Not just Machines, we make Relations !

K.K. MACHINERIES PVT. LTD.

ENGINEERING CONSULTANTS

(AN ISO 9001:2015 COMPANY)

Manufacturers of :

Steel Plant Machineries
EOT Cranes
Cement Plant Machineries
Sugar Plant Machineries
D R I Plant Machineries
Coal Fired Power Plant Machineries











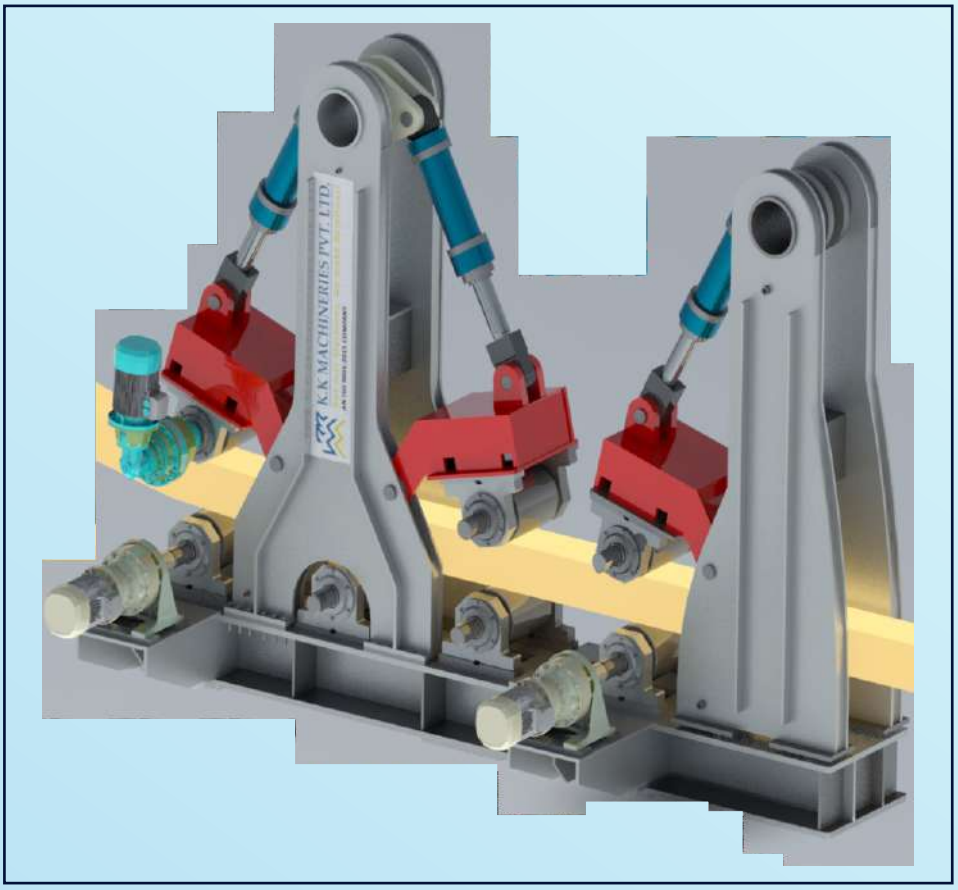


ABOUT US

ENGINEERING CONSULTANTS

K K Machineries has vast experience of Design and Supply of **Steel Plant Machineries Cement Plant Machineries, Sugar Plant Machineries, D R I Plant Machineries, Coal Fired Power Plant Machineries** including process technology for **Steelmaking, Secondary Metallurgy and Metallurgical Plant Equipment. K K Machineries** has become a key player offering Products and **Engineering Services** for the **Steel Industry,** while providing **Innovative and Integrated** solutions for complete process areas, including complete Turnkey Supply.

We have personally conducted business in Domestic as well as international market around the globe and we continue to expand our reach and success with every opportunity we encounter. It is our mission to create the highest possible value for our customers and our partners.



