

**GOVERNMENT OF INDIA  
MINISTRY OF MINES  
INDIAN BUREAU OF MINES  
ORE DRESSING DIVISION**

**SCHEDULE OF CHARGES FOR THE  
ORE DRESSING DIVISION, INDIAN BUREAU OF MINES  
WITH EFFECT FROM 1<sup>st</sup> MARCH, 2013**

Sl.No.	Item of Work	Charges for 'A' Category Mines (Rs.)	Charges for 'B' Category Mines (Rs.)
<b>A.</b>	<b>LABORATORY SCALE ORE DRESSING INVESTIGATIONS:</b>		
<b>I</b>	<b>Full Scale Laboratory Investigations (Involving Physical , Chemical and Mineralogical characterisation)</b>		
1.	Complete Laboratory Scale Ore Dressing investigation involving studies for recovery of <b>one mineral</b> by various physical beneficiation methods (per sample)	2,05,000	1,45,000
2	Complete Laboratory Scale Ore Dressing investigation involving studies for recovery of <b>two or more minerals</b> by various physical beneficiation methods (per sample)	4,10,000	2,90,000
<b>II</b>	<b>Amenability Tests Involving Single Beneficiation Technique (Including Sample Preparation, Chemical Analysis and Mineralogy)</b>		
1.	Flotation	1,65,000	1,20,000
2.	Gravity Separation (Jigging, Tabling, Heavy Media Separation, etc.)	1,65,000	1,20,000
3.	Magnetic Separation	1,65,000	1,20,000
4.	Deflocculation and bleaching studies (with PSA, Brightness, Chemical Analysis)	1,65,000	1,20,000
5.	Thickening / Filtration Studies	1,65,000	1,20,000
6.	Air Classification /Wet Classification	1,65,000	1,20,000
7.	Electrostatic Separation	1,65,000	1,20,000

Sl.No.	Item of Work	Charges for 'A' Category Mines (Rs.)	Charges for 'B' Category Mines (Rs.)
<b>III</b>	<b>Single Ore Dressing Unit Operation Under Specified Conditions Including Chemical Analysis and Mineralogy (Per Test)</b>		
1.	Flotation	35,000	25,000
2.	Gravity Separation (Jigging, Tabling, Humphreys Spiralling, Heavy Media Separation, Floatex Density Separation, Stub Cycloning etc)	35,000	25,000
3.	Magnetic Separation , Dry or Wet	35,000	25,000
4.	Bond's Work Index Determination (Ball / Rod Mill) (Per sample)	40,000	28,000
5.	Grindability Index Determination (Per Sample)	25,000	18,000
6.	Cyclosizing	25,000	18,000
7.	Attrition Scrubbing followed by Sizing	25,000	18,000
8.	Tumbler Index Determination	25,000	18,000
9.	Shatter Index Determination	25,000	18,000
10.	Screening	17,000	12,000
11.	Particle Size Analysis (Sub micron sizes) (Per Test)	7,000	5,000
12.	Brightness Measurement (Per sample)	1,700	1,200
13.	Surface Area by BET Technique per sample (Minimum 10 samples)	5,000	3,500
14.	Bottle Roll Cyanidation and CIP (Per test)	70,000	50,000

Sl.No.	Item of Work	Charges for 'A' Category Mines (Rs.)	Charges for 'B' Category Mines (Rs.)
<b>B</b>	<b>PILOT PLANT SCALE INVESTIGATIONS:</b>		
I	Complete Pilot Plant Investigation (Quantity of ore to be specified by IBM depending on the complexity of the sample)		
a	Studies for recovery of <b>one mineral</b>	4,10,000	2,90,000
b	Studies for recovery of <b>two or more minerals</b>	6,15,000	4,35,000
II	Pilot Plant Test comprising of a single Ore Dressing Unit Operation under specified conditions including chemical and mineralogical analysis. (Quantity of Ore to be specified by IBM)		
1.	Gravity Separation viz Heavy Media Separation, Jigging, Tabling with Classification, Spiralling, Bowl Concentration, GEC Duplex Table, Centrifugal Separator, Floatex Density Separator etc.)	2,05,000	1,45,000
2.	Magnetic Separation	2,05,000	1,45,000
3.	Column Floatation	3,30,000	2,35,000
4.	Scrubbing and Classification	2,05,000	1,45,000
5.	Classification / Hydrocycloning	2,05,000	1,45,000
6.	Crushing and Screening	1,65,000	1,20,000
7.	Sintering Studies	3,30,000	2,35,000
8.	Pelletisation Studies	3,30,000	2,35,000
III	Techno-Economic Pre-Feasibility Studies on the basis of available laboratory and pilot plant report ( for selection of equipment and operating costs)	4,10,000	--
<b>NOTE:</b>			
1.	The above charges do not include cost of production of concentrate for end use testing.		
2.	The charges for Indian companies/ organizations which are directly involved in consultancy jobs in mining and exploration for foreign samples are to be levied <b>Twice</b> the charges of "A" Category Mines.		
3.	The charges for overseas companies/organizations which are directly involved in consultancy jobs in mining and exploration are to be levied <b>Three times</b> the charges of "A" Category Mines.		
4.	<b>Service Taxes and Education Cess Extra (as applicable).</b>		
5.	<b>'B' category charges would be applicable only after producing the 'B' category certificate of recent time/date issued by respective Regional Controller of Mines, Indian Bureau of Mines.</b>		

