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Sub : Qualification of tensile testing facility for testing of materials at elevated Temperatures

TCR Engineering Services P. Ltd. Mahape has developed a testing facility for tensile testing of material at elevated temperatures. TCR Engineering Services P. Ltd. Mahape. Offered on, **17.12.2012, 21.12.2012 & 24.12.2012** this testing facility to NPCIL for its qualification. All prerequisite including proper sample preparation, calibration of UTM machine and instruments were ensured before taking up the testing of samples at three different temperatures.

The samples of materials were tested at three different level of temperatures i.e. 300° C, 500° C and 800° C. Three samples of same material at each temperature were tested and their properties were recorded. It was noticed that, no temperature variation was noticed during the test at test temperatures. All the test parameters of the test facility were found within the acceptable range.

In view of satisfactory test results, tensile test set up at elevated temperature (UTM testing machine, furnace, measuring devices, extensometer etc.) is found satisfactory for testing of samples of materials up to 800° C. NPCIL is requested to issue certificate of qualification of this test (Tensile Test at Elevated Temperature.)

Authorized signatories
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- Encl : (1) List of Machine & Instruments qualified for Elevated temp. (Annexure- I)
(2) Test reports (Annexure- II)
(3) Time temperature record & graph (Annexure -III & Annexure -IV).
(4) Procedure of tensile testing of material at elevated temperature (Annexure-V)

NPCIL Comment:

The test set up developed by M/s. TCR Engineering Services P. Ltd. at Mahape for tensile testing of samples of materials at elevated temperature was offered to NPCIL on **17.12.2012, 21.12.2012 & 24.12.2012** for its qualification. Based on test results, the test set up is qualified for tensile testing of materials at elevated temperature up to 800° C.

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