

# International Round Robin Test for Tensile Test on REBCO Wires at Cryogenic Temperatures

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Within the framework to establish standards of test methods for superconducting technical wires, various standards have been issued by the International Electrotechnical Commission IEC (standard documents IEC 61788-1 to -20). Following the experience of the successful Round Robin Test RRT for Tensile Test on REBCO Wires at Room Temperature, the effort is extended to Tensile Test on REBCO Wires at Cryogenic Temperatures and is coordinated by CryoMaK lab in KIT.

Different commercially available five REBCO wires from five different manufacturers and one BiSCCO wire from another supplier are provided by VAMAS TWA 16 for testing. Samples were distributed between eight participating labs from five different countries for testing according to the specified guidelines. After the test results have been delivered from all participants, the results were evaluated with statistical tools to investigate the amount and main source of scatter in the test results.

The final goal of RRT is to issue an ISO/IEC Standard for cryogenic temperature tensile test for REBCO wires.

In this report the results of Round Robin Test on REBCO Wires at Cryogenic Temperatures are presented and discussed.