



M E TECHNICAL SERVICES

Our Mission Is To Work As Customers Friendly Organization



OPTICAL EMISSION SPECTROMETER

Sample Preparation Machine | Consumable Parts Of Instruments
Certified Reference Material

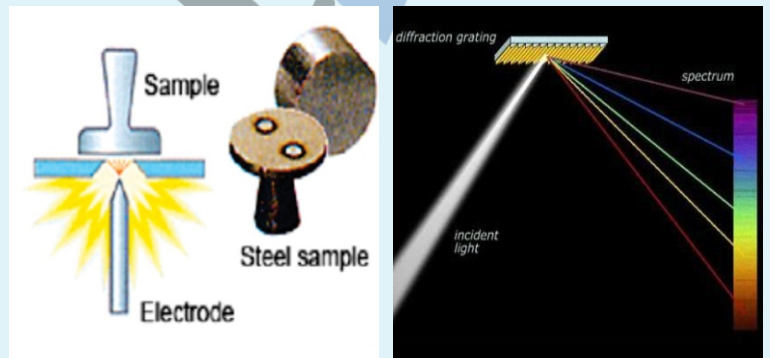
About :

Mets is built to its 15 years of experience in manufacturing of advanced analytical instruments and developing of analysis for various application and support the analytical and Laboratory instruments through its well established sales and service Network.

Mets represent and manufacturing of **OPTICAL EMISSION SPECTROMETER** at Ruggedness, Reliability, and Accuracy and Economy rates of OES using CCD base for measurements of elements composition of metals and non metals alloy and Analysis of chemical composition in metals (Ferrous and Non ferrous) with their Alloy.

We are providing calibration in various base (Fe, Al, Cu, Ni, Zn, Ti, Mg, Co,Pb, Sn) as per customer requirements analysis in concentration.

Optical Emission Spectrometers work on the principle of Optical Emission Spectroscopy OES. These machines are able to work due to the excitations of the electrons via the addition of energy which is in the form of some wavelength of the electromagnetic radiation which is usually light or ultraviolet.



In the Optical Emission Spectroscopy (OES) technology, atoms in a sample are excited by energy that comes from a spark formed between sample and electrode. The energy of the spark causes the electrons in the sample to emit light which is converted into a spectral pattern.

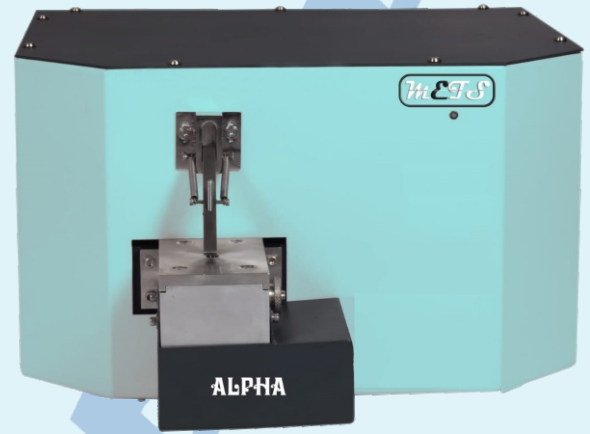
Application Area

This apparatus is widely used in material analysis of various industries, such as iron and steel, non-ferrous metal, metallurgy, machinery, chemical equipment, quality inspection system and so on. It is also used in, routine identification and analysis in metallic smelt industry.

- Manage blast furnace process control by various processes of blast furnace chemical analysis.
- identification of product specifications.
- Material checking and acceptance.
- Quality inspection.
- Industrial analytical laboratories of metallurgical and machine building factories.
- Express-analysis of alloys while melting in workshops.
- Identification of alloy grade in warehouses.
- Research institutes and educational institutions.

Optical Features:-

- Wavelength :- 160-410nm
- High resolution CCD detector 3600 groove/mm
- Multi base in single instruments
- Auto profile in software
- Temperature stabilized
- Sealed optic
- Halographic diffraction grating
- Elements upto 24 as per customer requirements



Software Features:-

- Auto id base and program detection
- Factory Calibration
- User friendly in standardisation process
- Display in SD and RSD
- Simple software use in report generator

