

**MATERIAL TESTING LABORATORY**  
**LIST OF TESTING EQUIPMENTS AT BDL, KACHANBAGH**  
**(Charges are indicative only)**

SI No	Description	Specification	Hourly Rate in Rs
1	Universal Testing Machine	Make: Roell+Korthus, Germany, RKM 600 Capacity : 600KN & 10KN, L.C : 0.001 KN & 0.01 KN Cross head speed:0-600mm/min	Rs 1000/-
2	Universal Testing Machine	Make: 50KN UTM INSTRON, USA Capacity : 50 KN & 5KN, L.C : 0.001 KN & 0.01 KN Cross head speed:0-600mm/min	Rs 1000/-
3	Vickers Hardness Tester	Make : George Reicherter, Germany, Brovisor KL2 Max. Load : 10Kg	Rs 750/-
4	Semiautomatic Vickers/Brinell Hardness Tester	Make : George Reicherter, Germany, Brovikop Max. Load : 187.5 Kg Dual Purpose: Vickers and Brinell	Rs 750/-
5	Metallurgical Microscope	Make:NIKKON, Epipot Magnification: 50,100,200,400,800,1000X	**
6	Stereo Zoom Microscope	Make: Nisho Optical Company, Japan, STZ 250 Magnification : 0-250X Zoom Ratio : 1:6	**
7	Radiography-I	Rich Seifert, Germany, ISOVOLT 420 With DS 1 Control Panel Capacity: 420 KV , Constant Potential Angle: 40°C, Tube Current: 10mA, Focal size: Dual spot 4.5x4.5mm & 1.8x1.8mm, Inherent Filtration : 7mm of Be. With RTR facility	**
8	Radiography-II	Make: ANDREX, 160 with Control Panel Capacity: 160 KV , Constant Potential Angle: 40°C, Tube Current: 10mA, Focal size: Dual spot 1.5x1.5mm & 0.4x0.4mm	**
9	Atomic absorption spectro meter	Make: GBC Avantha, Australia Analysis of elements by flame method	**
10	Carbon & sulphur analyzer	Make: LECO CS 200, USA Analysis of Carbon & Sulphur by combustion method	Rs 1500/- per sample
11	Handheld XRF analyser	Innov -X systems, USA Analysis of elements by X-Ray method	Rs 1500/- for first five elements Rs 500/- for subsequent

12	Foundry Master UV spectrometer	Oxford Instruments Analytical, Germany Analysis of elements by Spark Method	**
13	IndustrexHPX-1	Carestream Health, USA Digital Film	**

### INSPECTION FACILITIES AVAILABLE AT BHANUR

SI No	Description	Specification	Hourly Rate in Rs
1	Octagon Length Measuring Machine : Used for Length measuring and Diameters of Thread Plug Gauges, Thread Ring Gauges, Plain Plug Gauges, Plain Ring Gauges.	Accuracy: 0.3+ L/1000 µm Range: 0-450 mm for External 5-440 mm for External	**
2	CARL ZEISS Universal Measuring Machine with Rotary table (3D-CMM)(UMS - 850):	Accuracy: 1.9+ L/300 µm Range: X-600 mm Y-	**
3	Hydraulic pressure testing equipment (M/S. LEONARD ENGINEERING Pvt. Ltd.,)	Chamber dimension: Length : 95 mm, Breadth: 65 mm, Width: 50 mm Pressure range : 200 to 1500 bars The system is used for testing high pressures both internal and external using water as the testing fluid. It is	**
4	Hydraulic pressure testing equipment: (M/S SIMPLETEC Automatics PVT . LTD):	Test Chamber dimension: Length : 55 mm, Breadth: 90 mm, Width: 55 mm Pressure range : 400 to 1000 bars	**
5	Universal Hardness testing machine (M/S WILSON): Used for the inspection of Hardness ( Rockwell, Super Rockwell, Vickers & Brinell).	Max size of the Specimen : Height: 200mm Throat: 150mm Test load: 1-250 Kgf	Rs 750/-
6	Electrochemical Universal testing machine (M/S. MICRO TEST SA- SPAIN): Used for the inspection of Ultimate tensile stress, Yield Strength, Elongation of Flat & Round jobs in tension & compression mode	Range of the Specimen sizes: flat specimen : 0 to 7.5mm. Round specimen : 3.2 to 21.5 mm dia.	**

**NOTE:**

1) \*\* : The test facility will be provided to the private party by way of quotation based on the extent

2) Statutory duties & taxes are extra as applicable