

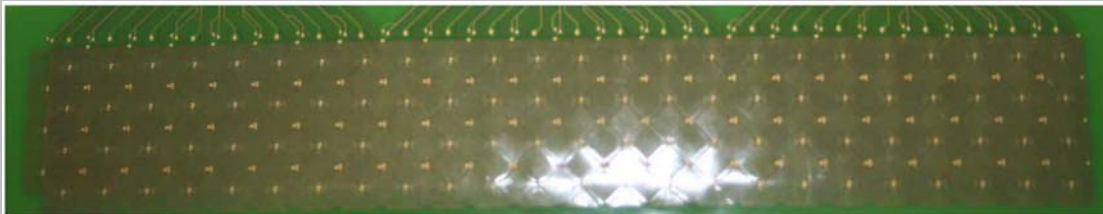
Large Area Inspection & Structure Health Monitoring Using Magnetic Carpet Probe



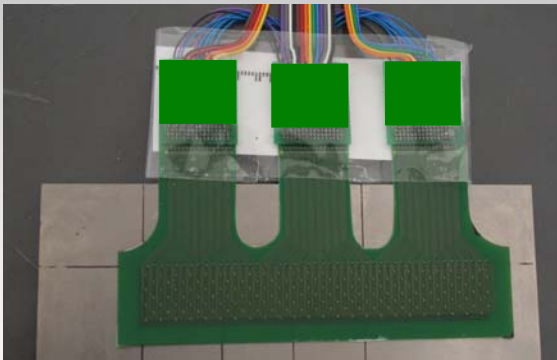
~0.008" thick film conformable
to curved surface



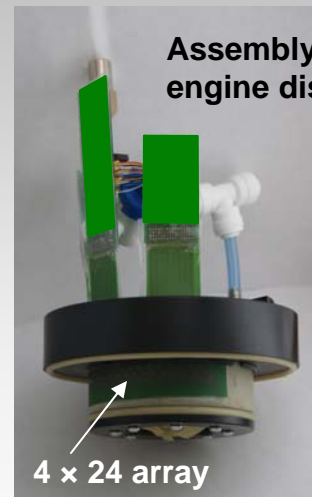
3 x 10 array covering 0.625" x 2.00"



4 x 24 array covering 0.750" x 4.25"



Calibration on a Ti EDM standard



Assembly for testing
engine disc bore ID

4 x 24 array



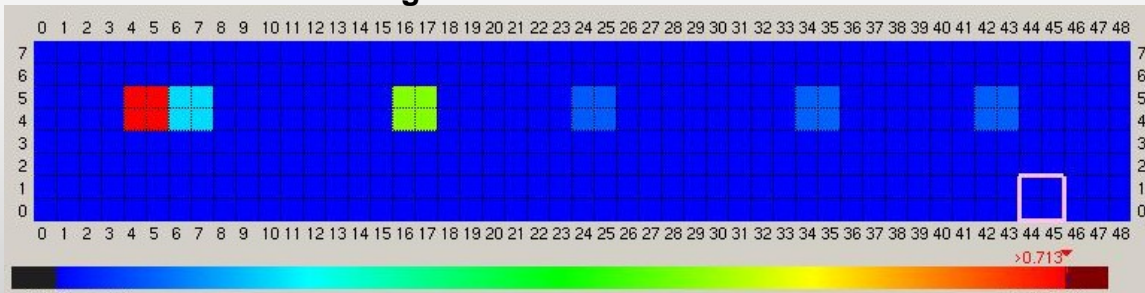
IMTT

3141 W. Torreys Peak Dr.
Superior, CO 80027, USA

P: 303-554-8000 F: 303-554-8001

<http://www.imtt-usa.com>

Detecting EDM notches on a Ti standard



.100"x.050"
1.946v

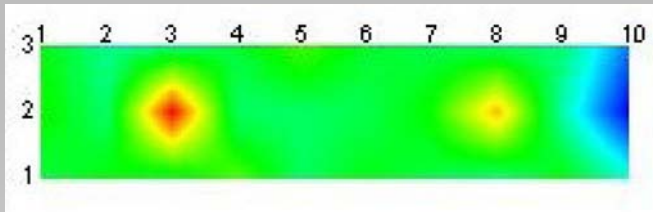
.060"x.030"
0.937v

.030"x.015"
0.141v

.020"x.010"
0.125v

.010"x.005"
0.074v

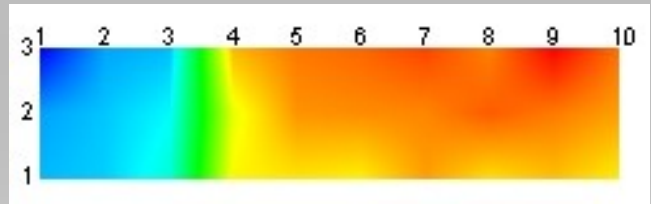
Detecting EDM notches on a Al standard



.060"x.030"

.030"x.015"

Detecting backside corrosion on a 0.024" thick Al standard



10% corrosion

No corrosion

1. NDI – static, but rapid electronic scan over the entire covered area, no mechanical movement is needed.
2. SHM - minimum weight, maximum flexibility and maximum robustness working in harsh environment.
3. 2-D coil array with higher resolution and more information about crack growth than any 1-D coil array.
4. No blind area in crack detection.
5. Driven by SSEC, a general-purpose instrument – the lowest overall cost.



