

Amendments to the technical specifications
Tender Notice No. NITW/CS-3/2018-19, dated 07-09-2018
Item No. 4 - Creep testing machines (18 Nos.)

S.No.	Ref. in our specs	Existing	Changed as
1.	S. No. III of section 2.1	Furnace temperature range: 50°C-1000°C with an accuracy of $\pm 1^\circ\text{C}$	Temperature range 200°C-1000°C. Please note that this corresponds to the test temperature range.
2	S. No. VI of section 2.2	The material for the frame is IS 226 mild steel (MS)	The material for load frame can be IS 226 mild steel (MS) or an equivalent high strength material.
3	S. No. III of section 2.3	There must be a provision to de-clutch the motor assembly from the gear assembly manually by hand wheel	In case of failure in automatic mechanism, manual system is needed to unload the specimen. If latter can be done in automatic mode, then automatic mechanism for the same is acceptable.
4	S. No. IV of section 2.3	Precise, anti-rotation worm gear drive jack with at least 100 mm linear travel and powered by a gear reduced high torque motor.	Precise, anti-rotation worm gear drive jack with at least 100 mm linear travel and powered by a gear reduced high torque motor. Alternatively, an electrical actuator is also permitted to perform the same function.
5	S. No. VI of Section 2.3 (actually this is section 2.4, but by oversight mentioned as 2.3)	Furnace dimensions <ul style="list-style-type: none"> • Outer Diameter: 250 mm • Inner Diameter: 75 mm • Height: 375 mm 	Inner diameter: Minimum 75 mm (to accommodate the 4-rod extensometer) Height: Maximum 375 mm to accommodate creep specimens with lengths up to 120-150 mm. But, uniform heating zone of 150 mm should be maintained.
6	S. No. I of section 2.6	Pull rods must be made of nickel-base superalloy grade INCONEL 713C	Pull rod material must be INCONEL 713C or Mar-M 246 or an equivalent superalloy with similar or better high temperature properties up to 1000°C.
7	Section 2.9	Materials of the extensometer should be nickel base superalloy grade INCONEL 713C	Extensometer material must be INCONEL 713C or Mar-M 246 or an equivalent superalloy with similar or better high temperature properties up to 1000°C.
8	S. No. II of section 2.10	Stroke: 30-40 mm length	Minimum stroke to be measured should be 30 mm.
9	S. No. III of Section 2.14	Calibration certificate	Apart from ASTM standards, equivalent ISO standards are also accepted.

Handwritten signature

Special Conditions:

Delivery period: Can be in single lot or in phased manner.

- In case of single delivery, the total delivery period is 5 to 6 months
- In case of phased manner - 10 machines should be supplied within 3 months from the date of PO, and the rest in within next 3 months (i.e. within 6 months from the date of PO).

Prices: FOB / CIP by AIR only

Comparison of prices will be done based on FOR destination.

EMD - Can be Cheque / DD / Bank Guarantee (BG)

Certificate of origin has to be issued from Chamber of Commerce

Pre-installation requirements for site preparation are to be submitted along with tender document.

Payment terms: 100% irrevocable Letter of Credit (LC), 90% against submission of shipping documents and rest 10% will be after installation and satisfactory performance. However, LC will be opened on receipt of 5% of the total order value (including the EMD) towards Security deposit (SD).

