

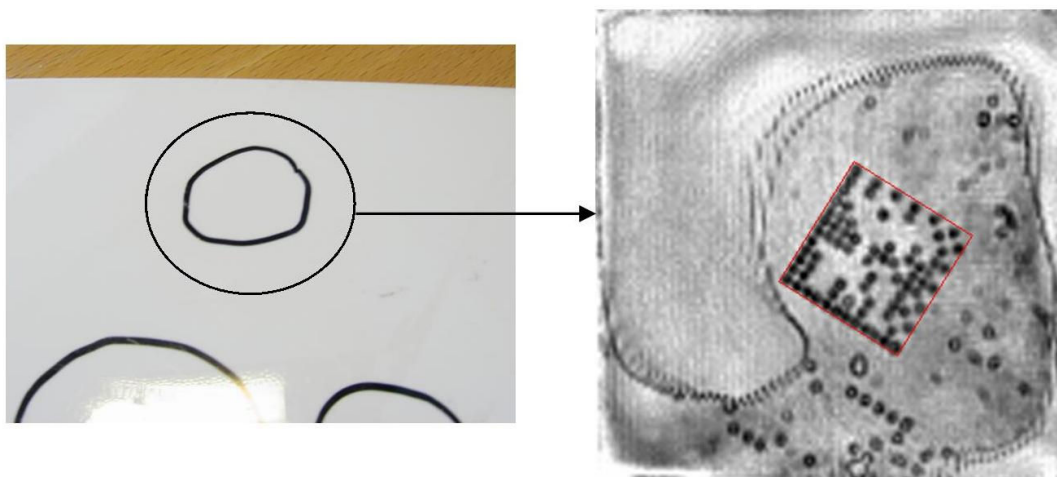
Read Through Paint Memo

This memo demonstrates DolphiScan's LOCUS Ultrasound Reader on painted Data Matrixes from the automotive industry, aerospace industry, and the military industry. The ultrasound images shown in the memo are generated using the LOCUS Ultrasound Reader with the SoundVision decode software.

Automotive Industry

This is a DMx sample from the automotive industry, typically used on car body parts. The DMx is marked with dot peen and is covered with white lacquer.

The illustration shows the painted DMx sample (left) and an ultrasound video image (right) from the LOCUS Reader software (SoundVision).



DMx from the automotive industry – covered with spray paint

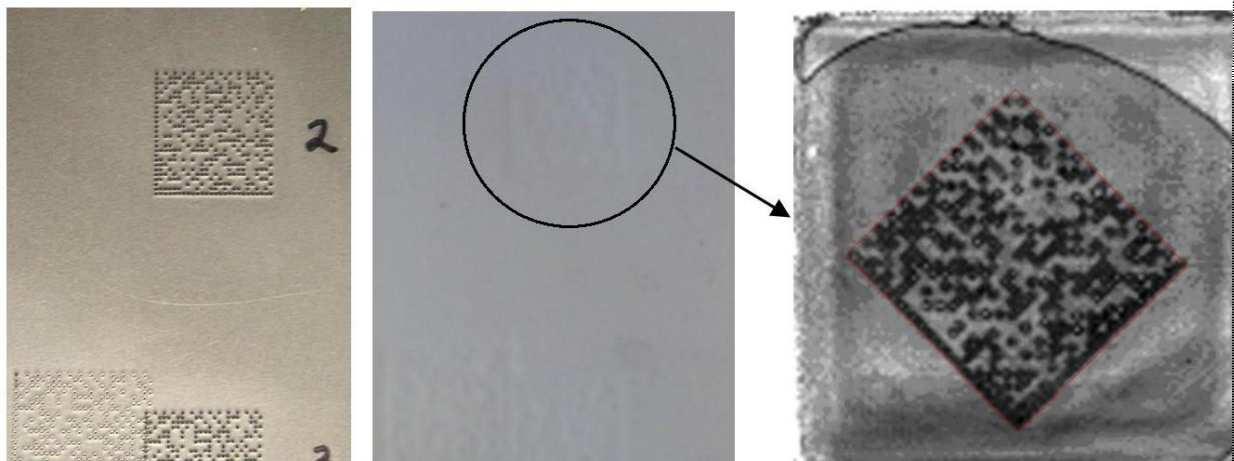
DMx Parameters:

- DMx size: 12x12
- Cell size: 0.75 mm / 0.030 inches
- Paint: 2 layers of primer/filler and 2 layers of white lacquer
- Marking method: Dot Peen

Aerospace Industry

This DMx is a sample from the aerospace industry. The DMx is marked with dot peen on a thin steel plate, and is covered with white spray paint.

The illustration shows the DMx before and after it was painted. To the right is an ultrasound image generated with the LOCUS ultrasound reader and the SoundVision software.



DMx from the aerospace industry, covered with spray paint

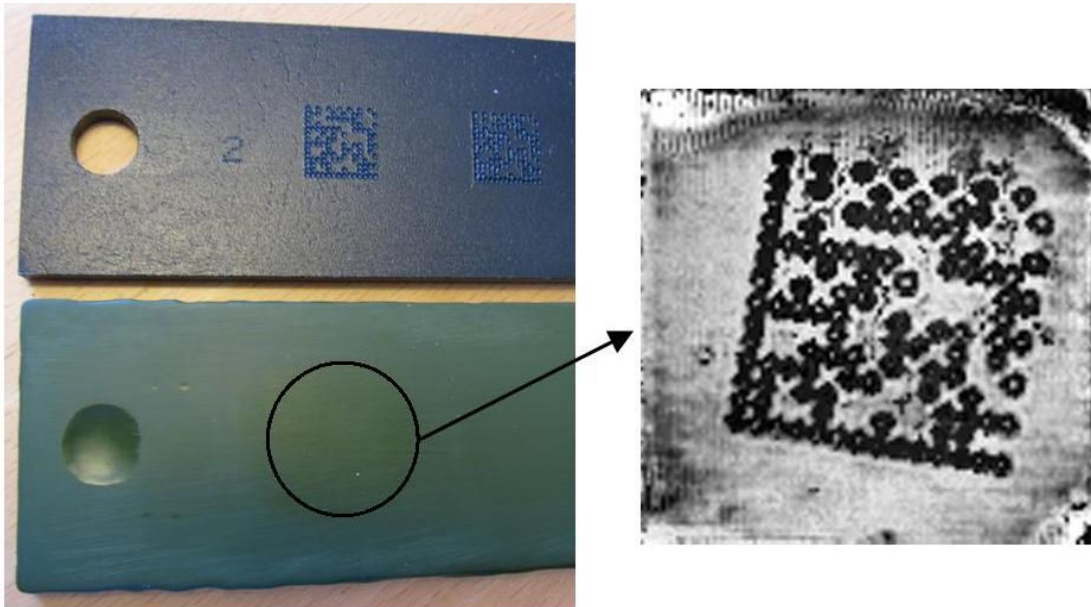
DMx Parameters:

- DMx size: 26x26
- Cell size: 0.6 mm / 0.024 inches
- Paint: 1 layer of primer, 2 top coats (0.08 mm / 0.003 inches)
- Marking method: Dot Peen

Military Industry

This DMx is a sample of steel marked with dot peen. The DMx is covered with several layers (0.5mm / 0.02 inches) of CARC (Chemical Agent Resistant Coating) paint. CARC is a paint used on military vehicles.

The illustration shows the painted DMx (bottom left) and an ultrasound image (right) generated by the LOCUS ultrasound reader. An identical unpainted DMx sample is shown (top left) for comparison.



DMx painted with CARC (Military paint)

DMx Parameters:

- DMx size: 14x14
- Cell size: 1.0 mm / 0.039 inches
- Paint: 1 layer of primer, 7 layers of CARC paint (0.5mm / 0.02 inches)
- Marking method: Dot Peen