IMTT

3141 W. Torreys Peak Dr.
Superior, CO 80027, USA

P: 303-554-8000 F: 303-554-8001

<http://www.imtt-usa.com>

Detecting Early Stage Corrosion under Thick Paint Initial Results

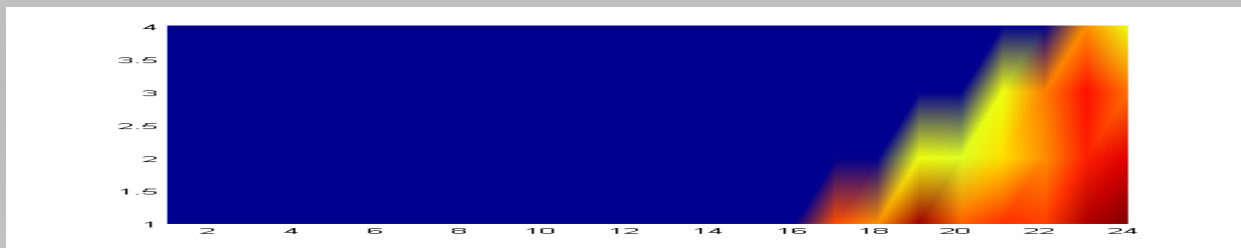
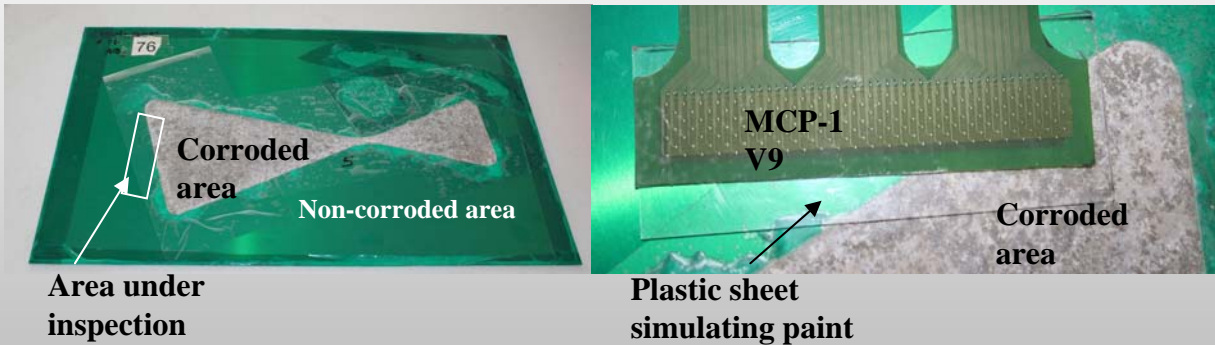


Image showing the corroded area under 0.023" thick simulated paint

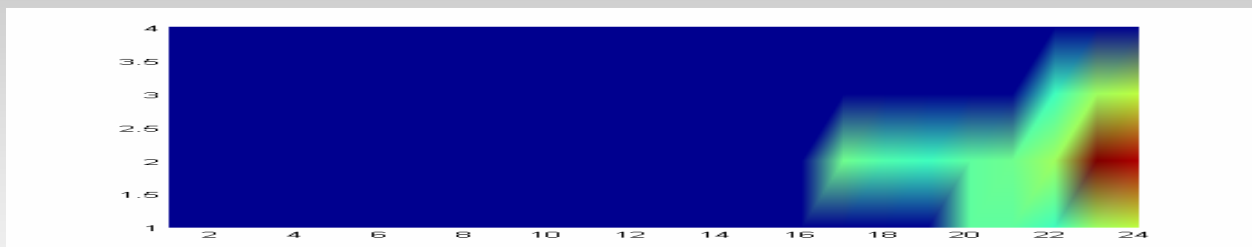


Image showing the corroded area under 0.040" thick simulated paint



IMTT

3141 W. Torreys Peak Dr.
Superior, CO 80027, USA

P: 303-554-8000 F: 303-554-8001

<http://www.imtt-usa.com>