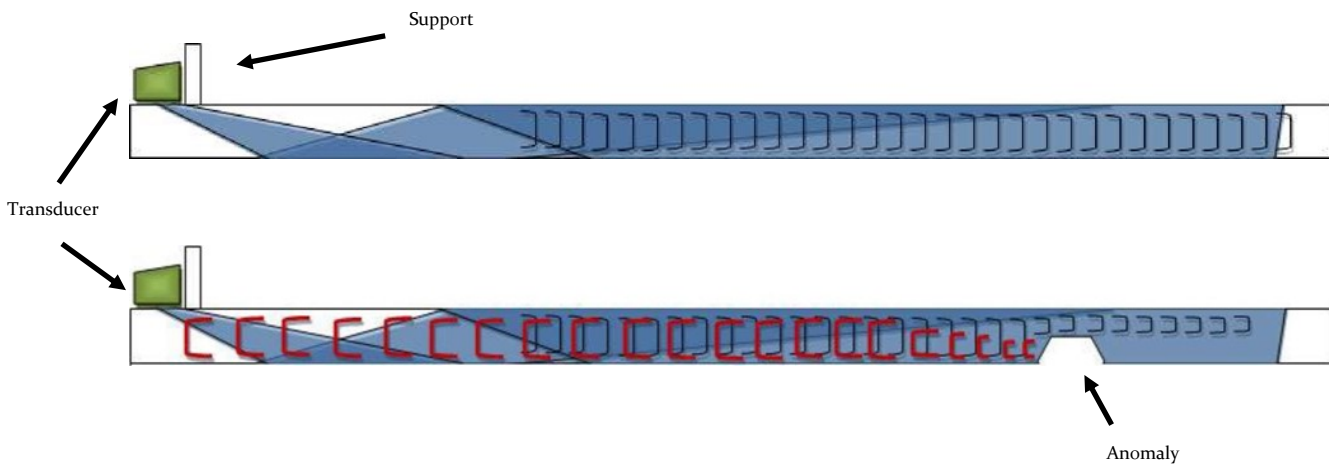


## SPS Guided Wave (Short-Range)

Short-Range Guided Wave is a technique which uses low frequency sound waves to flood thin wall material and then reflect back at interfaces such as cracking or corrosion/pitting. The guided wave technique is to be used as a screening tool only as remaining wall thickness measurements cannot be achieved, However, reflection distance can be measured with precise accuracy. This technique can be used for many different applications, such as tank floor inspection of the annular ring from the chime area, vessel inspection for detection of corrosion underneath pipe saddle supports or other obstructions, CUI detection for piping or vessels when access areas are made to allow probe scanning, corrosion on under pipe support, and many others. At this time the maximum ultrasonic beam coverage within a material is around 36" and the recommended material thickness for a thorough inspection is  $\approx /< 0.500"$  (13mm).



Example of tank floor annular ring inspection for corrosion detection

The guided wave technique uses a modified B-scan graph but displays information in terms of "Plan view" using surface distance calculations.

