



RATE LIST OF VARIOUS TESTING/SERVICES w.e.f. 01.08.2023

Chemical Energy & Environmental Laboratory

The following Test/Analysis/Sampling etc. can be taken from our laboratory:

1. Chemical Analysis of Iron & Steel :

<u>Elements</u>	<u>Rate per sample (Rs.)</u>
i) For Basic 5 elements (i.e. C, Mn, Si, P & S)	Rs. 3000/- per sample
ii) Each element of above 5	Rs.1000/- per sample
iii) Any two elements from basic five elements	Rs.1500/- per sample
iv) Nickel, Chromium, Tungsten Molybdenum in steel	Rs.1500/- per sample per element
v) Aluminum, Copper, Titanium (By AAS)	Rs.1500/- per sample per element
vi) Nitrogen (By Nitrogen Testing apparatus)	Rs.2000/- per sample
vii) Total Carbon in Cast iron	Rs.1000/- per sample
viii) Silico Manganese	Rs.1800/- per element per sample
ix) Boron, Cobalt, Calcium, Tin, Niobium, Vanadium in Steel	Rs.1500/- per element per sample
x) Ferro Chrome: Carbon	Rs.1000/- per element per sample
Chromium	Rs. 1800/- per element per sample
Silicon	Rs.1800/- per element per sample
Nitrogen	Rs. 2000/- per element per sample
xi) Ferro Silicon: Carbon	Rs.1000/- per element per sample
Silicon	Rs.1800/- per element per sample

Sponge Iron Analysis

i) Sponge Iron (Total Iron, Metallic iron, metallization)	Rs.3000/- per sample
ii) Total iron & moisture in Mill scale	Rs.2500/- per sample
iii) Total Carbon in Sponge iron	Rs.1000/- per sample
iv) Zinc in APCD Dust / Zinc Dust	Rs.2500/- per sample

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Analysis of Galvanized Steel

i) Analysis of mass of zinc coating	Rs.2500/- per sample
ii) Uniformity test	Rs.1800/- per sample
iii) Adherence Test	Rs.1000/- per sample
(Combined all three)	Rs.4500/- per sample
iv) Tin Coating	Rs.3500/- per sample
v) Zn Coating thickness determination	Rs.1000/- per sample

2. Fuel Analysis :

Parameters	Charges (Rs.) per sample
i) Moisture Content	Rs. 1000/-
ii) Viscosity Pre-heat Temp.	Rs. 1000/-
iii) Calorific Value (Coal or Oil)	Rs. 2000/-
All three above test combined in Furnace oil	Rs. 3000/-
iv) Sieve Analysis	Rs. 1000/-

3. Water Analysis:

i) Total Dissolved Salts (TDS)	Rs.700/- per sample
ii) Suspended Solids	Rs.800/- per sample
iii) pH	Rs.250/- per sample
iv) Conductivity	Rs.250/- per sample
v) Hardness	Rs.800/- per sample
Combined All above tests	Rs.2000/-per sample

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4. Air Testing Charges

S. No.	Test/Analysis	Charges (Rs.)	
		Ambient Air	Stack
1.	CO	--	Rs. 500/-
2.	CO ₂	--	Rs. 500/-
3.	NO _x	--	Rs. 2000/-
4.	Noise (per location)	Rs. 2000/- Per visit	--
5.	O ₂	--	Rs. 500/-
6.	SPM	--	Rs. 4000/-
7.	SO ₂	--	Rs. 2000/-
8.	Temperature	--	Rs. 500/-
9.	Velocity	--	Rs. 1000/-

5. SAMPLING/COLLECTION CHARGES

Air (Stack Monitoring & Ambient Air Quality monitoring)

Type of Sample	Charges (Rs.)
	Stack
For one day	Rs. 5000/-
	Consisting of 8 hrs. in Regular 9 a.m. to 5 p.m. 24 Hrs. Sampling Rs.10000/-. Odd hours Rs.5000/- per Sample consisting of 8 hours.

NOTE: Outstation charges Rs.2000/- per day wherever applicable.

