



SPARK TESTING PRODUCT SHEET

Spark Testing



Specifically designed for non-conductive or semi-conductive, painted, glass-lined or coated pipes and vessels, spark testing is a highly accurate NDT technology. It is typically used concurrently with visual asset inspection when potential damage to the surface or coating of an asset is detected.

Our robust robotic platforms can carry a spark testing brush tool for identifying and assessing the impact of defects or potential surface or coating integrity issues in your equipment. This brush can be customized based on surface properties (e.g. curvature). Invert Robotics has integrated Buckleys PHD Pro Kit spark testing equipment with the robotic platform.



Defects or issues that can be assessed include:

- Pinholes
- Voids
- Cracks
- Thin spots

NDT technology fit for even the most delicate surfaces

The spark testing brush on our robotic platform is designed to be used safely on any surface. The soft-metal copper wires on the brush are placed in such a way to move smoothly over even the most delicate surfaces.



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Highly accurate location of damages or potential issues

Sparks are generated in the copper wires of the brush only where there are damages in the coating or lining of your asset. This makes it possible to accurately locate any surface or coating integrity issues.

The precise location of all defects is recorded by the Invert Robotics software to carry out repair work or for future reference.

Optimize asset maintenance

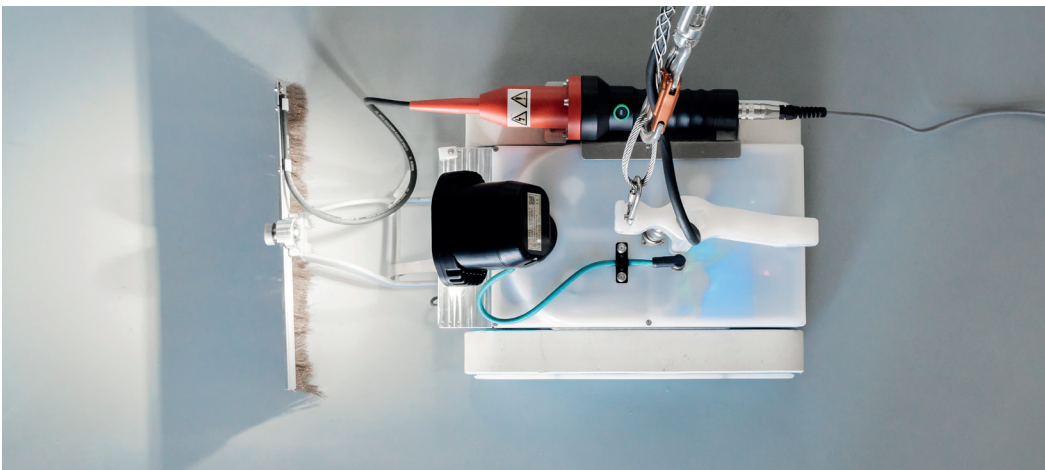
The Invert Robotics spark testing brush not only locates defects, importantly, it measures coating or lining integrity to enable you to optimize asset maintenance.

Customized brush

Get the best test results by ensuring the brush sweeps across all surface areas at precisely the same distance. Let us customise the brush to fit your surfaces: bigger, smaller or curved.

Ensure asset integrity: however thick the lining

Whether your asset has a thick lining or a thinner one, our spark testing brush measures lining or coating integrity – of both non-conductive or semi-conductive lining or coating – using highly accurate DC spark testing.



Camera		
	V3.2	Belly Camera
Camera Specs (Stills)		
Sensor Frame Resolution (Megapixels)	2MP	2MP
Sensor Type	Exmor R CMOS	
Optical Zoom	30x	N/A
Camera Specs (Video)		
Maximum Frame Size	1920x1080	1280x720
Maximum Frame Rate	30fps	12fps
Compressed Video Format	H.264	H/264
Transmission method	RTSP	RTSP
Resolution at Max Zoom (lp/mm)		
Defect resolution	65 micron (close) 0.6mm at 10m	N/A



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3 reasons for using our robotic platform to check asset integrity

Safer

**Minimize human entry
into assets**

No need for human entry into assets: the robotic crawler does all the inspection work while your inspectors remain at a safe distance and see any findings real-time.

Better

**See more,
more accurately**

Regardless of the roughness of the coating or lining surface, our spark testing tool accurately assesses its integrity. Better than dye-penetrant testing – that only measures the depth of a certain defect – our tool accurately informs you on whether your substrate is sufficiently protected.

Faster

**Maximise operational
uptime and
cut back costss**

With a minimum set-up time, and without need to set up any scaffolding for inspection purposes, inspections can be conducted at significantly lower costs. Our versatile robotic crawler scales any surface to detect and report critical defects real-time for immediate or next-day repair. What's more, our tool leaves no potential contaminants in your asset during testing.

Data-driven maintenance planning

Get a full understanding of your asset integrity. Use our comprehensive inspection data portal to unifies your robotic inspection data into a central online location; allowing you to view, track, and localise issues over time with the utmost precision.

Don't just take our word for it

See our robotic crawler at work. Request a demo or contact your local Invert Robotics sales representative for additional information. With seven offices around the globe, we'll respond quickly to your inspection needs.

Robust adhesion technology – also on non-ferromagnetic surfaces

Whatever the surface, our robots go anywhere. Climbing or descending, our platforms' robust adhesion technology – including unique vacuum adhesion – keeps them crawling smoothly and securely over both non-magnetic and magnetic surfaces. Our versatile robots can even complete inspections hanging upside, also when carrying heavy NDT tooling.