Established in the year 2000, we, **" K K Machineries Pvt. Ltd.,** is one of the leading manufacturers, suppliers, importers and exporters of a wide collection of Continuous Casing Machine (CCM), Oscillation and Cooling Towers. Our range consist of Pump House, Cooling Bed, Aluminum Template, Apron Assembly, Tundish, Ladle, Mould Jacket, Dummy Bar, Electric Panel and Copper Mould Tube. In addition to this, we also provide Continuous Casting Solutions and Fabrication & Erection Services to our customers for fulfilling their exact requirements.
Also we have extended our self in supply and commissioning of turnkey projects of **Cement Plant Machineries, Sugar Plant Machineries, DRI Plant Machineries, Coal Fired Power Plant Machineries.**

Being a one-stop-shop for all continuous casting solutions, we have been successfully provided complete fabrications & erection versions and also supplied machines & spare parts to Various companies. In addition to this, we have developed a best-in-class manufacturing facility, which helps us in maintaining a continuous production to meet the needs of market. This is manned by our team of experts, which uses all latest machines and technology installed for assuring that final output meets international quality standards.

We will listen to a customer's 'requirements' or 'Desire' and design a machine to meet those requirements. We have a dedicated team who are fully involved in the **Design and Development, Construction, Installation and Servicing of our Cement Plants, Sugar Plants, DRI, Coal Fired Power Plant Machineries.**

STEEL PLANT

ENGINEERING CONSULTANTS

INDUCTION FURNACE

This article needs additional citations for verification. An induction furnace is an electrical furnace in which the heat is applied by induction heating of metal. Induction furnace capacities range from less than one kilogram to one hundred tonnes, and are used to melt iron and steel, copper, aluminum, and precious metals.

The advantage of the induction furnace is a clean, energy-efficient and well-controllable melting process compared to most other means of metal melting. Most modern foundries use this type of furnace, and now also more iron foundries are replacing cupolas with induction furnaces to melt cast iron, as the former emit much dust and other pollutants.

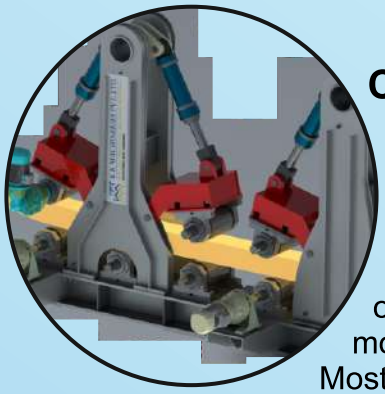
Since no arc or combustion is used, the temperature of the material is no higher than required to melt it; this can prevent loss of valuable alloying elements. The one major drawback to induction furnace usage in a foundry is the lack of refining capacity; charge materials must be clean of oxidation products and of a known composition and some alloying elements may be lost due to oxidation (and must be re-added to the melt).











Continuous Casting Machine

Process : A seemingly simple process, the continuous casting is a technically sophisticated process that could be developed properly only 50 years age, while the casting industry has a history of more than 5000 years old. In continuous casting, molten metal is poured into an open-ended mold that can be made of graphite or copper. Graphite molds are widely used both in vertical and horizontal continuous casting. Most molds are made from statically pressed graphite. However, extruded graphite molds can also be used for vertical casting of large ingots.

The metal is first melted in furnace and poured into a ladle. From the ladle the hot metal is

transferred into the tundish. The hot metal is poured into the continuous casting machine from the tundish. The mould is water cooled. When the hot metal is poured into the furnace, the metal near the walls cool first forming a skin like thin strip. While the metal to the inside is still molten.

The thin shell like solidified metal withdrawn from the mold and passes through a straightening roller. In the chamber the strand is water sprayed which prevents porosity. The thin strip, now called a rolls on a rotating roller. After solidification, predetermined lengths of strands are cut into pieces using mechanical shears or travelling oxyacetylene torches. The cast sizes are called strips, billets, slabs etc.

