

Accreditations, Memberships & Recognitions:





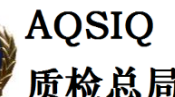
Corporate Profile

MSK is a leading Independent Inspection, Testing and Certification Expert, with a global network of offices and laboratories across 5 continents, with headquarters in Kolkata, India.

With over 85 years of experience and commitment to quality and accuracy, MSK is notched as a reliable Quality Assurance Partner for more than 50 key industrial sectors and a wide range of commodities. It is an agile, technology driven and IT enabled company with a proven track record. With over 2500 strong workforce globally, MSK is a people-centric organization that prides in its human capital.

With global and country-specific accreditations, memberships and recognitions, MSK has specialized and trained personnel and state-of-the-art infrastructure, strict and rigorous procedures for sample collection to ensure precision of results at every port, siding, wharf, industrial unit, mines or any nominated site.

Accreditations, Memberships & Recognitions:





MSK Corporate Profile

Vision
To be a respected and technically best- in- class Global
Inspection & Testing Company



Values
Passion, Care, Commitment,
Integrity, Trust, Consistency

Mission
To provide accurate and prompt service using state-of-the-art technology and
assure customer satisfaction through skill, enthusiasm and pride of our
employees who are our most valuable resource.

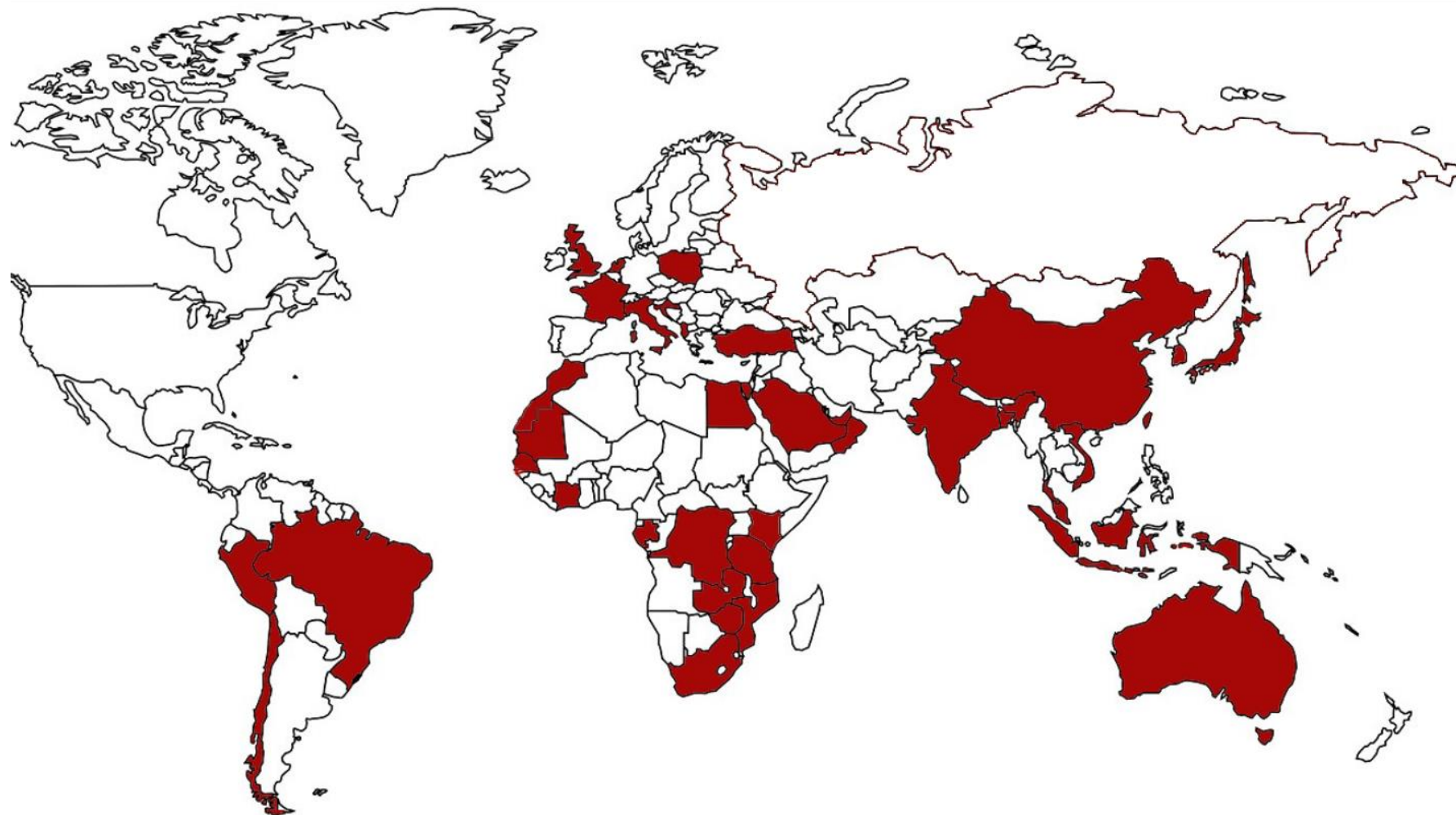




Global Footprint

(40 countries across 5 continents):

- | | |
|-----------------|---------------------|
| 1. Australia | 21. Morocco |
| 2. Albania | 22. Mozambique |
| 3. Bangladesh | 23. The Netherlands |
| 4. Brazil | 24. Oman |
| 5. Chile | 25. Peru |
| 6. China | 26. Poland |
| 7. Croatia | 27. Saudi Arabia |
| 8. DRC | 28. Senegal |
| 9. Egypt | 29. Singapore |
| 10. France | 30. South Africa |
| 11. Gabon | 31. South Korea |
| 12. Hong Kong | 32. Taiwan |
| 13. India | 33. Tanzania |
| 14. Indonesia | 34. Turkey |
| 15. Italy | 35. UAE |
| 16. Ivory Coast | 36. UK |
| 17. Japan | 37. Vietnam |
| 18. Kenya | 38. Zambia |
| 19. Malaysia | 39. Zimbabwe |
