



STEADY STATE GAS PERMEAMETER

# Application Note

## June 2021

DCI PRODUCT HIGHLIGHT

## Product Highlight

### Did you know DCI made that?

DCI has a vast product line allowing tests in Routine Core Analysis, Special Core Analysis, Rock Mechanics, and Fluid Properties. Some of the products you may not know DCI manufactures are highlighted below.

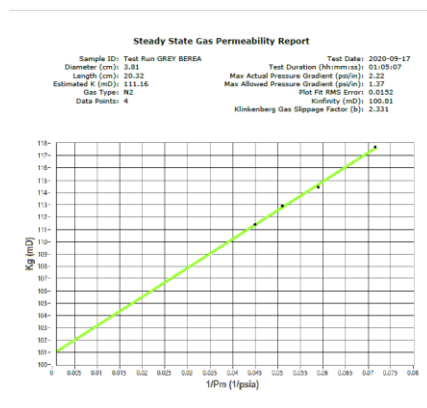
#### Steady State Gas Permeameter

DCI recently updated the design for their steady state gas permeameter. This permeameter allows for rapid testing of samples with a simplified quarter turn loading and unloading of samples. The fully automated software automatically selects appropriate pressures and flow rates to rapidly conduct tests and generate a test report with either a single point test, or a multipoint test to determine the Klinkenberg corrected permeability.

Does your lab deal with varying sample diameters? If so, the core holder and core holder stand for the steady state permeameter is easily changed from one setup to the next for the sample diameters you need.

Data from the tests conducted is automatically compiled into an easy to read report formatted with the results of the test

conducted. Beyond the report a .csv data file is generated to allow for review of the raw data generated from the test to allow for review and confirmation of the test report generated.



#### VPA Syringe Pump HMI Update

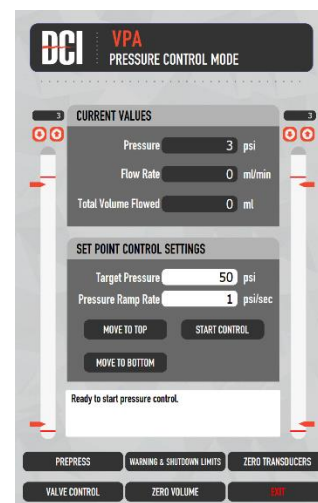
As touch screen technology has progressed in recent years so has the touch screen HMI for our VPA syringe pump. The latest touch screen features a large 10" touch screen with ample space for buttons and displays making it the easiest pump on the market to operate.

[Steady State Gas Permeameter](#)

[VPA Syringe Pump HMI Update](#)

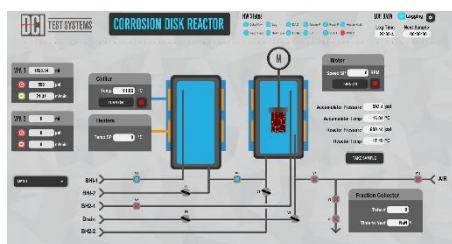
[Rotating Disk Corrosion Reactor](#)

[Custom Core Holders & Visualization Cells](#)

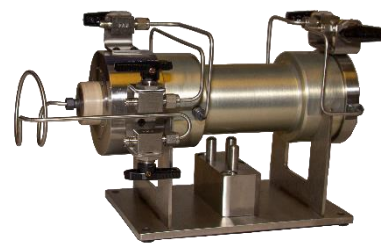


## Rotating Disk Corrosion Reactor

This system allows the user to study the reaction of multiple types of fluids with a solid disk shape object at user defined angular velocities. These results can be used in the design of stimulation treatments of wells. The Rotating Disk Corrosion Reactor system consists of three main components: the valve panel, reactor assembly and fluid accumulator. Each of these components is integrated into the complete system with custom software and data acquisition for comprehensive control and monitoring of tests.



manufacturing core holders for micro CT and medical CT applications with features such as triaxial loading, P&S wave measurement, and in situ heating



Many researchers also want to have the ability to visually record interactions between fluids and core samples at elevated temperatures and pressures. DCI has worked with researchers at multiple institutions to design and manufacture visualization cells that allow for pressures up to 7,000 psi and temperatures up to 150° C.

## Custom Core Holders & Visualization Cells

DCI has been creating custom core holders and other pressure vessels, such as visualization cells, for customers looking to perform unique research in the field of core analysis. In recent history there has been an increased interest in core holders that are CT compatible to allow for analysis of the fluids in pore spaces of rocks at elevated temperature and pressure. Micro CT systems have increased the resolution of this technology and created challenging applications for designing and manufacturing core holders. DCI has assisted in