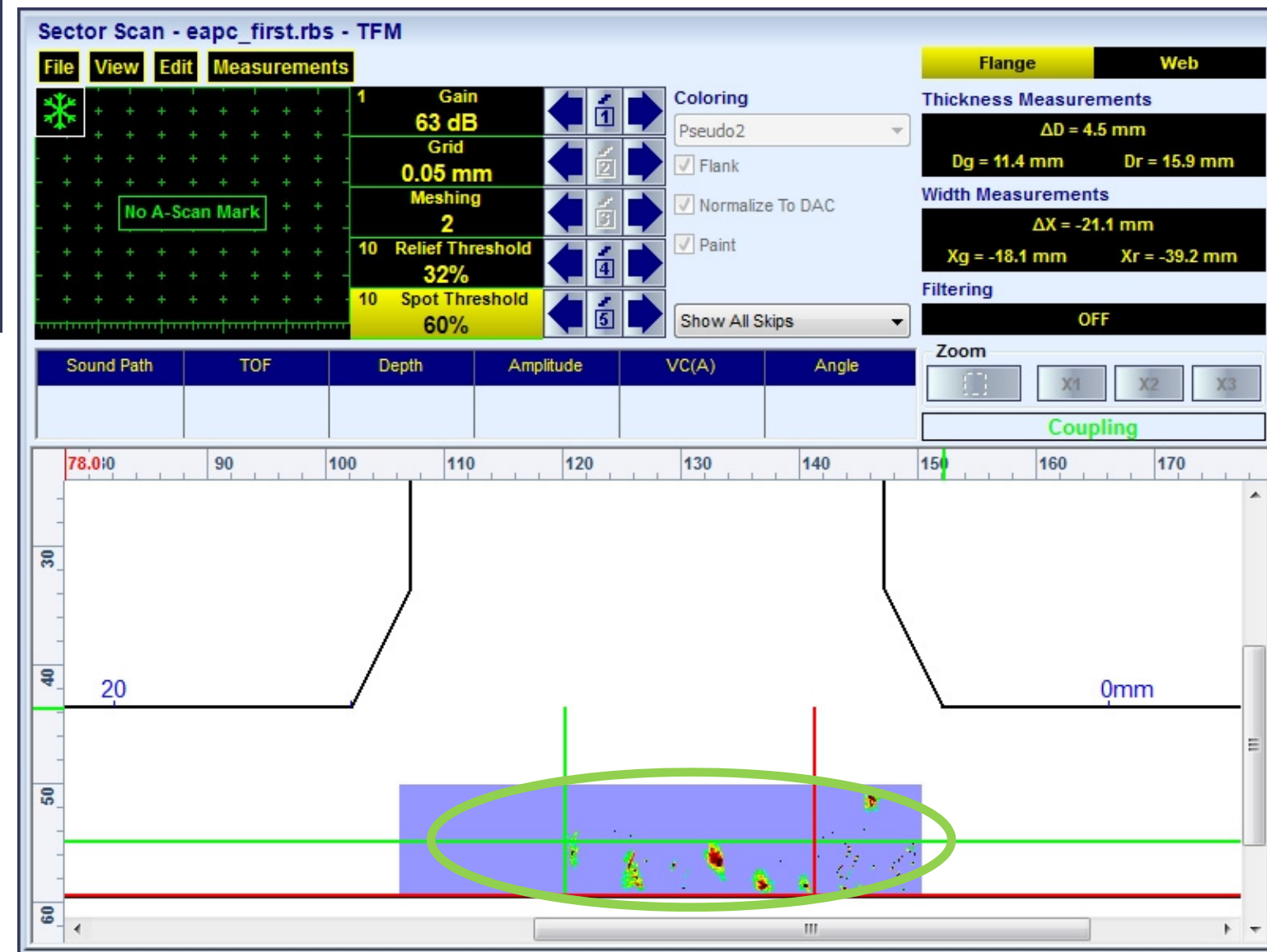
- ⇒ Detection, distinguishing, and sizing of the following defects:
 - ▷ Corrosion at the product side of the annular ring
 - ▷ Corrosion at the bottom side of the annular ring
 - ▷ Cracks and other defects in the fillet weld
 - ▷ Corrosion on the top and bottom surface of annular ring under the tank shell / fillet weld
 - ▷ Loss of the fillet weld metal at the inner side of the tank shell
- ⇒ Multiple skip shear wave True-To-Geometry Sector-Scan Cross Sectional Coverage and Imaging of the Annular ring critical zone and Fillet weld areas - Cross Sectional and Top (C-Scan) / Side- / End- View and 3D
- ⇒ Intuitive Image Guided PA Pulser Receiver with Beam Forming View
- ⇒ DAC / TCG Normalization
- ⇒ Built-In Fillet Weld / Annular Ring Geometry Editor and Ray Tracer - Scanning Pattern (Scan Plan) Design
- ⇒ Independent on TCG Angle Gain Compensation / Gain Per Focal Law Correction
- ⇒ Automatic Coupling Monitor
- ⇒ Encoded and Time based C-Scan
- ⇒ 100% Raw Data Capturing
- ⇒ FMC/TFM Protocol for the data acquisition and imaging
- ⇒ Automatic Defects Alarming Upon C-Scan Acquisition Completed
- ⇒ Automatic Creation of Editable Defects List
- ⇒ Comprehensive Postprocessing Including:
 - Recovery and Evaluation of Captured A-Scans from the Recorded Cross Sectional Views (Sector Scan) and C-Scans
 - Recovery of Cross Sectional Views from the Recorded C-Scans
 - Converting Recorded C-Scans or their Segments into 3D Images
 - Off-Line Gain Manipulation
 - Off-Line DAC to TCG / TCG to DAC toggling for all types of stored files (A-Scans, cross-sectional views, C-Scans, etc)
 - Off-Line DAC Normalization of the Recorded Images / DAC Evaluation
 - Numerous Filtering / Reject Options (by Geometry / Position / By Amplitude / dB-to-DAC / etc)
 - Defects Sizing including the Quantitative Evaluation of the Thickness Loss
 - Creation of Defect List and Storing it Into a Separate File
 - Automatic creating of inspection reports - hard copy / PDF File