| 20. Mauritania | |





MSK Inspection, Testing, Certification Services covers a wide range of commodities and services...

.... Serving major businesses, industrial and infrastructural sectors:

- Iron Ore
- Ferro Alloys
- Non Ferrous
- Coal and other Solid Fuels
- Coke
- Flux Commodities
- Environment
- Food & Water
- Fertilizer
- Agriculture

- Mines
- Steel
- Metals & Alloys
- Thermal Power
- Refineries
- Cement Plants
- Petrochemicals
- Food & Water
- Fertilizer
- Pharmaceuticals
- Health Care
- Hospitality
- Tanneries
- Paper Mills
- Textile Industry
- IT Industry
- Paints
- Environment
- Agriculture
- Engineering
- Marine





MSK Corporate Profile

Inspection & Quality Control:

- WSMD
- Sampling
- Sample Preparation
- TML Certification
- Online Surveillance



Quantity Survey:

- Draft Survey
- Weighment
- Volumetric Assessment



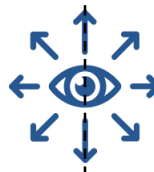
Analysis:

- Chemical
- Physical
- Microbiological



Supervision:

- Hatch Cleaning Inspection
- Cargo Loading/ Discharge
- Cargo conditions



MSK Scope of Services



Exploration:

- Bore Core Treatment
- Bore Core Sample Analysis
- Production Feed Analysis
- Process Quality Control



Reporting & Certification:

- Real time Observation Report
- Inspection Report
- Digital Certificate



Process Automation:

- Automated Sampling System
- Integrated Sample Preparation System



Monitoring:

- Air Quality
- Stack Emission Quality
- Baseline Data



Onsite Laboratory Management

- Lab Process Outsourcing
- Consultancy Services
- Quality Audit
- Lab Information Management



MSK Corporate Profile

Inspection & Quality Control:

- WSMD
- Party Assay
- Umpire Analysis
- TML Certification
- Online Surveillance



Quantity Survey:

- Draught Survey
- Weighment
- Volumetric Assessment



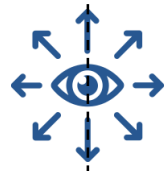
Analysis:

- Chemical
- Physical



Supervision:

- Hatch Cleaning Inspection
- Cargo Loading/ Discharge
- Cargo conditions



MSK Scope of Services

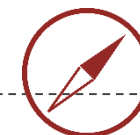
Reporting & Certification:

- Real time Observation Report
- Inspection Report
- Digital Certificate



Exploration:

- Bore Core Treatment
- Bore Core Sample Analysis
- Production Feed Analysis
- Process Quality Control



Laboratory Outsourcing

- Lab Process Outsourcing
- Consultancy Services
- Quality Audit
- Lab Information Management





Iron Ore and other Ferrous Commodities & Parameters

- **Iron- Ore Pellets, Fines, Lumps, Oxides, Concentrates**
- **Blast Furnace Slag**
- **CLO**
- **FSF**
- **HBI**
- **Magnetite**
- **Pig Iron**
- **Sponge Iron**

Services

- Third party inspection
- Sampling
- Supervision of Loading / Unloading / Blending
- Quality Testing
 - Chemical
 - Physical
- Quantity Survey
 - Draft Survey
- Certification
- Umpire Analysis
- Laboratory outsourcing
- Quality Audit



Major Clientele:



**AM/NS
INDIA**

A joint venture between ArcelorMittal and Nippon Steel Corporation



MSK Corporate Profile

MSK Inspection, Testing, Certification Services:



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Ferro Alloys: Commodities & Parameters

- **High Carbon Ferro Chrome:** All Parameters & Slag
- **Chrome Ore:** All parameters
- **Manganese Ore:** All parameters
- **Ferro Chrome:** All parameters
- **Ferro Manganese :** All parameters
- **Ferro Molybdenum :** All parameters
- **Ferro Silicon :** All parameters
- **Ferro Titanium :** All parameters
- **Ferro Vanadium :** All parameters
- **Silico Manganese :** All parameters

Services

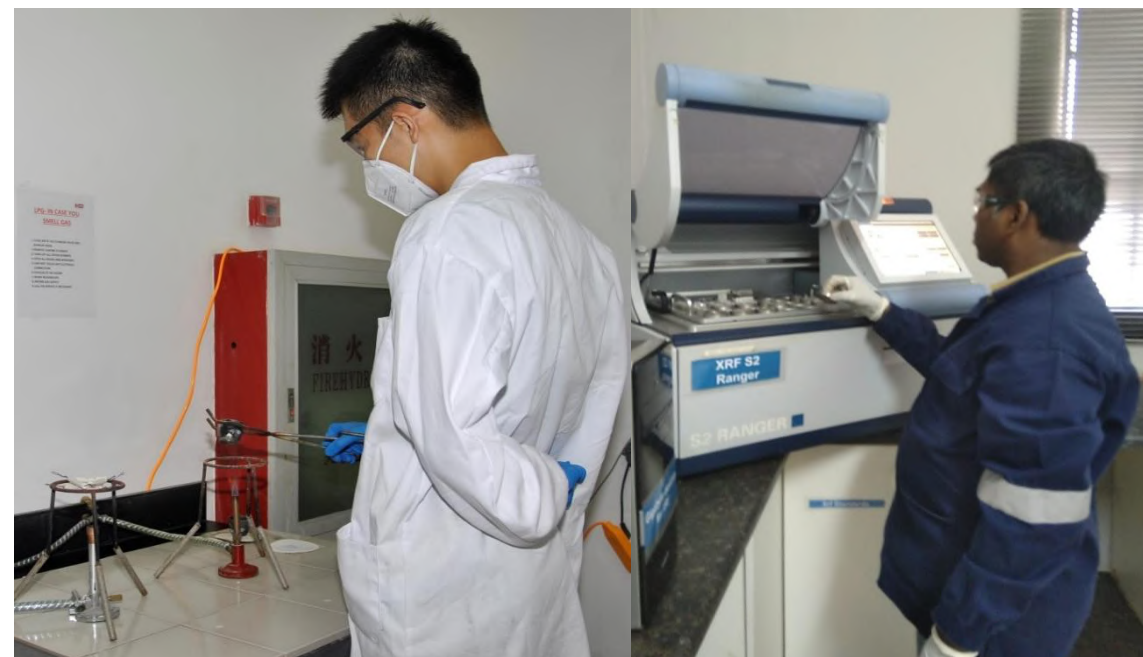
- WSMD (Weighment, Supervision, Moisture Determination for Ores/ Concentrates)
- Supervision of Empty Containers, Stuffing of Finished Goods, Physical Verification for Export Consignments
- Party Assay
- Umpire Analysis



Iron Ore and other Ferrous Commodities, Ferro Alloys Testing and Analysis Equipment :

- Microwave Digester
- ICP-OES
- Thermogravimetric Analyzer
- X Ray Fluorescence Spectrophotometer
- Powder X Ray Diffractometer
- Flame Photometer
- UV-Vis Spectrophotometer
- Ion Selective Electrode
- Carbon Sulphur Analyzer

With a fully functional crushing shed/sample preparation facility for ores, alloys and solid fuels.