Continuous casting can be better controlled by making the process automated. The two common types of continuous casting are horizontal and vertical continuous casting. Long shapes of simple cross section like round, square and hexagonal rods can be done in a short, bottomless, water cooled metal mold

- **6/11 Mtr Radius Continuous Casting Machine**

RADIUS OF MACHINE	R1 :6 Meter, R2: 11 Meter
CASTING RANGE	Width : 100mm To 200mm, Height : 100mm To 200mm, Length : 3-12 mtr
CASTING MATERIAL	Mild Steel Alloy Construction Steel

- **4/7 Mtr Radius Continuous Casting Machine**

RADIUS OF MACHINE	R1 :4 Meter, R2: 7Meter
CASTING RANGE	Width : 80mm To 150mm, Height : 100mm To 200mm, Length : 3-6 mtr
CASTING MATERIAL	Mild Steel Alloy Construction Steel

- **3/6 Mtr Radius Continuous Casting Machine**

RADIUS OF MACHINE	R1 :3 Meter, R2: 6Meter
CASTING RANGE	Width : 80mm To 110mm, Height : 80mm To 110mm, Length : 3-6 mtr
CASTING MATERIAL	Mild Steel Alloy Construction Steel

Equipments of CCM

Withdrawal & Straightening Machine
Mould Oscillator
Tundish
Rigid / Flexible Dummy Bar
Mould Jacket
Template (Aluminum)
Ladle
Roller Table
Pusher



CCM EQUIPMENTS

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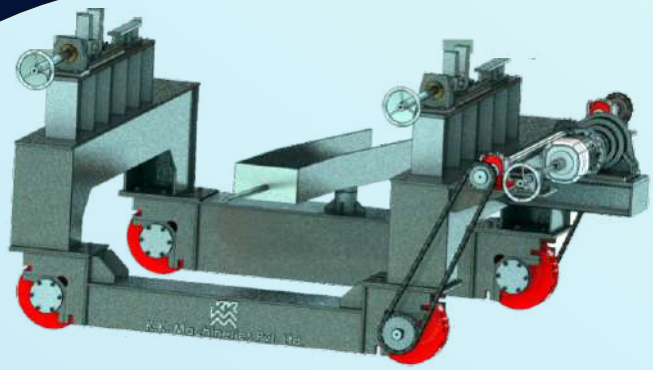






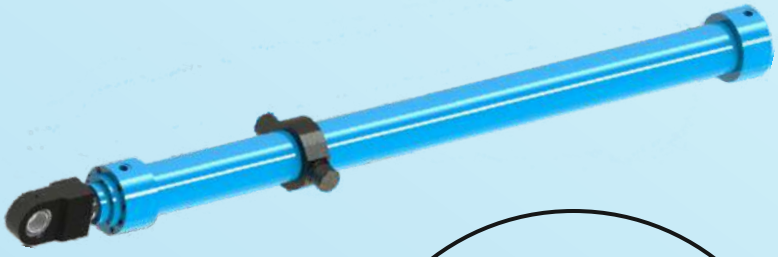
CCM EQUIPMENTS

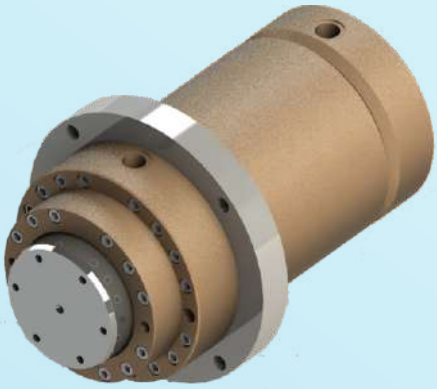
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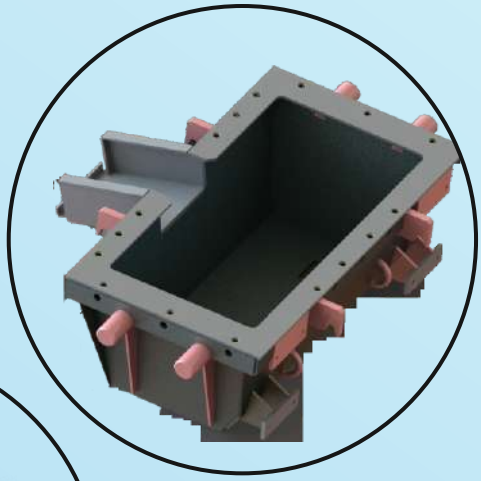


