

RATE LIST OF VARIOUS TESTS w.e.f. 02.11.2016

Chemical Energy & Environmental Laboratory

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

1. Chemical Analysis of Iron & Steel :

The following elemental analysis by wet method could be done in our laboratory :

<u>Elements</u>	<u>Rate per sample (Rs.)</u>
i) For Basic 5 elements (i.e. C, Mn, Si, P & S)	Rs.2500/-
ii) Each element of above 5	Rs. 900/-
iii) Any two elements from basic five elements	Rs.1300/-
iv) Nickel, Chromium, Tungsten Molybdenum in steel	Rs.1000/- per sample per element
v) Aluminum, Copper, Titanium (By AAS)	Rs.1000/- per sample per element
vi) Nitrogen (By Nitrogen Testing apparatus)	Rs.1500/- per sample
vii) Total Carbon in Cast iron	Rs.1000/- per sample
viii) Silico Manganese	Rs.1000/- per element

Sponge Iron Analysis

i) Sponge Iron (Total Iron, Metallic iron, metallization)	Rs.2500/- per sample
ii) Total Carbon in Sponge iron	Rs.1000/- per sample

Analysis of Galvanized Steel

i) Analysis of mass of zinc coating	Rs.3500/- per sample
ii) Uniformity test	Rs.1800/- per sample
iii) Adherence Test	Rs.1800/- per sample
(Combined all three)	Rs.5000/- per sample

2. Fuel Analysis :

S.No.	Parameters	Charges (Rs.) per sample
i)	Moisture Content	Rs.900/-
ii)	Viscosity Pre-heat Temp.	Rs.900/-
iii)	Calorific Value (Coal or Oil)	Rs.1800/-
iv)	All three above test combined	Rs.2500/-

3. Air Testing Charges

S. No.	Test/Analysis	Charges (Rs.)	
		Ambient Air	Stack
1.	Acid mist		700.00
2.	NH ₃	1000.00	1000.00
3.	CO	500.00	500.00
4.	CO ₂		
5.	Gaseous fluoride	1100.00	1100.00
6.	H ₂ S	1050.00	1050.00
7.	Metals (each element)	--	--
8.	NO _x	*	*
9.	NO ₂	700.00	700.00
10.	Noise (per location)		
11.	O ₂	--	*
12.	Particulate fluoride	1100.00	1100.00
13.	SPM	*	*
14.	SO ₂	*	*
15.	SO ₃	700.00	
16.	Temperature	--	*
17.	Total fluoride	1100.00	1100.00
18.	Velocity	--	*

4. SAMPLING/COLLECTION CHARGES

Air (Stack Monitoring & Ambient Air Quality monitoring)

Type of Sample	Charges (Rs.)	
	Ambient	Stack
For one day	*4000.00	5000.00
	* Consisting of 8 hrs. in regular 9 a.m. to 5 p.m. 24 hrs. sampling Rs.10,000/-. Odd hours Rs.5000/- per sample consisting of 8 hours.	

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

METALLOGRAPHY LABORATORY

A. Metallography Laboratory

S. No.	Test	Charges (Rs.)
01	Microstructure	Rs.1500/-
02	Grain Size determination	Rs.800/-
03	Inclusion Rating	Rs.1500/-
04	Decarburisation depth	Rs.1500/-
05	Case depth	Rs.1000/-
06	Nodule count, carbide, Nodule Shape determination in S. G. Cast Iron	Rs.1500/-
07	Graphite Flake type and size in Cast Iron	Rs.1500/-
08	'Zn' coating thickness determination in G.I.	Rs.1500/-
09	Vickers' cum Micro Hardness	Rs.2500/- for two indentations and Rs.1000/- each for addl. Indentations
10	Image Analysis	Rs.3000/- per sample
11.	Macro Examination of Steel	Rs. 1500/- per sample

B. Direct Reading Spectrometer

S. No.	Test	Charges (Rs.)
01	Elemental analysis of Steels & Cast Iron for 24 elements and Grade determination	Rs.700/- for C, S, P, Si, Mn and any two Allowing element & Max. Rs.1500/- up to 24 elements. Rs.300/- for providing Grade/CE.

MECHANICAL & NDT LABORATORY

Sr. No.	Name of existing Test/Analysis	Charges (Rs.) each sample	
1	Tensile/Compression Test by UTM (TS, YS, % Elongation)	Rs.1200/- Dumble/Sample Preparation Rs.350/-	
2	Nut/Bolt Test(Tensile Type)	Rs.400/- per sample	
3	Bend Test	Rs. 500/- per sample	
4	Rebend Test	Rs. 500/- per sample	
5	Double Shear Test	Rs.300/- per sample	
6	Drift Expanding (for tubes)	Rs.300/- per sample	
7	Flattening (for tubes)	Rs.300/- per sample	
8	Hardness Rockwell/Brinell	Rs.350/- per sample	
9	Impact Testing (Izod/Charpy) (Set of three samples)	Room Temperature Zero and Sub Zero Testing	Rs.850/- Rs. 1100/- per sample
10	Erichson Cupping	Rs.300/-	
11	Dynamic/Impact Hardness Test (SHORE)	Rs.350/- per sample (a) Visit Charge a) Local-Nil b) Out station – Rs.550/- (b) Transport a) Local – Rs.350/- b) Out station – Actual	
12	Ultra Sonic Test	Rs.175/- per Sq. Feet Scanning Charge Min. charge Rs.550/- + visit charge a)Local-Nil b)Out station – Rs.550/- + Transport a)Local – Rs.350/- b)Out station – Actual	

13	Magnaflux	Rs.250/- per Sq. Feet (Min. Charges Rs.550/-)
14	Measurements of Tolerances / Dimensions/Thickness	Rs.350/- per sample
15	Weight per unit length	Rs.300/- per sample
16	Twist (for tubes)	Rs.300/- per sample
17	Rib Test	Rs.300/- per sample
18.	Surface inspection of Ingots	Rs.1200/- per sample

Safety Inspection

S. No.	Name of Equipment	Charges Rs.(each)
01	Crane Testing	Rs.1000/- upto 10 Ton crane Rs.1500/- above 10 Ton crane If no. of cranes are more than five in the same unit, the discount of 10% will be given.
02	Chain Pulley Block	Rs.750/- If no. of cranes are more than five in the same unit, the discount of 10% will be given.
03	Chain Sling	Rs.500/-
04	Pressure vessel upto 1000 ltr.	Rs.1000/-
05	Hydraulic testing of pressure vessel upto 1000 ltr.	Rs.1800/-
06	Pressure vessel upto 1000 ltr. With hydraulic testing	Rs.2200/-

Electrical Testings

S. No.	Name of Testing	Charges
1.	Transformer Oil Dehydration	Rs.5.00/- per liter subject to minimum charge of Rs.2000/- per transformer + machine transportation.
2.	Transformer Oil Testing	Rs.500/- per sample Rs.300/- for Sample Collection

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 <ul style="list-style-type: none"> • Basic course • Specialized Course • Performance Improvement Training 		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.	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

NOTE:

1. Service Tax shall be charged, as applicable.
2. Cost on travel, stay and other arrangements are to be borne by the concerned unit.