Major Clientele:



MSK Corporate Profile

GLENCORE
INTERNATIONAL plc



eramet



samancor ^{CR}



AML
Asia Minerals Limited

Maden Tic. ve San. A.Ş.

JSL
JINDAL STAINLESS

SAMBHIC RESOURCES FZC



河北冀物金屬國際（香港）有限公司
HEBEI JIWU METAL INTERNATIONAL (HONGKONG) CO., LTD.



TATA
TATA STEEL MINING



Non Ferrous Ores & Concentrates : Commodities & Parameters

- **Copper/Zinc/Lead Ores and Concentrates:** All parameters including Gold, Silver & PGMs
- **Tin/Cobalt/Nickel Ores and Concentrates:** All parameters
- **Bauxite**
- **Calcined Alumina**

Services

- WSMD (Weighment, Supervision, Moisture Determination for Ores/ Concentrates)
- Supervision of Empty Containers, Stuffing of Finished Goods, Physical Verification for Export Consignments
- Party Assay
- Umpire Analysis
- Impurity Analysis in Pure Metals and thereby finding Purity of Base Metal



Non Ferrous Metals: Commodities & Parameters

- **High Purity Copper/Copper Cathode:** All impurities & Copper (By Balance)
- **High Grade Zinc/Zinc Ingot:** All impurities & Zn (By Balance)
- **Lead & Lead Alloys/Lead Ingots/refined Lead:** All impurities & Pb (By Balance)
- **High Grade Primary Aluminum/ Aluminum Ingots:** All impurities & Al (By Balance)
- **Tin/Tin Ingots:** All impurities & Sn (By Balance)
- **Primary Nickel:** All impurities & Ni (By Balance)
- **Pure Cobalt:** All impurities & Cobalt (By Balance)

Services



LME listed Sampler & Assayer (LSA)- Exclusive Assayer for India
<https://www.lme.com/en/>

- WSMD (Weighment, Supervision, Moisture Determination for Ores/ Concentrates)
- Supervision of Empty Containers, Stuffing of Finished Goods, Physical Verification for Export Consignments
- Party Assay
- Umpire Analysis
- Impurity Analysis in Pure Metals and thereby finding Purity of Base Metal



Spent Catalyst: Commodities & Parameters

- Automobile Catalyst: Platinum Analysis
- Refinery Catalyst: Platinum Analysis

Services

- WSMD (Weighment, Supervision, Moisture Determination for Ores/ Concentrates)
- Supervision of Empty Containers, Stuffing of Finished Goods, Physical Verification for Export Consignments
- Party Assay
- Umpire Analysis
- Impurity Analysis in Pure Metals and thereby finding Purity of Base Metal



MSK Inspection, Testing, Certification Services :

MSK Corporate Profile

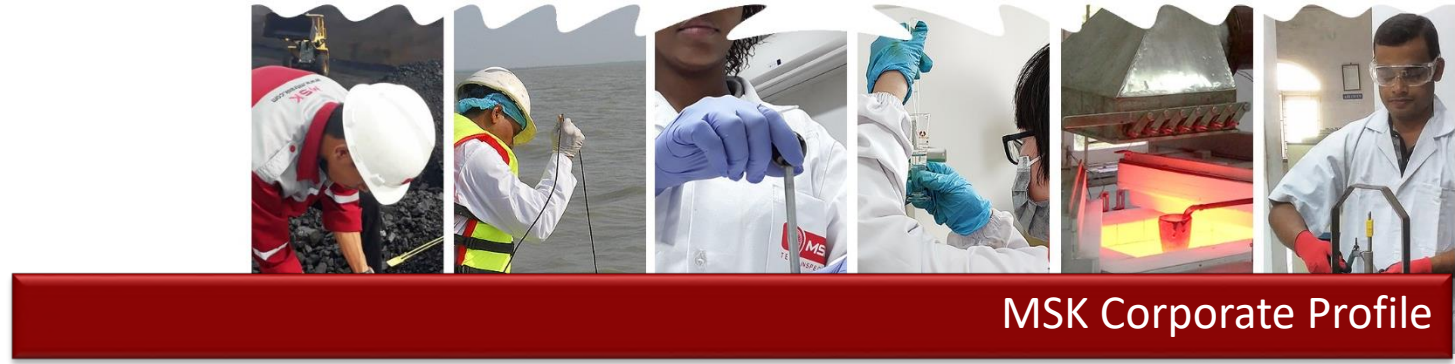
Non Ferrous Testing and Analysis Equipment:

- Microwave Digester
- ICP-OES
- ICP MS
- Mercury Analyzer
- Fire Assay set up with Pit type furnace, cupellation furnace and high temperature annealing furnace
- 6-digit Balance
- Ion Selective Electrode
- X Ray Fluorescence Spectrophotometer
- Powder X Ray Diffractometer
- Flame Photometer
- C S Analyzer

With a fully functional crushing shed/sample preparation facility for ores, alloys and solid fuels.



Major Clientele:



MSK Inspection, Testing, Certification Services:

Coal: Commodities & Parameters

- Non Coking Coal
- Coking Coal
- PCI Coal
- Anthracite Coal
- Graphite

Services

- Total Moisture Analysis
- Proximate Analysis
- Ultimate Analysis
- Sulphur & Ash Analysis
- Value & Size Analysis
- Petrography
- Plastometry & Dilatometry
- Draft Survey
- Chemical & Physical Analysis



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MSK Inspection, Testing, Certification Services:



MSK Corporate Profile

Coke:

- Metallurgical Coke
- Breeze Coke
- Nut Coke
- Coke Fines
- PET Coke

Services

- Total Moisture Analysis
- Proximate Analysis
- Ultimate Analysis
- Sulphur & Ash Analysis
- Value & Size Analysis
- Plastometry & Dilatometry
- Draft Survey
- Chemical & Physical Analysis



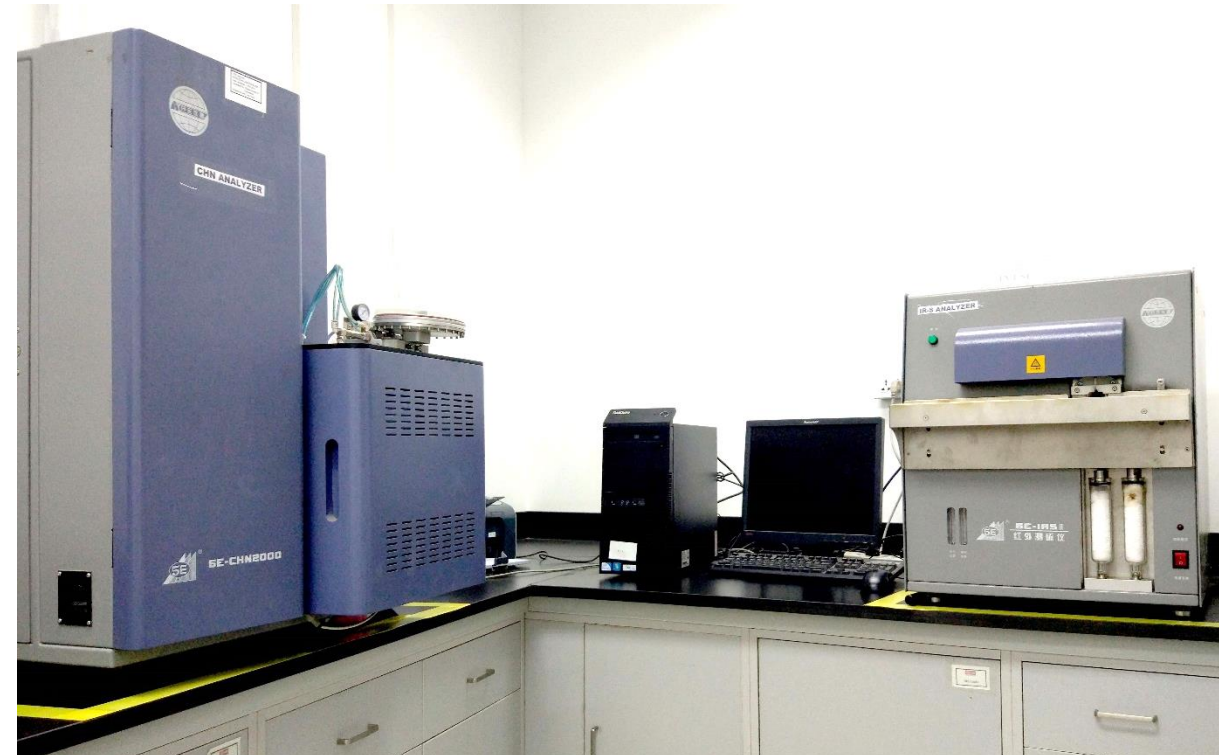
MSK Inspection, Testing, Certification Services :