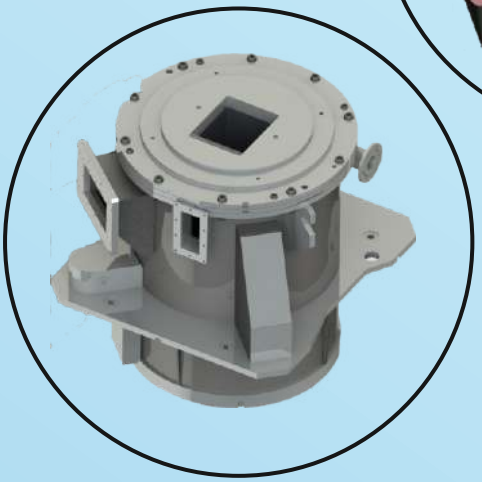


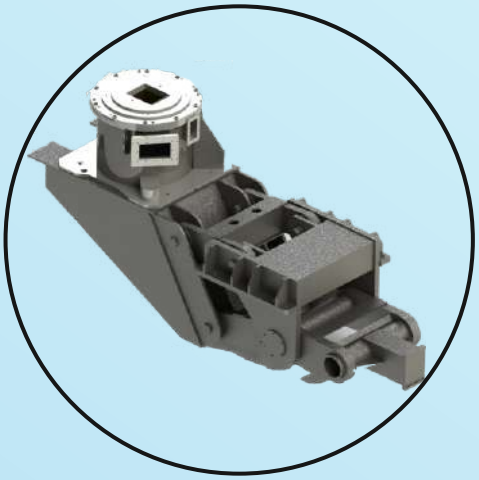












ROLLING MILL

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Rolling Mill

In metalworking, rolling is a metal forming process in which metal stock is passed through one or more pairs of rolls to reduce the thickness and to make the thickness uniform. The concept is similar to the rolling of dough. Rolling is classified according to the temperature of the metal rolled. If the temperature of the metal is above its recrystallization temperature, then the process is known as hot rolling. If the temperature of the metal is below its recrystallization temperature, the process is known as cold rolling.

In terms of usage, hot rolling processes more tonnage than any other manufacturing process, and cold rolling processes the most tonnage out of all cold working processes. Roll stands, holding pairs of rolls, are grouped together into rolling mills that can quickly process metal, typically steel, into products such as structural steel (I-beams, angle stock, channel stock, and so on), bar stock, and rails. Most steel mills have rolling mill divisions that convert the semi-finished casting products into finished products.

There are many types of rolling processes, including ring rolling, roll bending, roll forming, profile rolling, and controlled rolling.



Equipment:

- Pre-Stressed Mill Stands
- Brush Rolls
- Rolling Mill Un Coiler Machine
- Rolling Mill Cranes
- Rolling Mill Rolls
- Rolling Mill Stands
- Recoiler Machine
- Ejector Machines
- Work Roll Chock Assembly
- Mandrel Shaft
- Pinch Rolls
- Forged Rolls
- Roller Guide Box





STEEL PLANT

ENGINEERING CONSULTANTS

HOT CHARGING ROLLER TABLE

Hot charging and hot delivery process of continuous casting billet has the advantages of saving energy, improving the production capacity of heating furnace, reducing the burning loss of billet, decreasing the rolling fault, improving the rate of finished products, speeding up the logistics movement, reducing billet storage warehouse and liquidity occupation etc. It is widely used in many iron and steel enterprises. The basic conditions for the realization of hot delivery and hot charging of continuous casting billet is :