Elements	Burn1	Burn2	Burn3	Burn4	Burn5	Burn6	Burn7	Mean	SD
C	0.2045	0.2058	0.2007	0.1997	0.2002	0.2486	0.1772	0.2095	0.0839
S	0.1513	0.1549	0.1503	0.1725	0.1747	0.1733	0.2298	0.1724	0.0275
Mn	0.6061	0.6224	0.6342	0.6528	0.5816	0.5808	0.5746	0.6082	0.0295
P	<-0.0080	0.0086	<-0.0050	0.0080	0.0278	0.0203	0.0288	0.0213	0.0120
S	0.0229	0.0198	0.0196	0.0191	0.0416	0.0400	0.0433	0.0394	0.0116
Cr	0.0730	0.0723	0.0582	0.0596	0.1153	0.1122	0.1123	0.0961	0.0266
Mg	<-0.0080	<-0.0080	<-0.0080	<-0.0080	0.0225	0.0204	0.0160	0.0196	0.0013
W	0.1333	0.1193	0.0908	0.1018	0.1532	0.1417	0.1457	0.1251	0.0221
A	0.0379	0.0294	0.0294	0.0229	0.0297	0.0202	0.0429	0.0328	0.0056
Cu	0.0686	0.0704	0.0679	0.0704	0.1576	0.1589	0.1587	0.1325	0.0476
Ti	<-0.0050	<-0.0050	<-0.0050	<-0.0050	<-0.0050	<-0.0050	<-0.0050	0.0000	0.0000
V	<-0.0050	0.0050	<-0.0050	<-0.0050	<-0.0050	<-0.0050	<-0.0050	0.0000	0.0000
Nb	<-0.0150	<-0.0150	<-0.0150	<-0.0150	<-0.0150	<-0.0150	<-0.0150	0.0000	0.0000
W	<-0.0050	<-0.0050	<-0.0050	<-0.0050	<-0.0050	<-0.0050	<-0.0050	0.0000	0.0000
Co	<-0.0200	<-0.0200	<-0.0200	<-0.0200	<-0.0200	<-0.0200	<-0.0200	0.0000	0.0000
S	0.0066	0.0052	0.0084	0.0095	0.0072	0.0079	0.0102	0.0079	0.0017
Sn	<-0.0080	<-0.0080	<-0.0080	<-0.0080	<-0.0080	<-0.0080	<-0.0080	0.0000	0.0000
Al	0.6112	<-0.0200	<-0.0200	<-0.0100	<-0.0100	<-0.0100	<-0.0100	0.6112	0.0000
Pb	<-0.0200	<-0.0200	<-0.0200	<-0.0200	<-0.0200	<-0.0200	<-0.0200	0.0000	0.0000
Fe	98.6957	98.6852	98.7305	98.6696	98.3220	98.3382	98.2581	98.5296	0.2201

Data Processing System:-

- Computer Upgrade PC with update windows Lan connection to pc

Power Features:-

- Input power requirements 230v +/- 5% , 50 hz

Source Features:-

- Arc/ Spark optimised sparking
- Frequency range 50 to 500 hz
- High stability
- Input power 1.5 kva
- Peak current pre comusion 100A
- Exposure 20 A
- Ignition current :- pulse amplitude + 10kv

Quality

- Log of last 1000 burns
- Logging of all actions to HDD
- Retrieval of results from HDD
- Simple to use report Generator

Dimensions:-

- H:- 12 Inch W:- 18 Inch L:- 22 Inch

Environmental Feature:-

- Operating Temperature:- 10°C to 45°C
- Storage:- 0 to 39°C
- Relative Humidity :- 20% to 80%
- Working Temperature:- 20°C to 30°C

Weight:-

- 25kg

Sample preparation :-

Properly and freshly prepared sample are most impact for good preparation and accuracy .
We made a very economical range of sample preparation machine.



Consumable Items:-



- Electrode
- Certified Reference Material
- Lens and Windows
- Electrode Cleaning Brush With Holder.
- O Ring
- Vacuum pump oil
- Argon Regulator
- Spectro Polish Paper In All Grit .

All Electronics Level Repaired of All Analytical Instruments. Service of All OES At Less Amount Compared With OEM

Wire Adaptor:-

It is possible to analysis wire rode and wire using wire adaptor.



M E TECHNICAL SERVICES

Our Mission Is To Work As Customers Friendly Organization

Mob: +91 9701 595 292 | 9930 349 194

B-6022, Bima Complex, Kalamkoli, Navi Mumbai - 410 218. Maharashtra (INDIA)
mettechnicalservices@gmail.com | sales@metsspectro.com | www.metsspectro.com