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Coal & Coke Testing and Analysis Equipment :

- C H N S Analyzer
- Automatic Bomb Calorimeter
- Ash Fusion Temperature Measurement System
- CRI CSR Measurement System
- X Ray Fluorescence Spectrophotometer
- ICP-OES
- Macro Thermogravimetric Analyzer
- Ion Selective Electrode
- Flame Photometer

With a fully functional crushing shed/sample preparation facility for ores, alloys and solid fuels.





Major Clientele:

MSK Corporate Profile



Major Clientele:



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KIOCL



DPCL



KALYANI



MSK Inspection, Testing, Certification Services:

Laboratory Outsourcing Services

- **Testing of Raw Materials, Process Intermediates and Products** (Finished Products, By- Products, Waste Products) **in Steel Manufacturing, Thermal Power Plants, Cement Plants, Mines**
- **In house lab set-up and operation**
- **Lab Accreditation**
- **Skilled Manpower** (Chemists, Samplers and Supervisors)
- **CAPEX to set up in-house QC Lab**
- **Sampling Automation**
- **Digitized Results**
- **Single Window Customer Support**

Advantages

- Lower TAT (Turn Around Time)
- Accurate Results
- Unbiased Third Party Testing and Inspection
- Testing Process Standardization

Benefits

- Enhanced Quality of Products
- Efficient Plant Processes
- Reduced Costs
- Liability Reduction



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MSK Inspection, Testing, Certification Services:

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Flux : Commodities & Parameters

- **Limestone**
- **Dolomite**
- **Pyroxenite**

(For all above commodities: All parameters- Chemical & Physical including Water Absorption Capacity, Tumbler Index, Shatter Index, Decrepitating Index)

- **Gypsum:** Purity, Chemical, Physical
- **Oliflux:** Chemical & Physical
- **Cement Clinker:** Chemical, Size Analysis
Parameters: Fe_2O_3 , Al_2O_3 , SiO_2 , CaO , MgO , Free Lime, S, LOI, Chloride, Acid Insoluble, Na_2O , K_2O

Services

- Chemical & Physical Analysis
- Size Analysis
- Draft Survey



MSK Inspection, Testing, Certification Services :

MSK Corporate Profile

Flux Commodities Testing and Analysis Equipment :

- Microwave Digester
- ICP-OES
- Ion Selective Electrode
- X Ray Fluorescence Spectrophotometer
- Powder X Ray Diffractometer
- Flame Photometer
- Thermogravimetric Analyzer
- Uv-Vis Spectrophotometer

With a fully functional crushing shed/sample preparation facility for ores, alloys and solid fuels.



Major Clientele:



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MSK Inspection, Testing, Certification Services:

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Environmental Parameters

Air

- Stack Emission as per EPA
- Ambient Air as per EPA
- Fugitive / Work Zone as per Factory Rules
- Indoor Air Quality as per OHSAS
- VOC in Air
- Heavy Metal in Air

Noise

- By Automatic Data Logger

Meteorological Monitoring

- By Automatic Data Logger

Effluent Water

- Inlet & Outlet of ETP & STP

Hazardous Waste Analysis

- Factory Waste
- Municipal Waste
- Used & Waste Oil

Soil

- All Heavy Metals, Pesticides, Nutrients

Water

- Drinking water as per WHO
- Ground Water
- Surface Water
- Packaged Drinking Water
- Processed Water for any type of industry

Value-added Services

- Hazardous Waste Audit
- ETP/ STP Performance Consultancy
- Baseline Monitoring for EIA/SEIAA

MSK Inspection, Testing, Certification Services:



MSK Corporate Profile

Environment

Special Services for Marine Biology

Biodiversity Management Plan

Reviewing how the physical and chemical environmental mechanisms contribute to the sustainable environment for the flora and fauna in the projected area and choosing suitable methodology and analytical techniques for testing under prevailing geographical conditions.

