
SESSION 11: Special Topics

Paper 11.2 Wednesday POSTER Session 1:15 to 2:45 PM

Mechanical Test Bench for Material Engineering and Testing in the 20K Region

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Absolut System has extensive experience in the design and production of high capacity remote Helium close loop cryogenic temperature controllers. Thanks to this heritage, Absolut System develops custom cryostats to support material and sensor characterization on a wide temperature range from 20K cryogenic temperature linked to Hydrogen activities up to positive temperatures. Those cryostats envelop the fixed and mobile fixtures of standard mechanical test benches and will be used both for static and fatigue testing. Two cooling concepts are used, depending on the testing needs: conductive cooling and exchange gas cooling for both highly conductive and insulating materials. Various realizations will be described and performance tests will be reported in this paper.