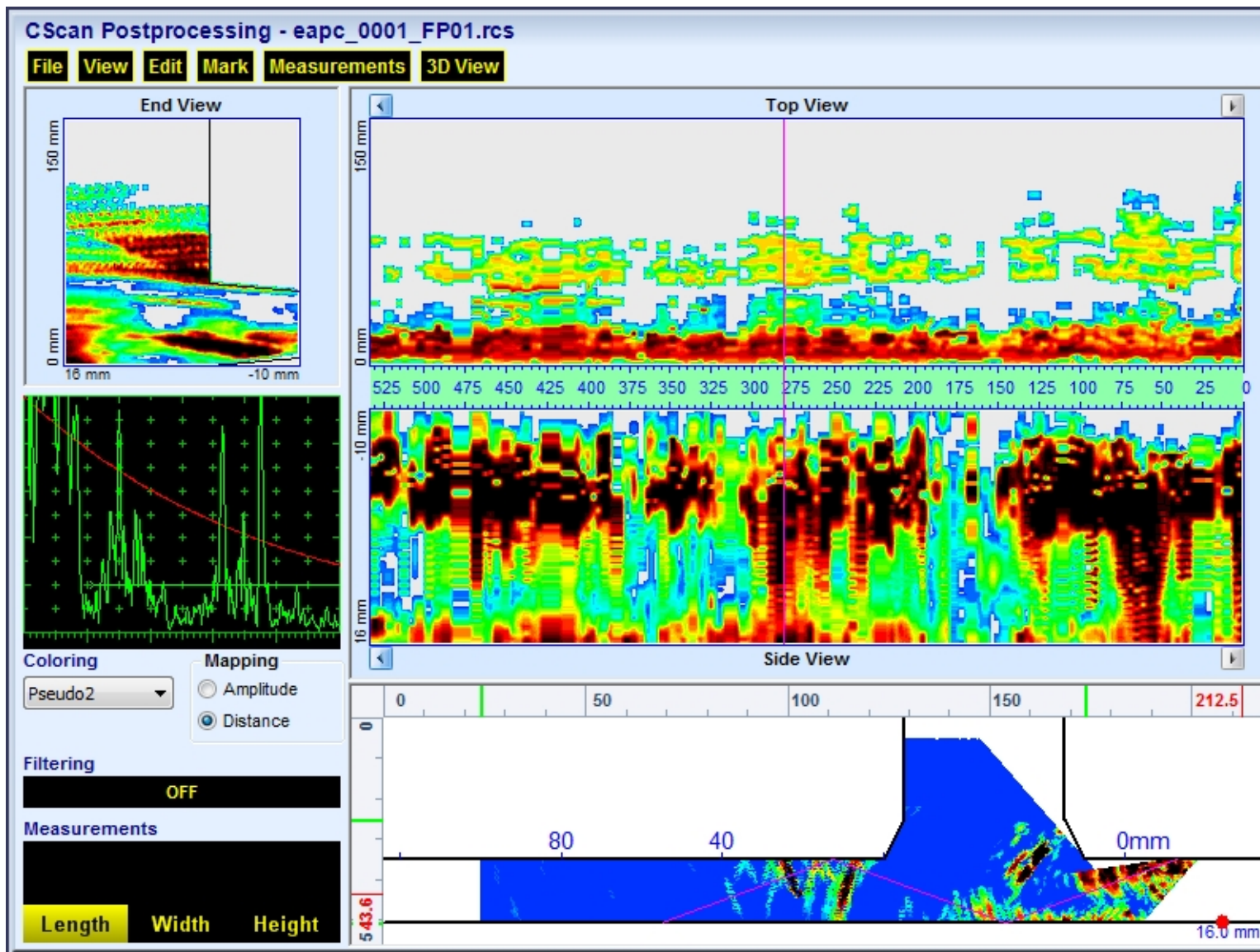


True-to-Geometry Sectorial Scan Coverage

FMC/TFM Imaging and evaluation of the damage area

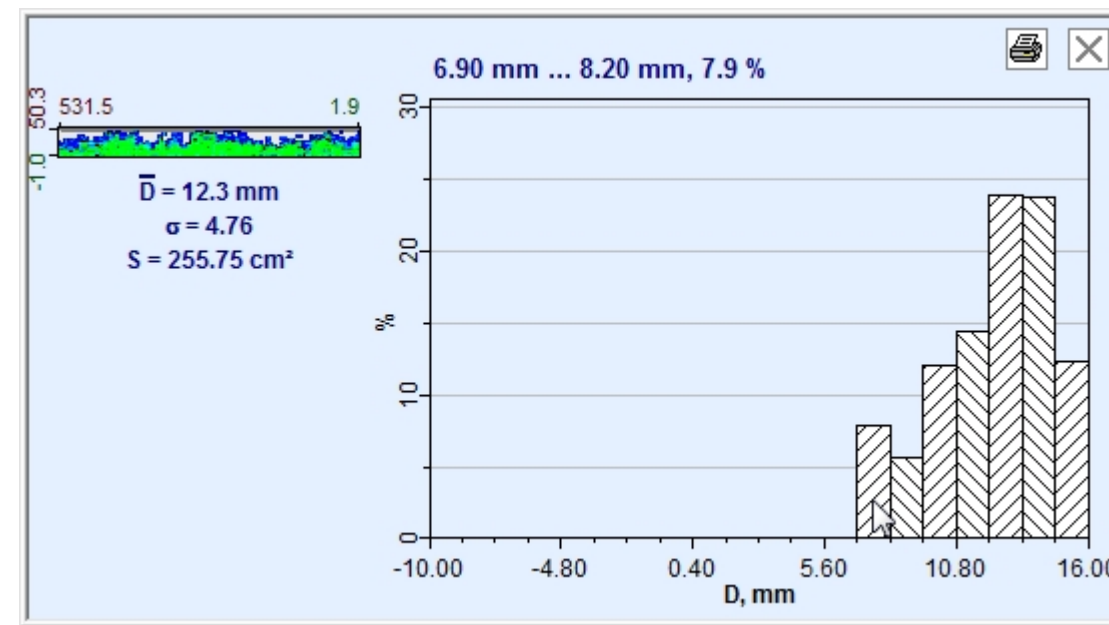






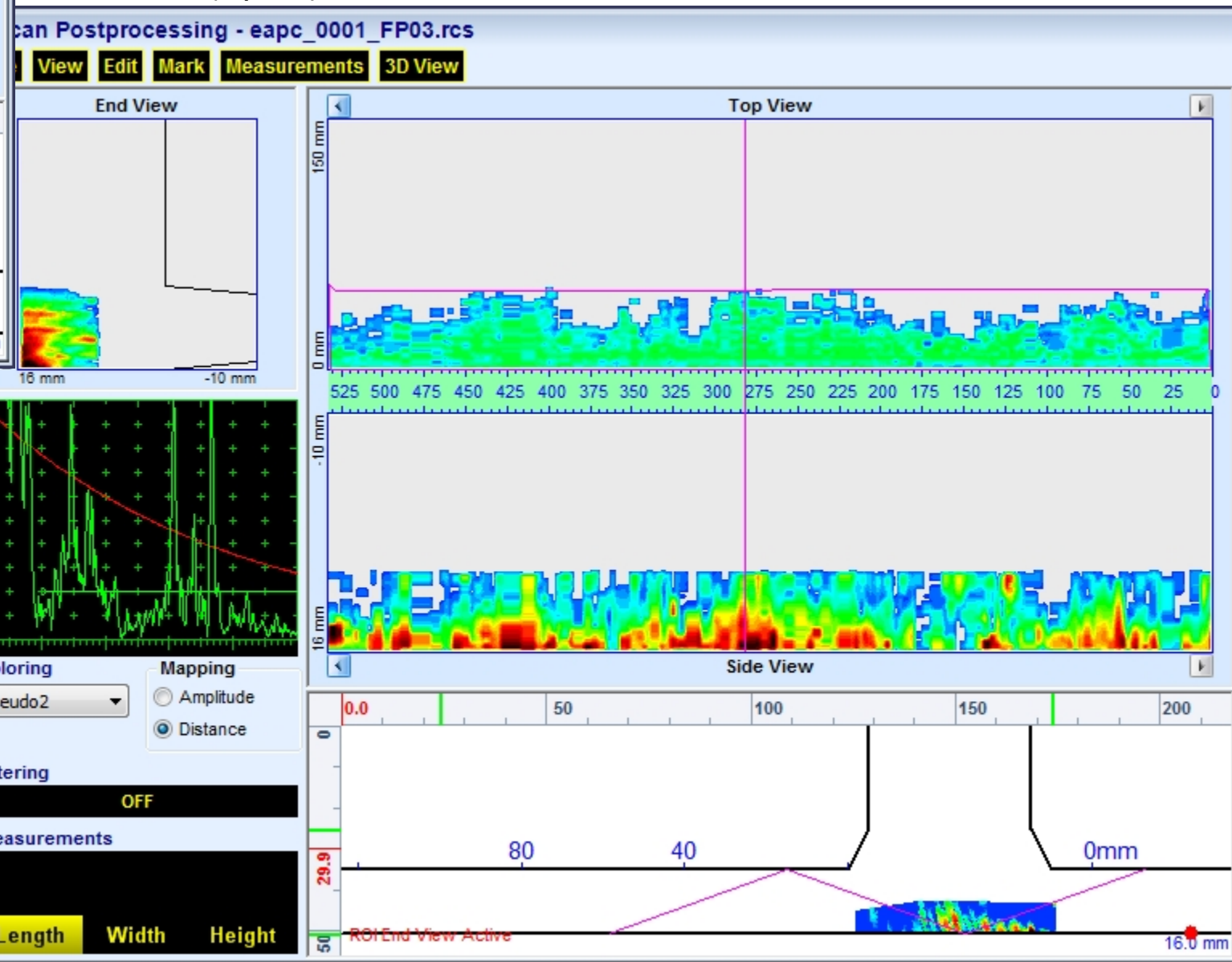
Global C-Scan (Top View), Side View, End View Data