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6. METALLOGRAPHY LABORATORY

A. Metallography Laboratory

S. No.	Test	Charges (Rs.) per sample
01	Microstructure	Rs. 1500/-
02	Grain Size determination	Rs. 1000/-
03	Inclusion Rating	Rs. 1500/-
04	Decarburization depth	Rs. 1500/-
05	Case depth	Rs. 1500/-
06	Vickers' cum Micro Hardness	Rs. 1200/-
07	Image Analysis	Rs. 3500/-
08	Macro Examination of Steel	Rs. 1500/-
09	Sulphur Print	Rs. 2000/-
10	Distribution of carbides	Rs. 1500/-
11	Carbide density	Rs. 1500/-
12	Jominy test/Hardenability	Rs. 5000/-
13	Blue Fracture Test	Rs. 5000/-

NOTE: Sample preparation charges Rs.500/- shall be taken extra wherever applicable.

B. Direct Reading Spectrometer

S. No.	Test	Charges (Rs.) Per Sample
01	Elemental analysis of Steels & Cast Iron for 28 elements and Grade determination	- Rs.300/- for C, S, P, Si & Mn. - Rs.100/- for each additional element. - Rs. 750/- for all elements (28) i.e. C, S, P, Si, Mn, Ni, Cr, Mo, V, W, Cu, Al, Sn, B, Nb, Co, Ti, As, Bi, Ca, Pb, Zn, Zr, Sb, Ta & Fe. - Rs.2000/- for providing grade - Rs.100/- for providing C.E

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7. MECHANICAL & NDT LABORATORY

Sr.No.	Name of existing Test/Analysis	Charges (Rs.) Per Sample	
1	Tensile/Compression Test by UTM (TS, YS, % Elongation)	Rs.1200/- Dumble Sample Preparation Rs.1000/-	
2	Bend Test	Rs. 500/-	
3	Re-bend Test	Rs. 500/-	
4	Double Shear Test	Rs. 500/-	
5	Drift Expanding (for tubes)	Rs. 500/-	
6	Flattening (for tubes)	Rs. 500/-	
7	Hardness Rockwell/Brinell	Rs. 500/-	
8	Impact Testing (Izod/Charpy) (Set of three samples)	Room Temperature	Rs.1000/-
		Zero Testing	Rs.1500/-
9	Erichson Cupping	Rs. 500/-	
10	Dynamic/Impact Hardness Test (SHORE)	Rs. 500/-	
		(a) Visit Charge a) Local- Rs.500/- b) Out station – Rs.1000/- (b) Transport a) Local – Rs.500/- b) Out station – Actual	
11	Ultra Sonic Test	Rs.700/- per Sq. Meter Scanning Charge + visit charge of Rs. 1000/- per hour. Minimum Charge Rs.750/- a) Local-Rs. 500/- b) Out station – Rs.750/- + Transport a) Local – Rs.500/- b) Out station – Actual	
12	Surface roughness	Rs.1000/-	
13	Strain ageing	Rs.1500/-	
14	N value	Rs.2000/-	
15	R value	Rs.2000/-	
16	Bake hardening	Rs.1500/-	
17	Y groove	Rs.3000/-	
18	Camber	Rs.500/-	
19	Rolling mass	Rs.500/-	

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20	Crown	Rs.500/-
21	Flattening	Rs.500/-
22	Strain measurement	Rs.500/-
23	Freedom from defect	Rs.500/-
24	Surface finish	Rs.500/-
25	Straightness workmanship	Rs.500/-
26	Pipe/tube ends	Rs.500/-
27	Hydrostatic test	Rs.1500/-
28	Bend for strip 180°	Rs.500/-
29	Crushing	Rs.500/-
30	Bend of whole pipe 90°	Rs.500/-
31	Eccentricity	Rs.500/-
32	Fracture disc test	Rs.1500/-
33	Crop test of bar	Rs.1500/-
34	Cold shearability	Rs.500/-
35	Deflection	Rs.500/-
36	Shear strength	Rs.500/-
37	Ageing embrittlement	Rs.1500/-
38	Fracture toughness	Rs.1500/-
39	Magnaflux	Rs.250/- per Sq. Feet (Min. Charges Rs.550/-)
40	Measurements of Tolerances / Dimensions/Thickness	Rs.600/-
41	Weight per unit length	Rs.400/-
42	Twist (for tubes)	Rs.500/-
43	Rib Test	Rs.1000/-
44	Surface inspection of Ingots	Rs.1200/-
45	Pullout	Rs.15000/-
46	Cold Upsetting Test	Rs.2000/-

NOTE: Additionally if not specified sample preparation charges Rs.500/- shall be taken extra wherever applicable.

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8. Safety Inspection / Safety Audit

I.)

