

## CAPABILITY STUDY

# WATER INGRESS

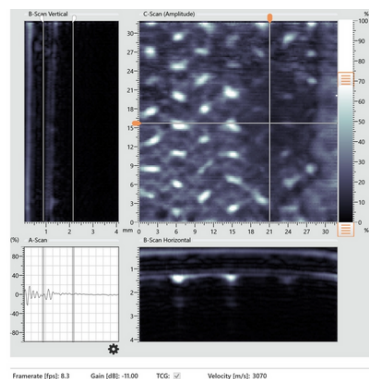
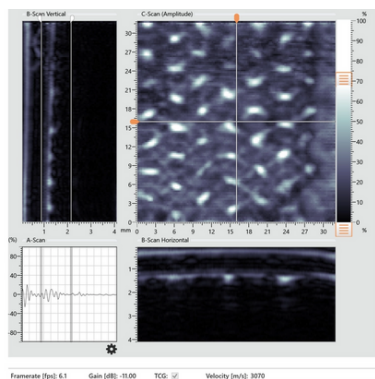


Aluminium Honeycomb Panels

May 25, 2019

## STUDY OVERVIEW

This capability study targets the detection of water ingress on an aluminium honeycomb sandwich panel. This is a common inspection, usually done with legacy ultrasonic systems.



## THE SOLUTION

The dolphicam2 was used with a [TRM DB 8.00MHz](#), as the "skin" is very thin on this sample. The higher frequency also allows for the front and backwall to be "separated" in the signal, due to the shorter wavelength.

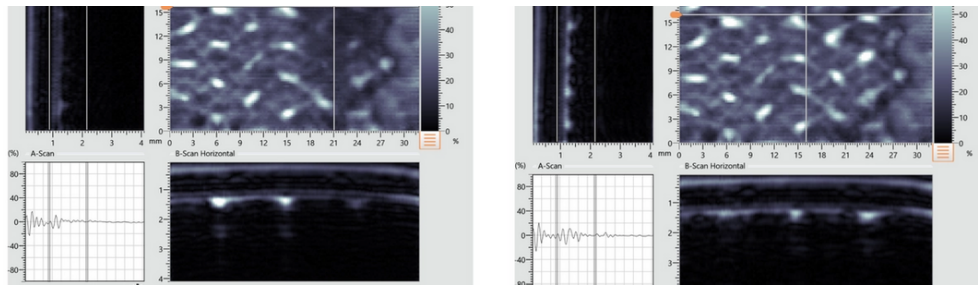
## CHALLENGES

The set up for this type of inspection is usually very sensitive, and detection with scan probes can be difficult. Due to this there is often a need for highly trained NDT personnel and the inspection can take some time.

## FINDINGS

The dolphicam2 was very capable of imaging the presence of water on the aluminium honeycomb sample. C-scan presentation make it simple to identify the water ingress area.





## CONCLUSION

Dolphicam2 is especially well suited for this application, as it has the necessary sensitivity, ease of use and quick set up. The standalone 1.4 software also allows inspections to be conducted by less experienced technicians, data can then be analyzed remotely anywhere in the world; saving on both the amount of time and the amount of analysis expertise required on-site, as well as the need for NDT experts to travel to site.