Biological Parameters

- Chlorophyll
- Primary Productivity
- Phytoplankton
- Zooplankton
- Benthic Micro
- Benthic Macro
- Flora
- Fauna
- Fish Catchment Data Analysis

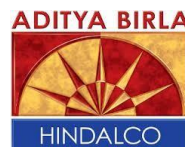
Involvement of Man & Management

- Marine Scientist
- Research Scholar
- Field Instrument like Depth Sampler
- High Grade Laboratory
- Review of Report through reputed institution



Major Clientele:

MSK Corporate Profile





MSK Inspection, Testing, Certification Services:

MSK Corporate Profile

Food, Beverages & Water

With meticulous 360-degree Quality Testing, Analysis, and Advisory Services, we cover Food, Beverage, Tea & Coffee, Dairy Processing, top-tier Hotels, Restaurants, Hospitals, Agriculture, Oil Production, Trade, and Retail. Our aim is to ensure that products comply with government-set standards for quality and safety, along with meticulous adherence to other rules and regulations, guaranteeing their suitability for consumption and usage.



MSK Inspection, Testing, Certification Services:

MSK Corporate Profile

Food & Beverages: Chemical Testing

Commodities

- Beverages
- Cereals & Agro Products
- Oils & Fats
- Chocolate & Confectionary
- Meat & Fish
- Dairy Products
- Processed Foods
- Milk Based Products
- Fruits Vegetables & Herbs

Parameters

- Pesticide Residue
- Antibiotic Residue
- Nutritional Labeling
- Heavy Metals
- Packaging Migrations
- Adulterants
- Process Contaminants(PAH)
- Food Additives
- Artificial sweeteners/colors
- Toxins
- Preservatives
- Fatty acid profiles (PUFA/ MUFA/TRANS FAT/SAFA)

Services

- Nutritional Value Determination
- Shelf-Life Determination
- Qualitative & Physical Parameter Testing
- Microbiological and Chemical Testing and Analysis (as per FSSAI & Other National/ International standards) Complete range of Water, Air and Soil testing as required by different F&B companies/ Establishments from time to time.



MSK Inspection, Testing, Certification Services :

MSK Corporate Profile

Food & Beverages : Biological Testing

Commodities

- Bakery & Confectionery
- Cereals & Ready to eat Food products
- Beverages(alcoholic/non-alcoholic)
- Meat & Fish products
- Tea & Coffee
- Dairy products
- Fruit, Vegetables & related products
- Spices & Condiments

Parameters

- Bacillus cereus
- Clostridium
- Salmonella
- Vibrio
- Shigella
- Listeria
- E.coli & coliforms
- Staphylococcus
- Thermophiles & acidophiles
- Yeast & Mould (pathogenic)
- Pathogenic aerobes & anaerobes

Services

- Nutritional Value Determination
- Shelf-Life Determination
- Qualitative & Physical Parameter Testing
- Microbiological and Chemical Testing and Analysis (as per FSSAI & Other National/ International standards) Complete range of Water, Air and Soil testing as required by different F&B companies/ Establishments from time to time.



MSK Inspection, Testing, Certification Services :

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Water Testing

Commodities

- Drinking Water
- Packaged Drinking water/
Natural Mineral Water
- Processed Food Water
- Dialysis Water

Parameters

- Bacillus cereus
- Clostridium
- Salmonella
- Vibrio
- Shigella
- Listeria
- E.coli & coliforms
- Staphylococcus
- Thermophiles & acidophiles
- Yeast & Mould (pathogenic)
- Pathogenic aerobes & anaerobes

Services

- Physical Testing
- Heavy Metals Testing
- Chlorinated Compounds
- Pesticide Residues
- Bacterial Contaminants
- Pathogens
- Endotoxins
- Pyrogen Tests

Note: All methods as per APHA, BIS (IS 10050, 14543/ 13428) AOAC and other international and national bodies



Major Clientele :



MSK Corporate Profile





MSK Inspection, Testing, Certification Services :