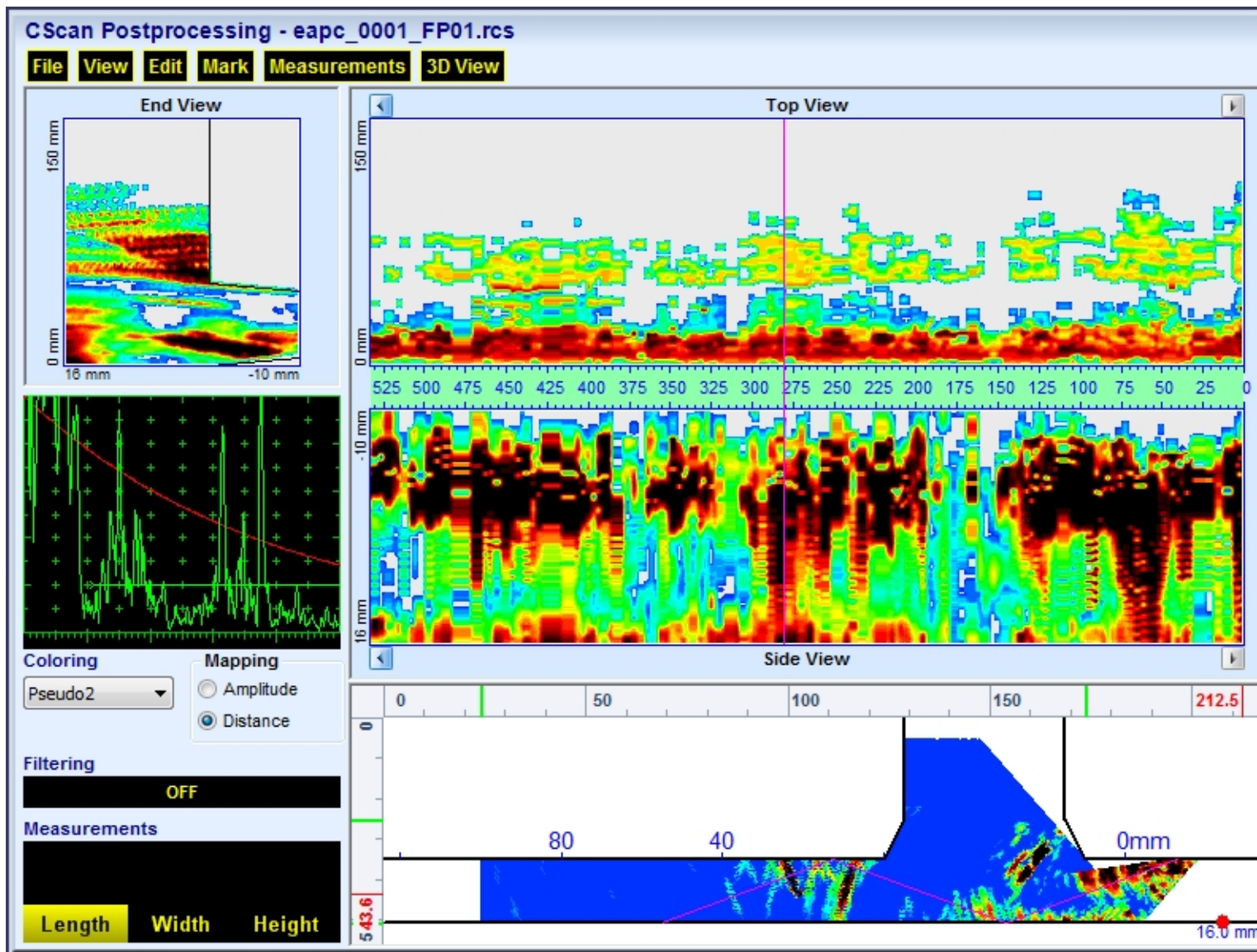
3D - scattered corrosion under the tank shell at the soil side



Statistical distribution of the RMT (Remaining Material Thickness) under the tank shell

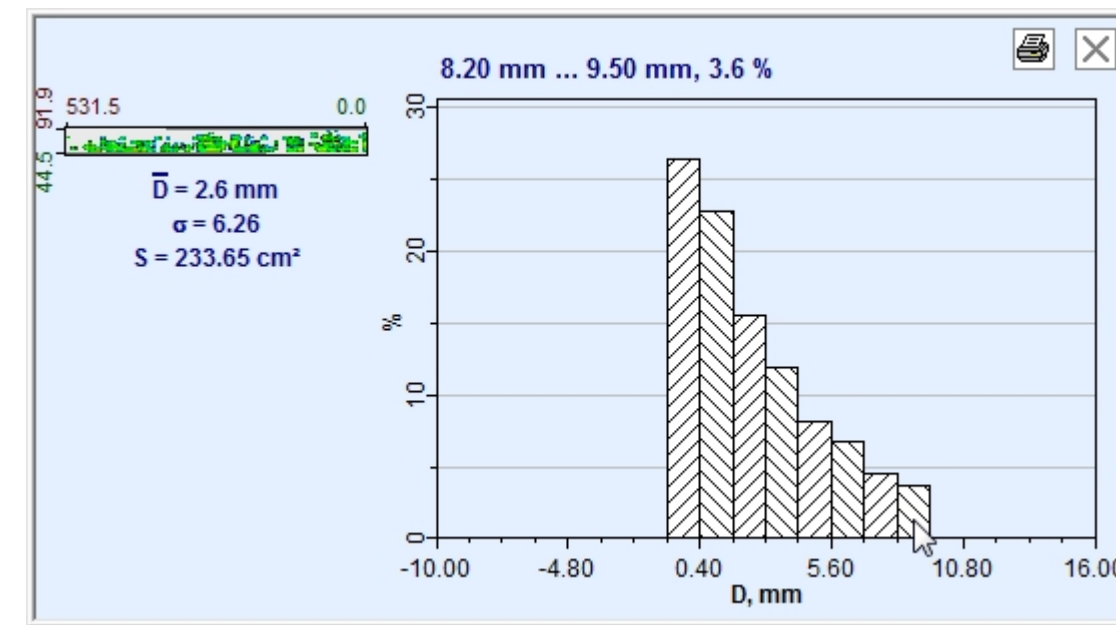
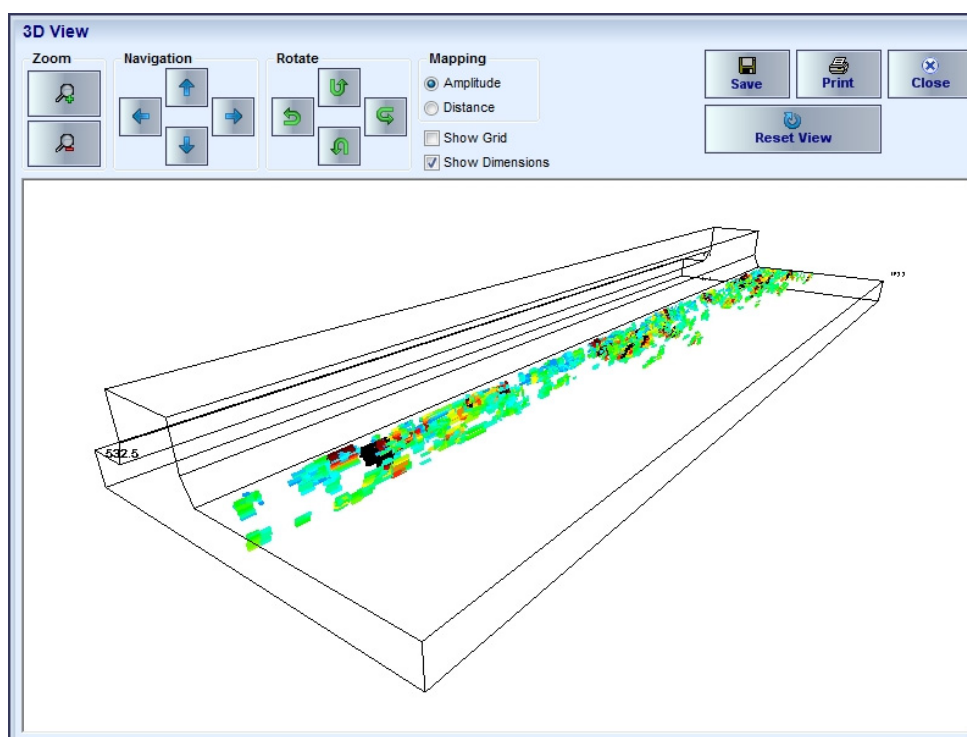
C-Scan (Top View), Side View, End View Data for the scattered corrosion under the tank shell at the soil side





