

Deformation Simulation Laboratory

IIT Bombay

Requisition form for TA Instruments' Dilatometer DIL805A/D

Date:

1. Name of User:
2. **Department/Company/Institute Name:**
3. Official email id:
4. Category: External student/ National Lab/ Industry- Small Scale / Industry- Large Scale
(Please √)
5. Type of Test: Quenching/ Deformation/Sub-zero/Alpha Measurement
6. Sample Material: **(Please specify)**
Sample Dimension: 10mm length x 4mm dia. (Quenching), 10mm length x 5mm dia. (Deformation) Max. Samples: 6
(Hollow cylindrical samples preferred for high cooling rates and mandatory for sub-zero test)
7. Parameters for Testing:
Upper Target Temperature (°C):
Soaking Time at Upper Target Temperature:
Heating Rate: °C/sec or min Cooling Rate: °C/sec or min
Intermediate cooling Temperature (if any): °C, Holding Time: min
Final Temperature:
8. Environment: Vacuum/ Nitrogen/Argon / Helium **(Please tick)**
(Please note that gas cannot be interchanged during the test run and Helium will be used only for very fast cooling in excess of 50°C/sec)
9. For any other requirements, please draw a line diagram of the heating, soaking and cooling required ***(You can use the backside of this requisition, if needed):***
(Please bring a CD/DVD for collecting your data, when you come)

Signature of User

Signature of Supervisor

Deformation Simulation Laboratory

IIT Bombay

Requisition form for Gleeble 3800

Date:

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(Please ✓)

5. MCU to be used: Hydra-wedge/Pocket Jaw

6. Type of Test: **Uniaxial flow Stress/ Plane Strain---** with/without water quenching/
Tensile/ Continuous Casting/ Hot Ductility/_____

7. Sample Material:

Sample Size: 15mm lengthx10mm dia. (Flow Stress), TensileTest: Ask for dimensions
20mmx15mmx10mm (Plane Strain Test) Max.no. of samples: 8

8. Test Parameters:

Strain Rate:

Strain/Percent deformation:

Number of Deformations:

Temperature: °C

Soak Duration:

Atmosphere: Air/ Nitrogen/Vacuum

(Please ✓)

Heating rate/sec:

Cooling rate (if needed):

Cooling Medium: Air / Water / normal cooling

(Please ✓)

(Please note that for runs involving water quenching, no vacuum or atmosphere will be used.)

9. Any other requirements (*You can use the backside of this requisition, if needed*)

(Please bring a CD/DVD for collecting your data, when you come)

Signature of User

Signature of Supervisor