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Fertilizer Testing

Commodities & Parameters

- Rock Phosphate (P₂O₅, CaO, MgO, Al₂O₃, SiO₂, SO₃, Na₂O, K₂O, Fe₂O₃)
- Phosphoric acid (Phosphoric acid content, Chloride, Nitrate etc.)
 - Mono Ammonium Phosphate (Moisture, Total P₂O₅, Water soluble P₂O₅, Citrate Soluble P₂O₅, Total Nitrogen, Ammonical Nitrogen)
 - Di Ammonium Phosphate (Moisture, Total P₂O₅, Water Soluble P₂O₅, Citrate Soluble P₂O₅, Total Nitrogen, Ammonical Nitrogen, Alumina, Ferric Oxide & Titanium Di Oxide)
- MOP (Moisture, Potassium Oxide and Sodium Chloride)
- Sulphur (S, Ash, Purity, Chloride, Cd, Te, Se, Acidity as H₂SO₄)
- Urea (Moisture, Total Nitrogen & Biuret)
- Single/Triple Super Phosphate
- Nitrogen based fertilizers
- Potassic fertilizers

Services

Inspection: Cargo Offering at Manufacturers / Mines, Vessel inspection Prior and after loading, Loading & Discharge Inspection, Container Checking, Weight inspection during and before despatch.

Supervision / Survey: Cargo Offering at Manufacturers / Mines, Vessel Loading & Discharge supervision, Container loading and discharge supervision, Draught Survey / Weighing Supervision, Cargo loading at the time of domestic despatch from Port.

Sampling: Cargo Offering at Manufacturers / Mines, Bulk Cargo, Containerised Cargo. Cargo in the form of Stack

Assaying / Testing: Physical quality determination, Chemical, Micro-Biological

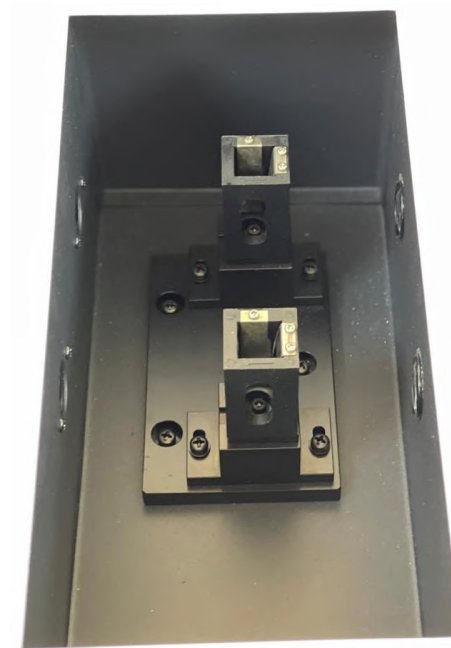
Lab Outsourcing

MSK Inspection, Testing, Certification Services :

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Fertilizer Testing and Analysis Equipment:

- Double Beam UV Visible Spectrophotometer
- N Digestion system
- Flame Photometer
- ICP OES
- Four Digit Balance





Major Clientele :



MSK Corporate Profile





**CONSISTENT
SERVICE
ENSURED**

CLOUD BASED
ERP
MISTAKE PROOFING
SYSTEM &
SAFE WORKING
CONDITIONS

GLOBAL &
COUNTRY-SPECIFIC
ACCREDITATIONS',
MEMBERSHIPS
& RECOGNITIONS

STATE-OF-THE ART
LABS WITH
ADVANCED
EQUIPMENT

TRAINED, QUALIFIED,
EXPERIENCED &
SKILLED MANPOWER
AVG. TRAINING OF 50
HOURS ANNUALLY TO
EACH EMPLOYEE

ROUTINE
CALIBRATION OF
EQUIPMENT
EVERY 6
MONTHS

STRINGENT
STANDARD TESTING
PROCEDURES

CONSISTENCY IS THE KEY

Accurate results - On Time- Every Time | Reproducible Results | 48 hours TAT for test result

We Cultivate a culture of Learning and Development to pursue Knowledge and Excellence

- Technical knowledge in Chemistry and relevant Instruments for accuracy
- Applied R&D to develop more accurate methods of testing which are cost effective, quicker and safer
- Knowledge of Commercial and Business processes involved in industries we serve

Knowledge that helps personality and skill development

- Grooming of Technically qualified people
- Regular participation in Workshops, Trade Fair, Conferences, Business Meets
- Applied R&D blog
- Experimenting and adopting new techniques using latest equipment



Thank You

FOLLOW US



CONTACT US



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