S. No.	Name of Equipment	Charges Rs.(each)
01*	Crane Testing (EOT, Electric Hoist, Winch Hoist, Mobile/Hydra Crane, Fork Lift)	Rs.1400/- upto 25 Ton crane Rs.1800/- above 25 Ton crane
02*	Chain Pulley Block	Rs.1000/-
03*	Chain Sling	Rs.600/-
04*	Pressure vessel upto 1000 ltr.	Rs.1500/- (without hydraulic test) (Rs.500/- for Additional 1000 Ltr)
05*	Hydraulic testing of pressure vessel upto 1000 ltr.	Rs.2500/- (Only Hydraulic Test) (Rs.500/- for Additional 1000 Ltr)
06*	Pressure vessel upto 1000 ltr. With hydraulic testing	Rs.3000/- (Including Hydraulic Test) (Rs.500/- for Additional 1000 Ltr)
07*	Dangerous Machinery/ Power Presses	Rs.1500/- per machine

II.)

08	Safety Audits	As per scope of work & man days required
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***Note: If no. of Equipments is more than five in the same unit, than the discount of 10% will be given.**

9. Electrical Testing's

S. No.	Name of Testing	Charges
1.	Transformer Oil Dehydration	Rs.6.00/- per liter subject to minimum charge of Rs.3000/- per transformer + Machine transportation.
2.	Transformer Oil Testing	Rs.700/- per sample Rs.300/- for Sample Collection

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10. Short Term Courses

S. No.	Name of Course	Duration	Charges
1.	Implementation of 5S	5 days Beyond 5 days	Rs.1,25,000/- per unit Rs.15,000/- per day
2.	In-house training programmes • Basic course • Specialized Course • Performance Improvement		Rs.40,000/- per day Rs.60,000/- per day Rs.75,000/- per day
3.	Development of SOP & SMP manual •		Depending upon type of modules & shall vary from case to case basis.
4.	Electrical Basics & Maintenance of electrical equipments	4 months (once a week)	Rs.15,000/- per student
5.	Furnace Operator	4 months (once a week)	Rs.20,000/- per student
6.	Chemical Testing of steel	4 months (once a week)	Rs.20,000/- per student
7.	Mechanical Testing	4 months (once a week)	Rs.20,000/- per student
8.	Safety in Steel Melting and Scrap Segregation	10 hrs.	Rs.10,000/- per student
9.	Understanding Steels & Cast Iron through Microstructure & Property Co-relationship – Microstructure examination	4 months (once a week)	Rs.20,000/- per student
10.	Quality steelmaking	4 months (once a week)	Rs.30,000/- per student
11.	Ferrous Heat Treatment	4 months (once a week)	Rs.25,000/- per student
12.	Ferrous Metallurgy for Non- metallurgists	4 months (once a week)	Rs.25,000/- per student
13.	Arc & Induction furnace steelmaking & Continuous casting	4 months (once a week)	Rs.30,000/- per student
14.	Auto Cad	40 hrs.	Rs. 6000/- per student
15.	Auto Cad with Isometric	50 hrs.	Rs. 8000/- per student
16.	Solidworks, Drafting, Modeling & Assembly.	100 hrs	Rs. 15000/- per student

NOTE:

1. GST shall be extra, as applicable.
2. Cost on travel, stay and other arrangements, if any are to be borne by the concerned unit.

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11. Energy Audits/Combustion Studies

S. NO.	Services	Charges
01	Energy Audit of Rolling Mills, Induction Furnaces, mini steel plants & general industries	As per load & volume of work
02	Mandatory Energy Audit, Monitoring & Verification (M&V) Audit of Designated Consumers of B.E.E.	As per load & volume of work
03	Combustion analysis of Re-heating furnaces	Rs.6000/- per furnace
04	Combustion performance study of Re-heating furnaces	Rs.20000/- per furnace
05	Technical visits	Rs.15000/- per day

12. Slag Testing

S. NO.	Services	Charges
01	FeO (Ferrous Oxide)	Rs.1500/- per sample
02	SiO ₂ (Silicon dioxide/Silica)	Rs.1500/- per sample
03	MgO (Magnesium oxide)	Rs.1500/- per sample
04	MnO (Manganese oxide)	Rs.1500/- per sample
05	CaO (Calcium oxide/Quicklime)	Rs.1500/- per sample
Note: Sample Preparation charges Rs.1000/- per sample shall be taken extra		

NOTE:

1. GST shall be extra, as applicable.
2. Cost on travel, stay and other arrangements, if any are to be borne by the concerned unit.

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