Sl.No.	Item of Work	Charges for 'A' Category Mines (Rs.)	Charges for 'B' Category Mines (Rs.)
<b>C.</b>	<b>SCHEDULE OF CHARGES FOR CHEMICAL ANALYSIS:</b>		
1.	Quantitative chemical analysis of radicals by Classical Wet Analysis method	Rs.850/- for the first radical and Rs.600/- for each of the subsequent radical	Rs.600/- for the first radical and Rs.450/- for each subsequent radicals
2.	Elemental Analysis using instruments viz. XRF, AAS, ICPA, FTIR, Ion Chromatograph, Mercury Analyser, Flame Photo Meter, Isotope Analyser, UV / VIS Spectrometer, C & S Analyser etc.	Rs.600/- for the first radical and Rs.300/- for each of the subsequent radical	Rs.450/- for the first radical and Rs.210/- for each of the subsequent radicals
3.	XRF Scanning per sample	Rs.1,000/-	Rs. 700/-
4.	Proximate Analysis of Coal or Determination of Fixed Carbon in Coal	Rs. 600/-	Rs.450/-
5.	Determination of Volatile Matter / Ash / Moisture in Coal	Rs.200/- for each radical	Rs. 140/- for each radical
6.	Platinum Group of Minerals for one element of PGM Analysis, Estimation of Gold by Fire Assay	Rs.4,000/- for the first radical and Rs.350/- for subsequent radicals	No concession for small mines.
7.	Estimation of Gold by Fire Assay	Rs.1,200/- per radical	Rs. 850/- per radicals
8.	Sample preparation upto 500 gm including crushing, grinding and drawing 25 gm representative sample of minus 300# size for Chemical Analysis	Rs. 175/- per sample	Rs.130/- per sample
9.	Environmental Analysis	Standard cost as proposed by Central Pollution Control Board	No concession for 'B' Category mines
<b>NOTE:</b>			
The Controller General, Indian Bureau of Mines shall have the discretionary power to charge 50% of that of 'B' Category mines for <b>Chemical Analysis</b> for academic & research students on production of recommendation letter from their respective head of academic institutions.			

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<b>D</b>	<b>SCHEDULE OF CHARGES FOR MINERALOGICAL STUDIES:</b>		
1.	Mineralogical examination on rocks, ores, minerals and sinters etc. by microscopic studies (only mineral identification).	2,000	1,400
2.	* Detailed mineralogical studies for identification and quantitative estimation of minerals and liberation characteristics involving mineral separation by heavy liquid and magnetic separation	6,000	4,200
3.	* Mineralogical studies to assess the amenability to mineral beneficiation involving size analysis, Frantz Isodynamic Magnetic Separation including necessary Chemical Analysis	10,000	7,000
4.	*Electron Probe Micro Analyser (EPMA) studies (Per hour per sample)	5,000	3,500
5.	Identification of mineral phases in ore and rock samples by X-Ray Diffraction / DTA / DTG ( Per sample).	3,000	2,100
6.	Photomicrographs (three prints)	1,000	700
7.	Determination of specific gravity (by Walker steel yard balance)	200	140
8.	Determination of Hardness by Mohs Scale	165	120
<b>NOTE:</b>			
The Controller General, Indian Bureau of Mines shall have the discretionary power to charge 50% of that of 'B' Category mines for <b>Mineralogical Studies</b> to be carried out for academic research students on production of recommendation letter from a respective head of academic institutions.			
* The investigation will be considered as one limited ore dressing investigation.			

**E. SCHEDULE OF CHARGES FOR CONSULTANCY SERVICES PER DAY RENDERED BY OFFICERS OF ORE DRESSING DIVISION, INDIAN BUREAU OF MINES IN INDIA AND FOREIGN ASSIGNMENTS**

Sl.No.	ITEM OF WORK	CONSULTANCY CHARGES (FOR INDIAN ASSIGNMENTS)	CONSULTANCY CHARGES (FOR FOREIGN ASSIGNMENTS)
1.	Officers of Group 'A' Category'	4,200	12,000
2.	Officers of Group 'B' Category'	2,400	7,200
3.	Officers of Group 'C' Category'	1,500	4,500
<b>NOTE:</b>			
1.	Actual travel expenses (to and fro) of the officers including hotel accommodation as per their entitlement is to be borne by the client.		
2.	If the client prefers, the technical personnel may be allowed to travel by higher class even if they are not allowed under the Govt. rules		
3	The daily rates are payable for the total period of absence from the head quarter inclusive of the period of journey.		
4.	<b>The following job will be carried out under consultancy services and the charges will be calculated based on the quantum of work, actual man-power involved in the job and man-days.</b>		
	➤ Plant Auditing studies of a mineral processing plant.		