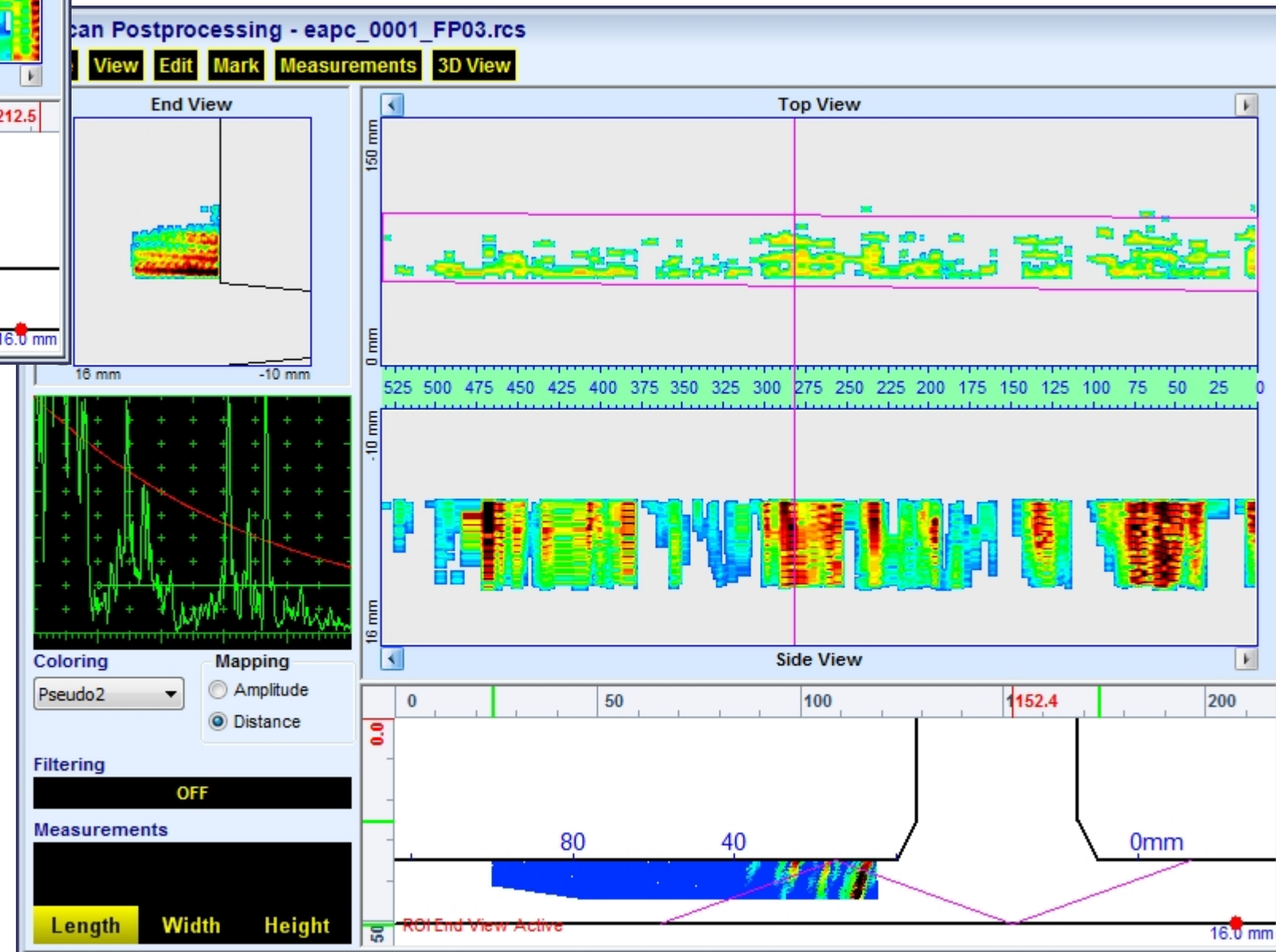
Global C-Scan (Top View), Side View, End View Data

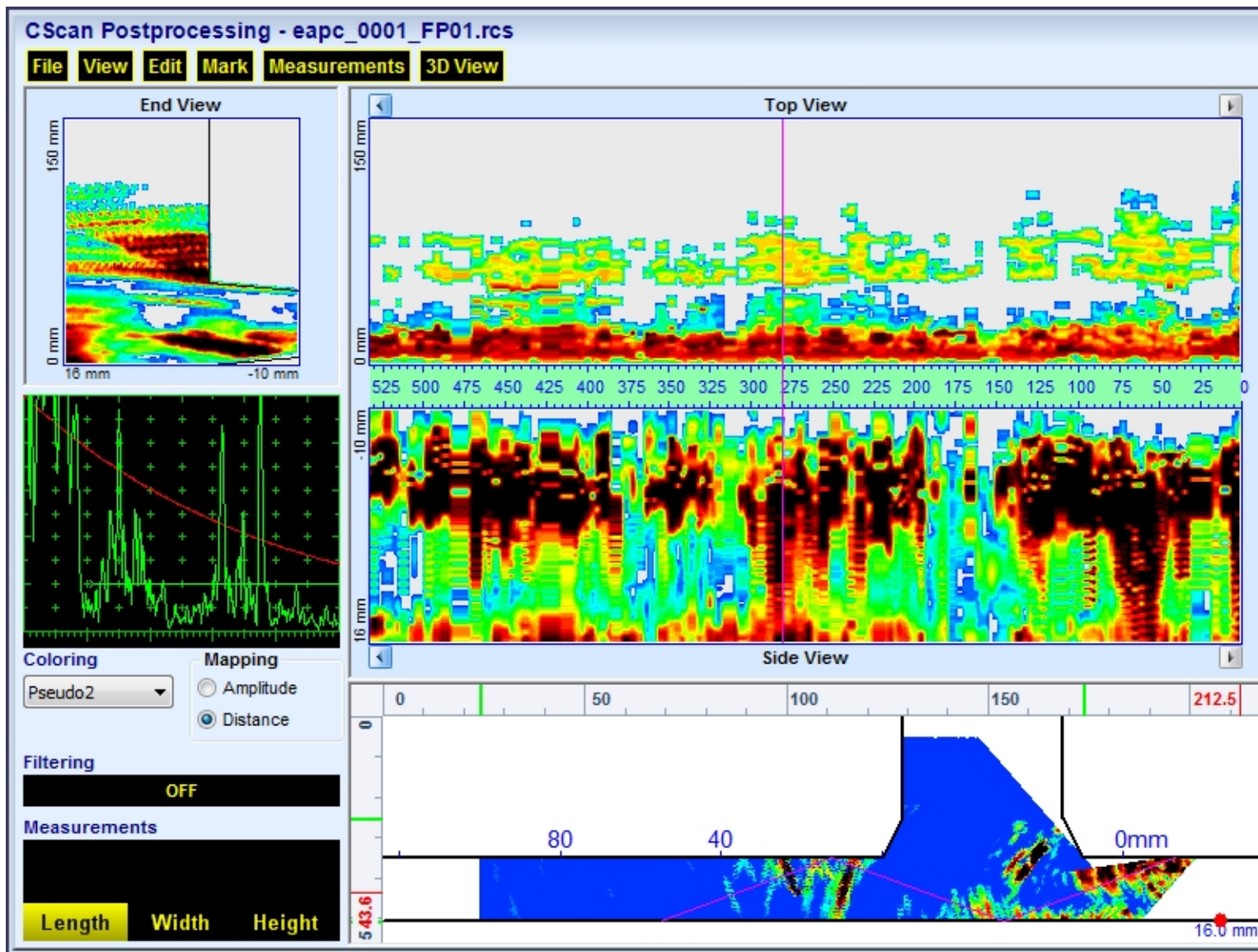
3D - scattered corrosion inside the tank at the product side



