# Plug'n Test fluid/metal compatibility testing

# The USB----DIGIGALV

## AgilDigi\_Win Datasheet

## Version 2.1 June.08

USB Interface

Agil DWin Acquisition Software



Instant Screening of Fluids

Adjust fluid Formulations And see Effects in Real-time

Output Data
Direct to Excel
uA and um/yr
wt loss



Reduced Development Time

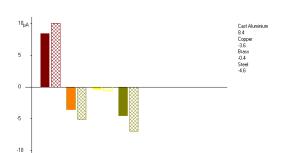
#### OVERVIEW

The DIGIGALV System is an innovative chemical electronics technique, which offers lubricant developers instant evaluation of corrosion inhibitor performance in machining coolants, and engineering water based fluids.



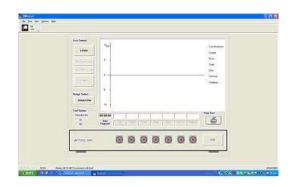
The USB----DIGIGALV is a significant advancement in testing technology, adding a COM layer which enables plugin testability. Plug any BKT instrument into the Agilent USB DAQ and start the instrument software. This technology negates the need for network enabled computers and data transfer. Collect the data at source.

The magnitude of the galvanic currents that flow between the test metals is displayed in real- time in a histogram format on the computer screen.



The freeze/split feature allows the user to visualise the effects of inhibitor additions at any point in a test. User interaction allows probe metal channels to be switched in or out from the virtual instrument panel displayed on-screen whilst the test is running.

Current vs Time plots allow persistence testing of inhibitor systems and are typically used to display inhibitor breakdown/oxidation at increased temperatures. The instrument display ranges from 1uA-10uA HIGH and 100uA-1mA in the LOW range settings. Range selection at the click of a button gives the flexibility to test from saline to highly resistive fluid media.



### **Applications**

- Automotive antifreeze testing
- Cutting fluids engineering
- Marine and Offshore fire resisting fluids
- Aircraft cleaners and degreasers
- Water based hydraulics
- Steel manufacturing rolling lubricants
- Boiler water treatment