- Continuous casting process of high temperature defect-free billet production technology;
- The production capacity of steel rolling can match the production capacity of steel making;
- The process of steel making, continuous casting and steel rolling is stable and efficient;
- The shape, size and temperature of the billet can meet the rolling product varieties and specifications;
- Set up a throughout production management and quality assurance system which can realize process integration. The continuous casting billet hot delivery form that originally used is hot delivery and hot charging



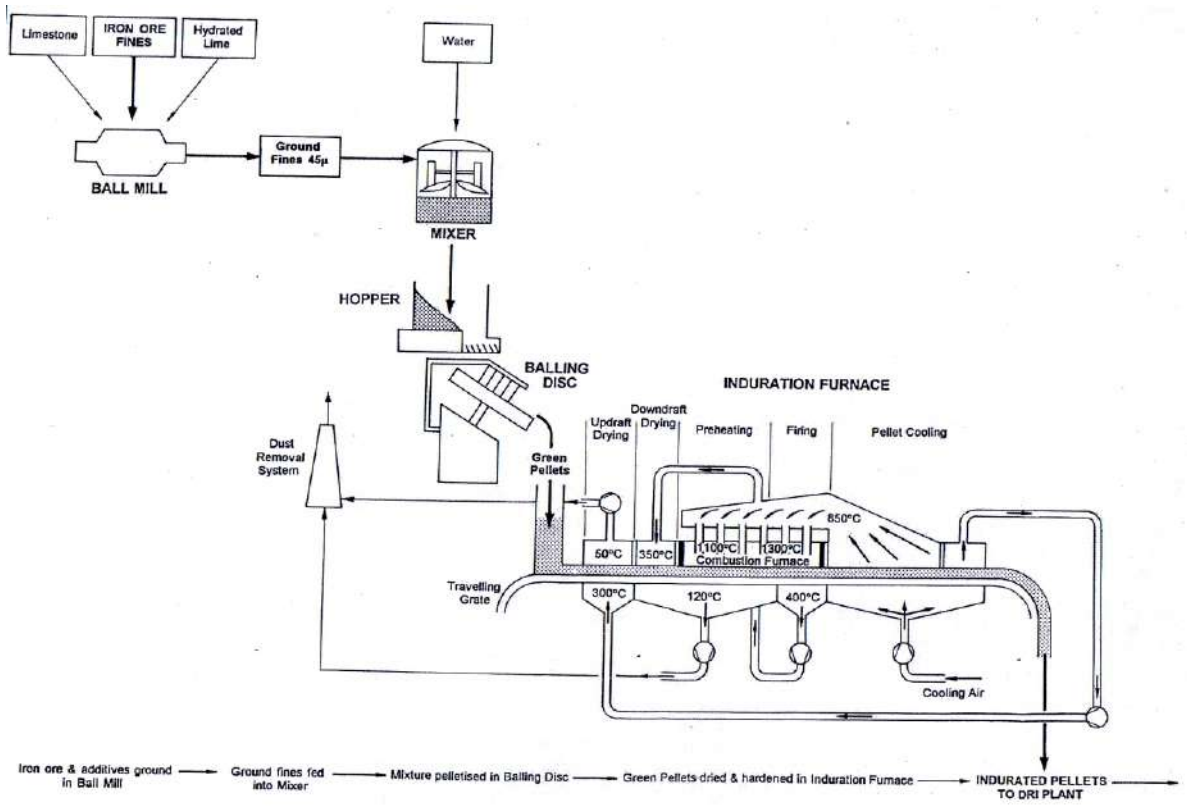






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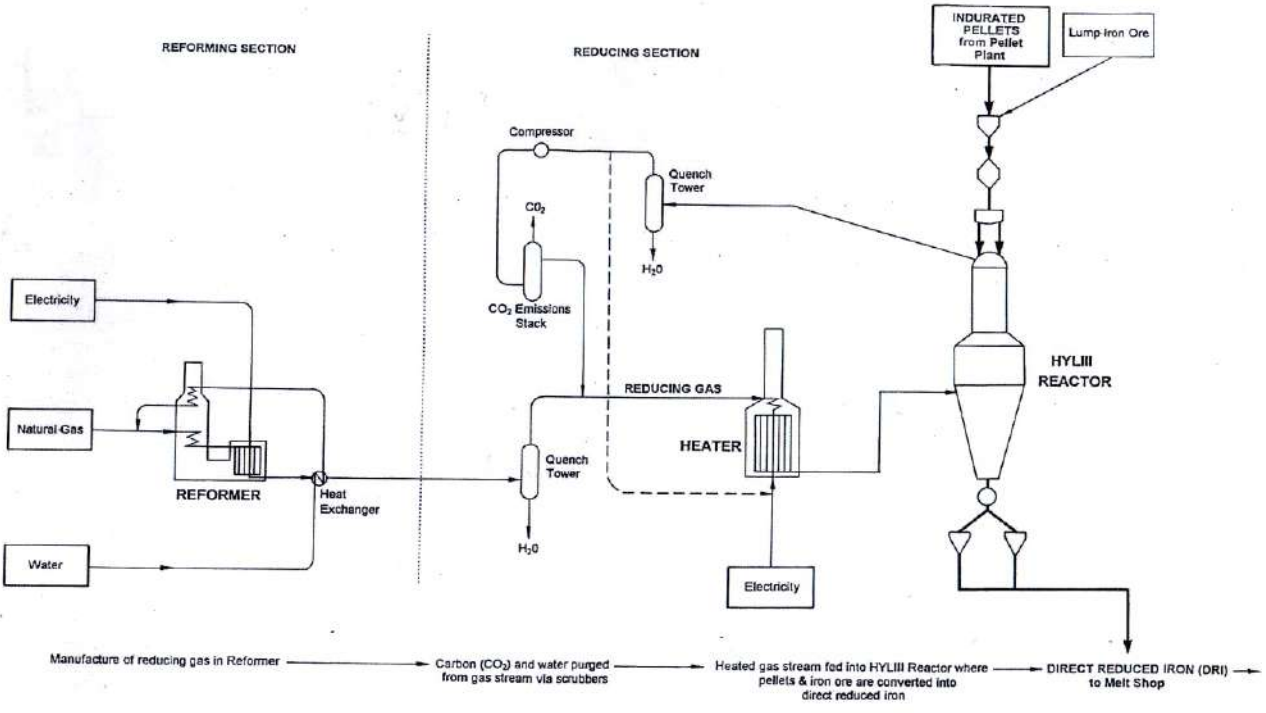
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PELLET PLANT PROCESS DIAGRAM

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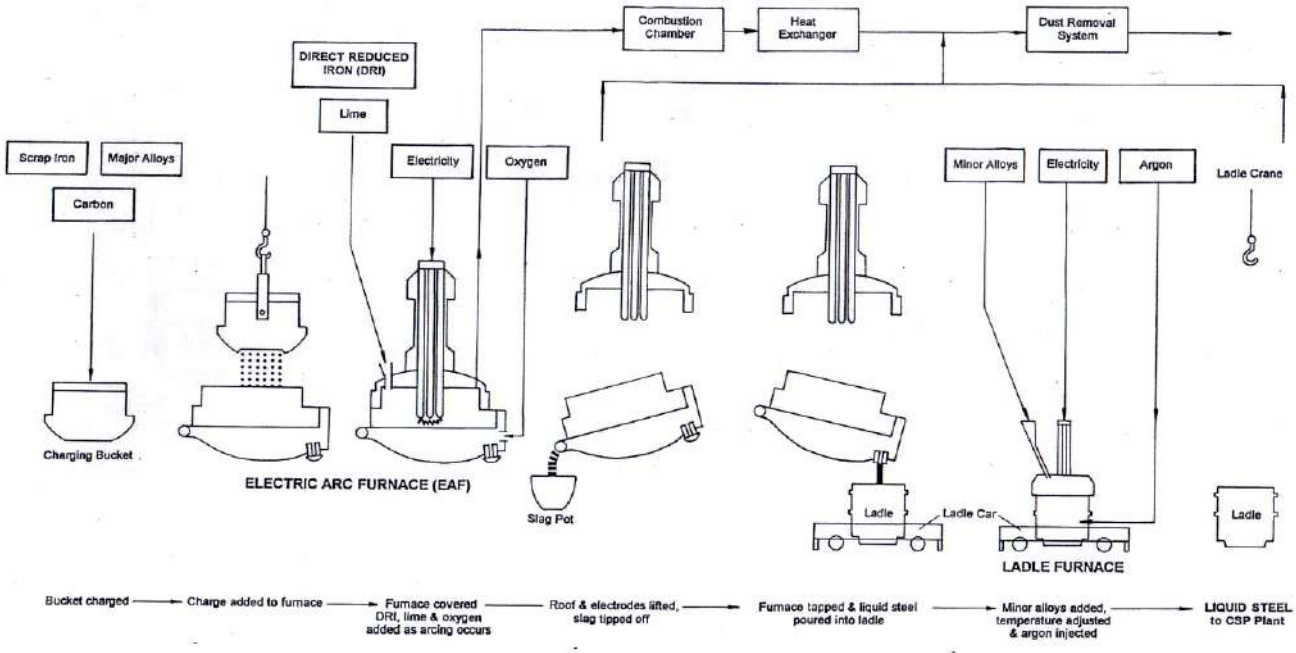
DIRECT REDUCTION (HYLIII) PROCESS DIAGRAM