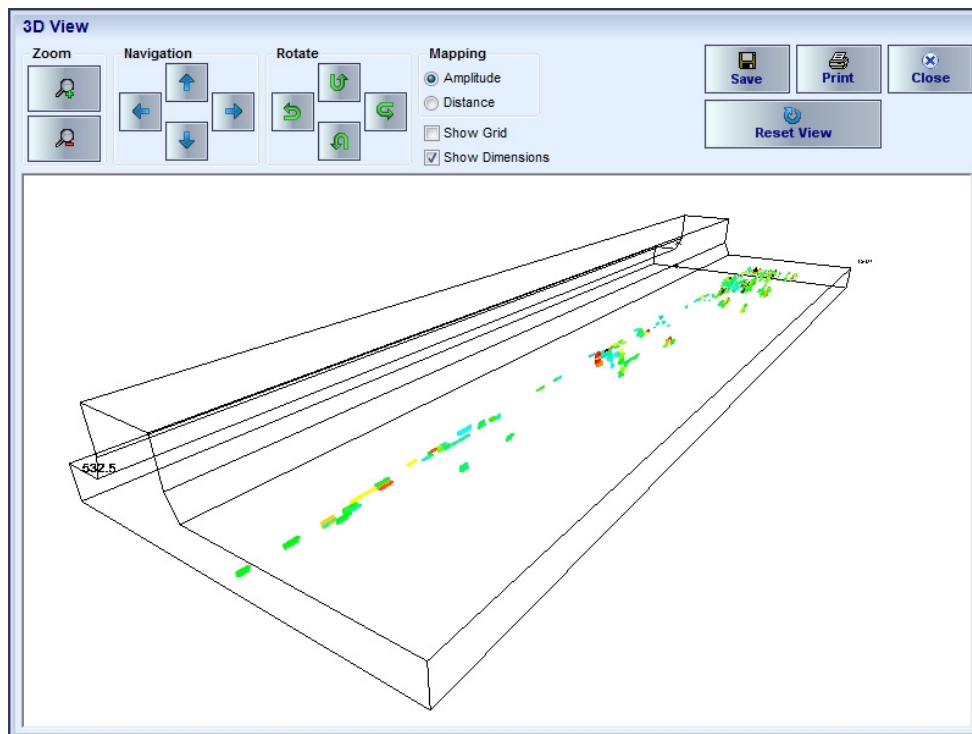
Statistical distribution of the ML (Material Loss) at the product side

C-Scan (Top View), Side View, End View Data for the scattered corrosion inside the tank at the product side

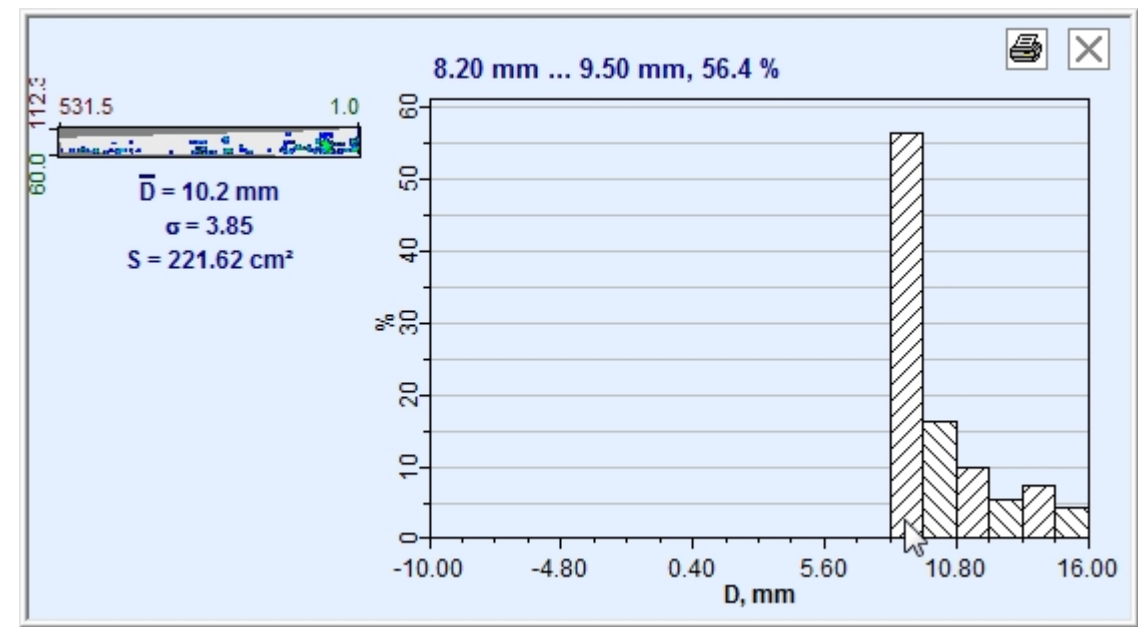




Global C-Scan (Top View), Side View, End View Data



3D - scattered corrosion inside the tank at the soil side



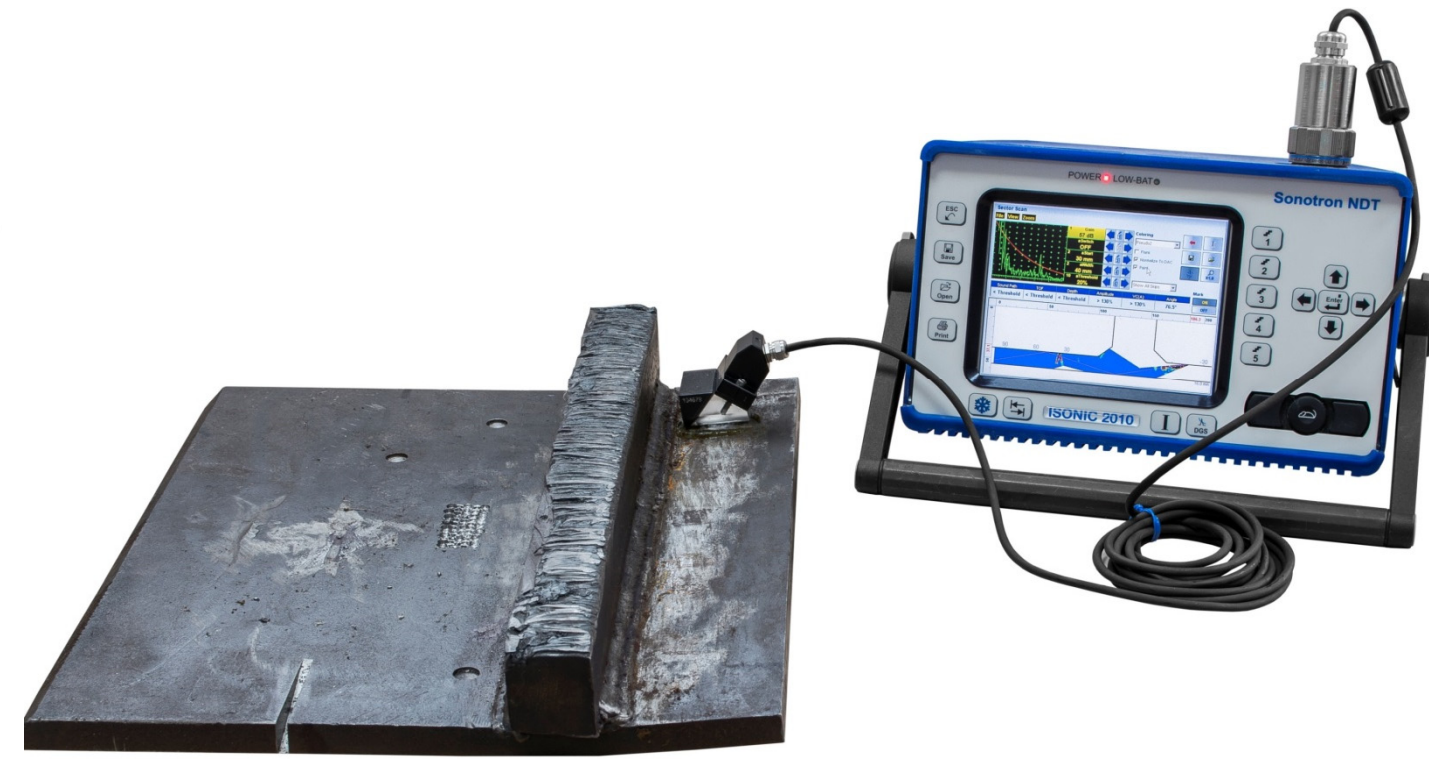
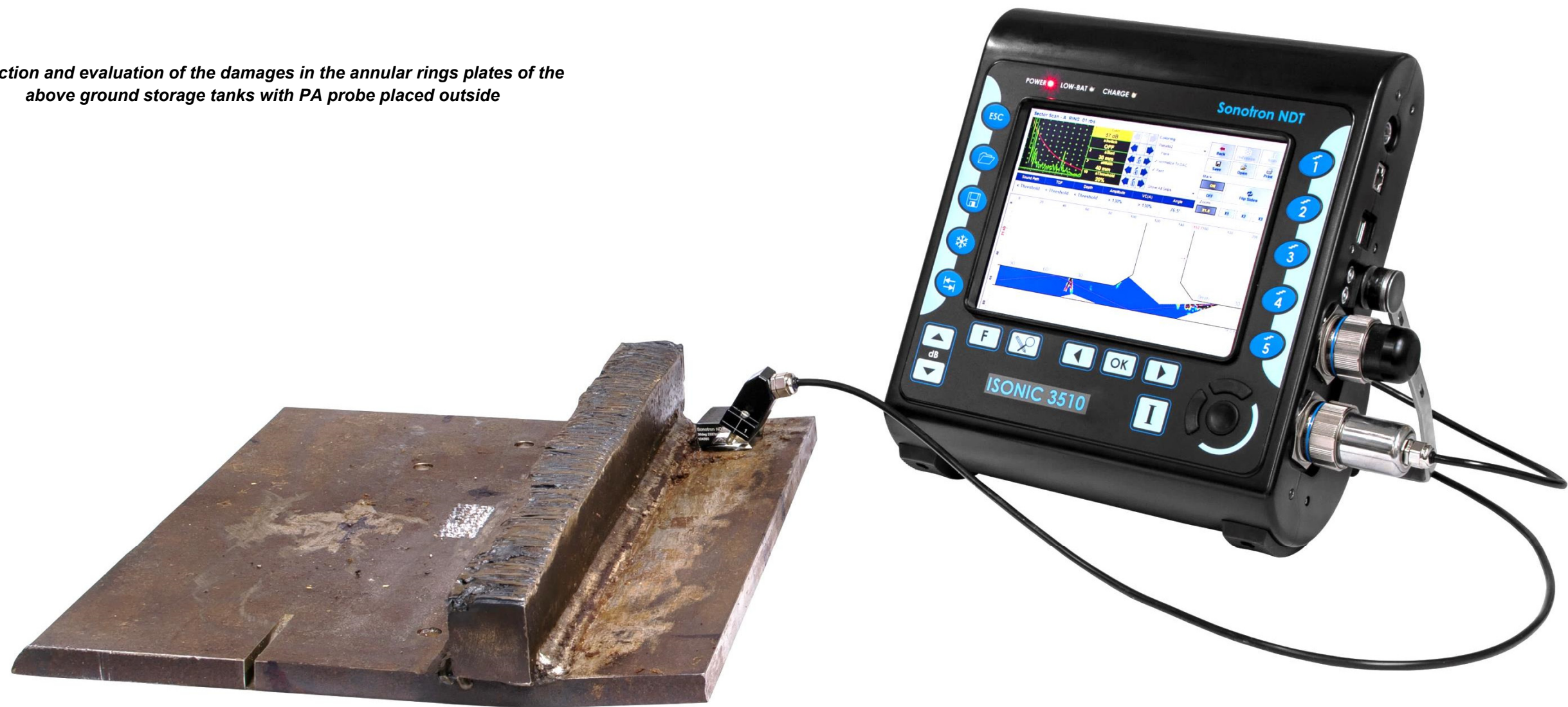
Statistical distribution of the RMT (Remaining Material Thickness) inside the tank at the soil side

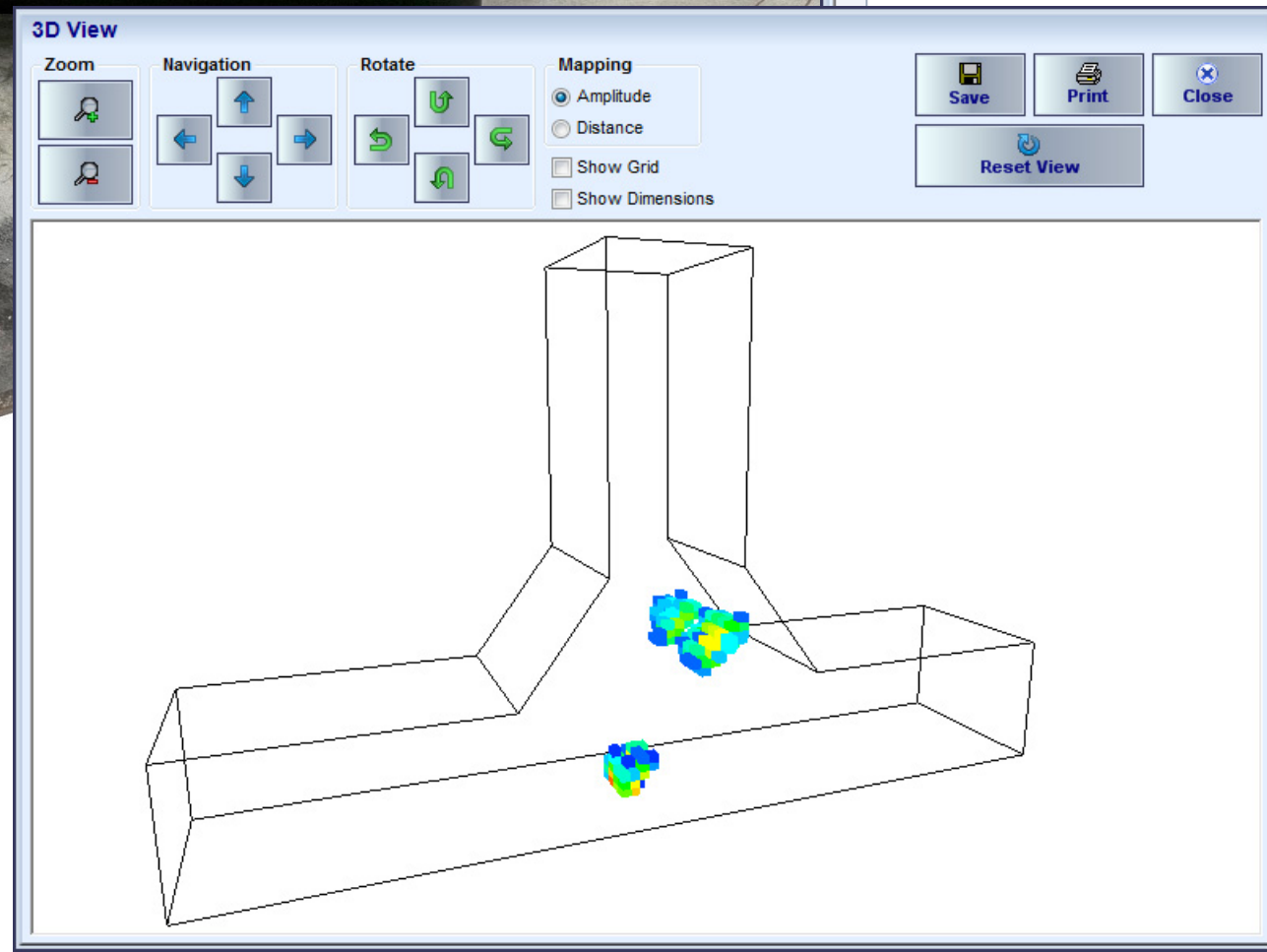
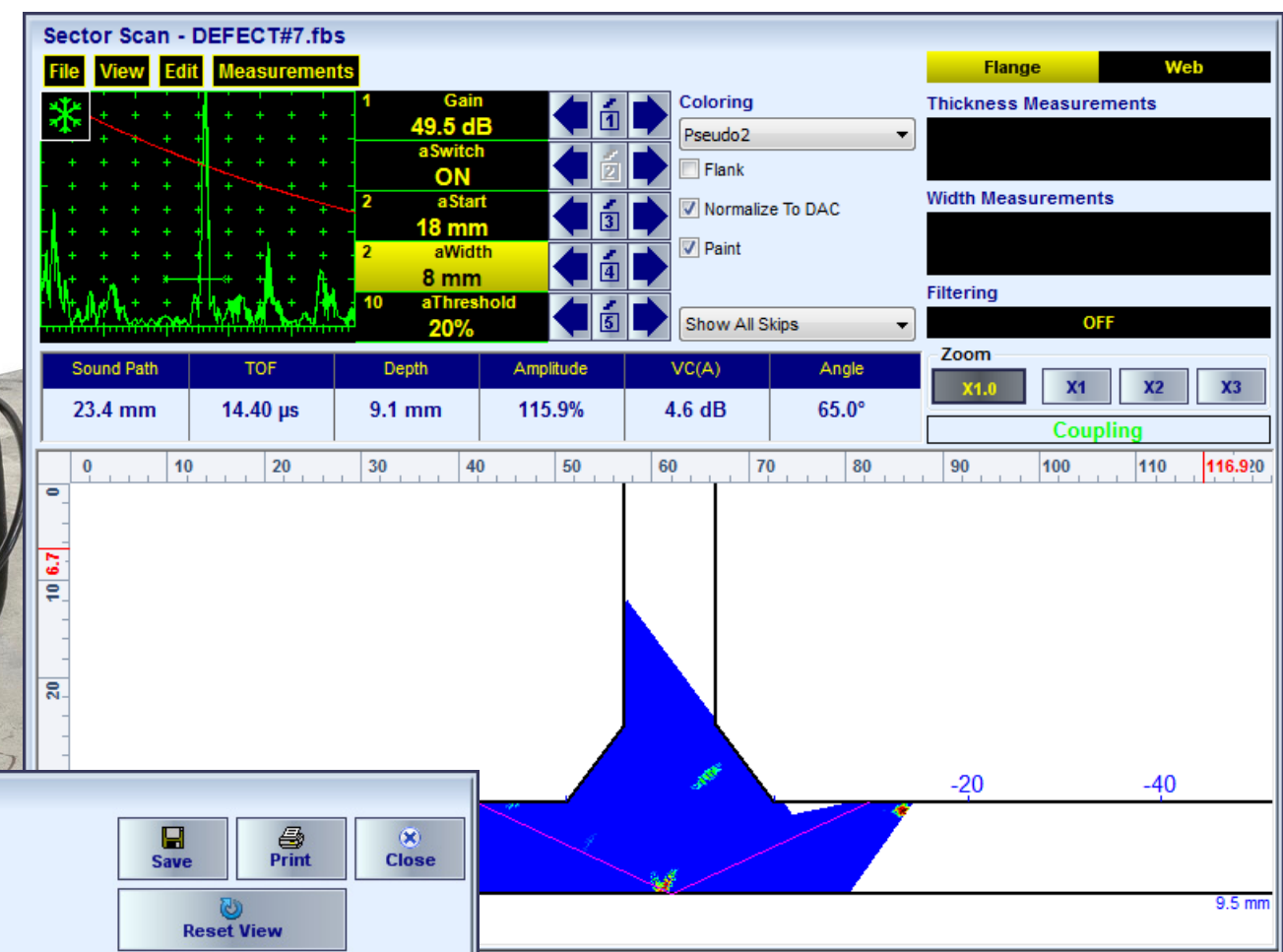
C-Scan (Top View), Side View, End View Data for the scattered corrosion inside the tank at the soil side