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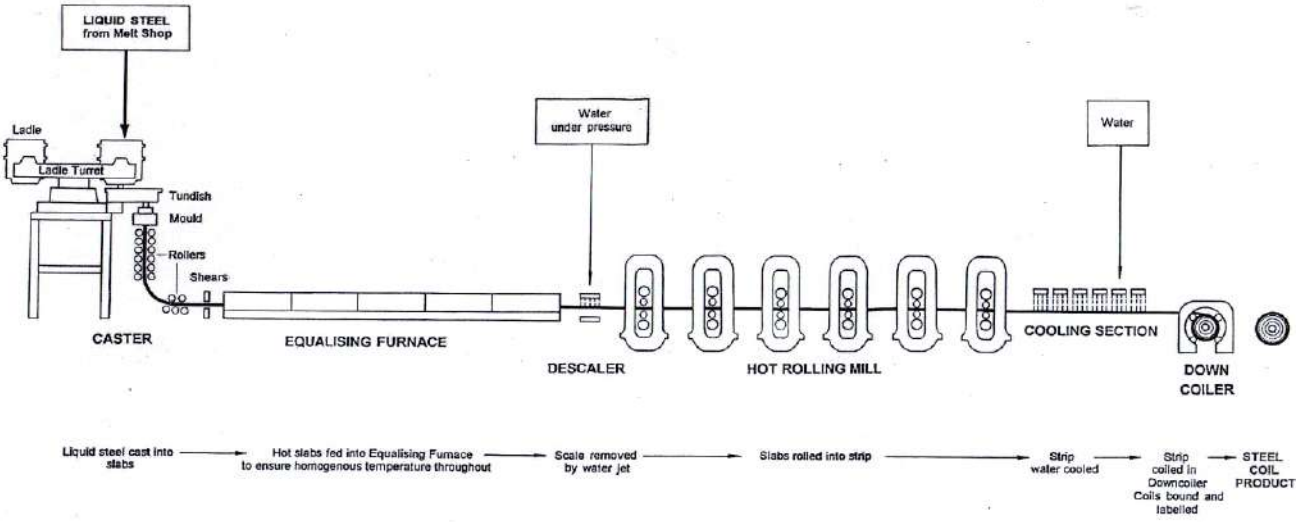
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MELT SHOP PROCESS DIAGRAM