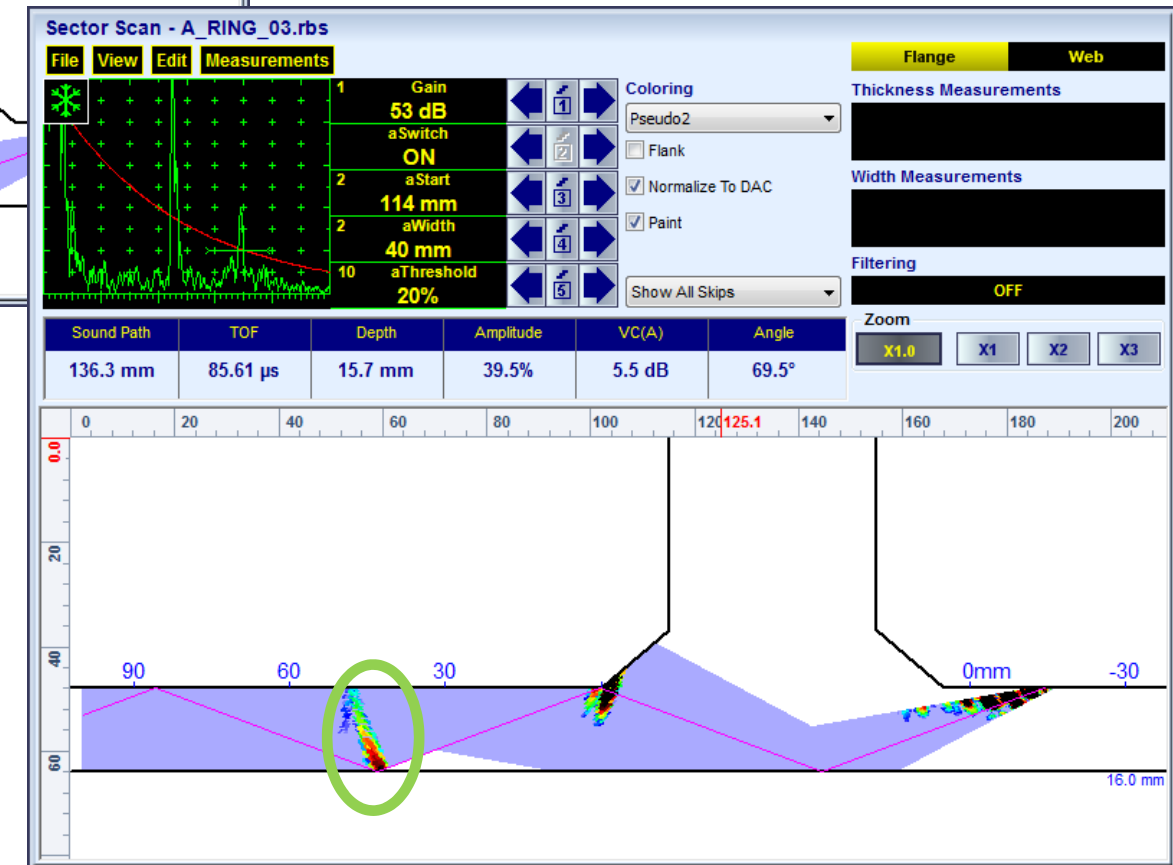
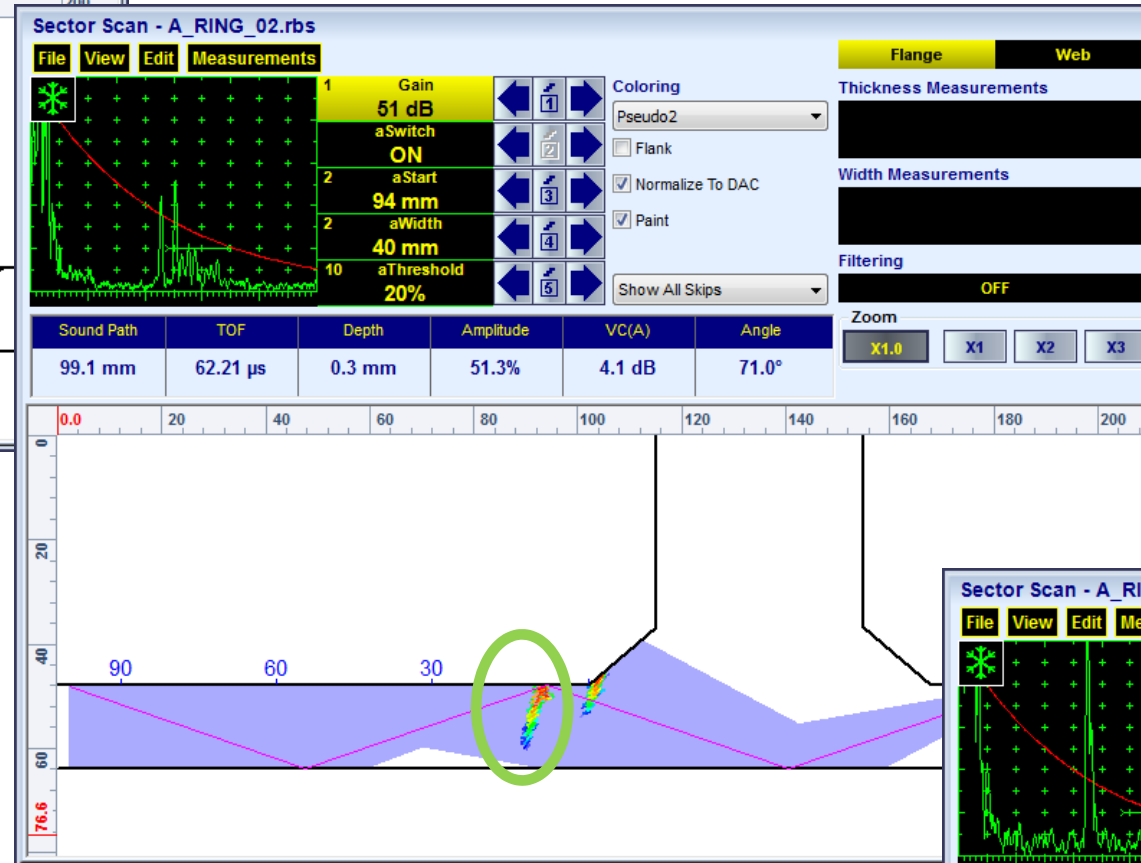
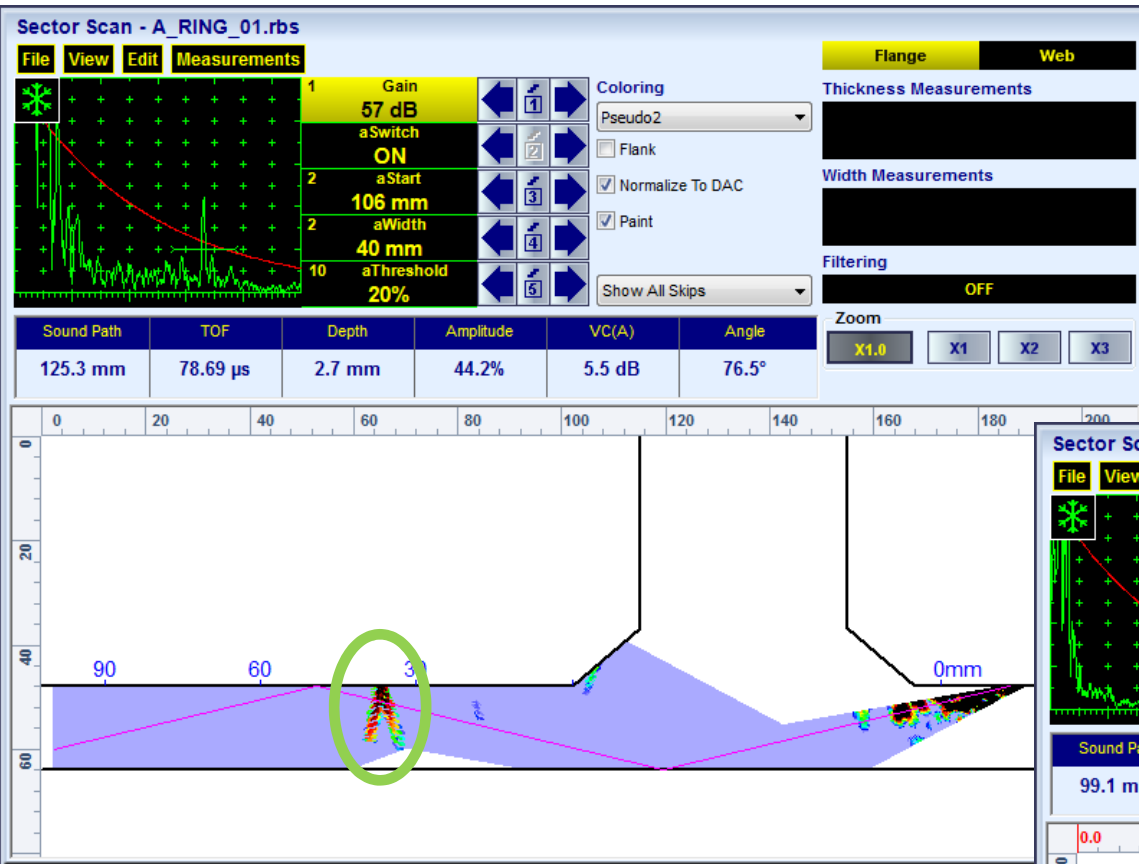


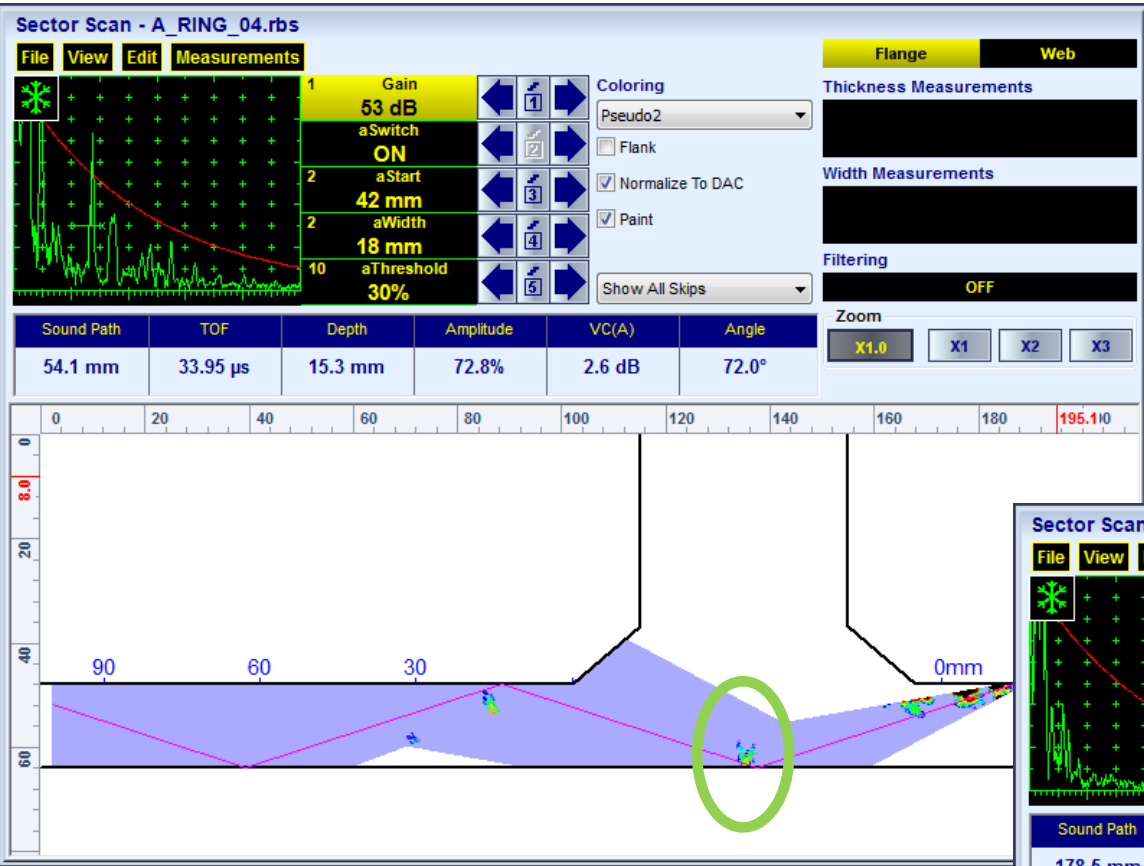
Detection and evaluation of the damages in the annular rings plates of the above ground storage tanks with PA probe placed outside





Typical Postprocessing Screenshots





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