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COMPACT STRIP PRODUCTION (CSP) PROCESS DIAGRAM

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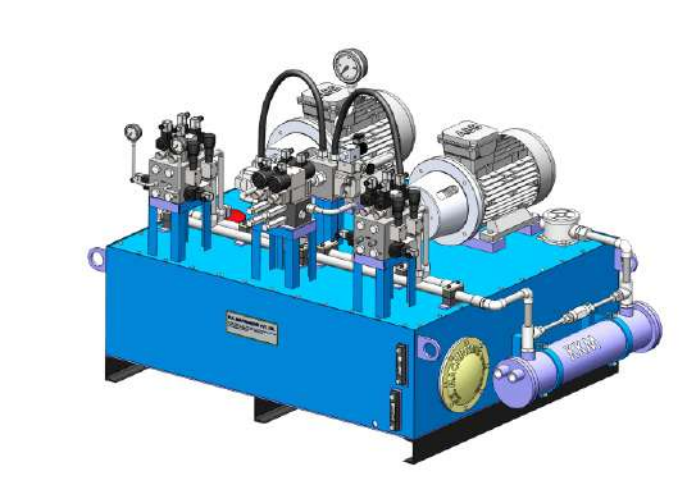
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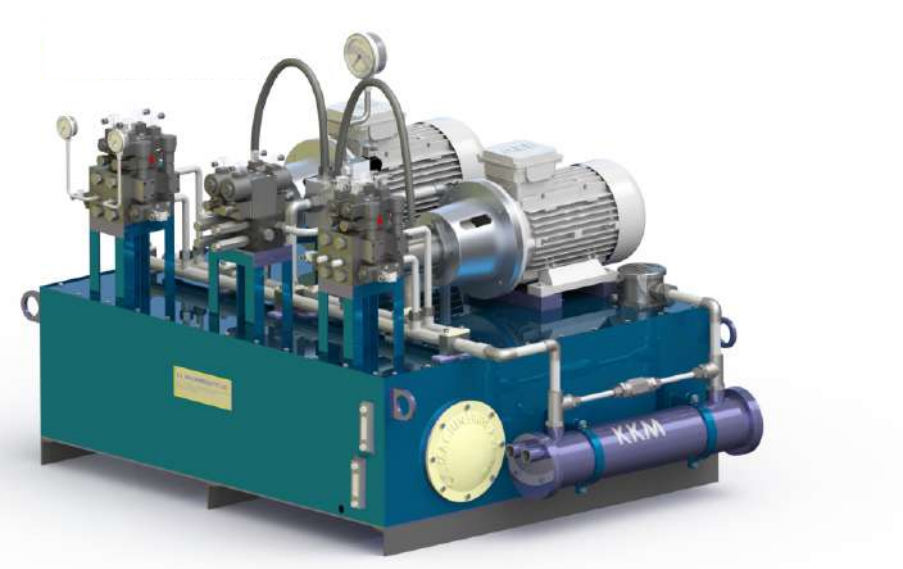
Hydraulic Power Pack System

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Function	Servicing the hydraulic systems of : • Withdrawal & Straightener • Rigid dummy bar storage • Pusher mechanism
Location	Hydraulic room
Construction	Hydraulic power station. Logically divided into individual systems.
Fluid	Safe and reliable system with individual strand or equipment related groups. Mineral oil ISO VG 68 / HVLP according to DIN 51’524







CEMENT PLANT MACHINERIES

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DESCRIPTION OF MANUFACTURING PROCESS 80 TPD VSK (R.K GRINDING PLANT)

Process flows heat for manufacturing of ordinary Portland cement in vertical shaft kiln with technology is shown in drawing.

The – VSK mini cement plant consists of the following main sections :

i) Receipt of raw materials
ii) Crushing & Storage
iii) Proportioning grinding & mixing
iv) Blending and storage
i) Formulation of clinker
ii) Grinding of Clinker, Fly ash, Gypsum & blending
iii) Storage, packing and transportation.

VSK Plants or Vertical Shaft Kiln cement plants are a smaller version of the rotary kilns cement plants and highly efficient as a cement plant. We have a dedicated team of professionals who have gained expertise in manufacturing cost-effective, performance-oriented, and easy to use VSK Plants. They have been designing and developing cement plants for the past 25 years using the VSK technology. Our VSK cement plants are manufactured in such a way that they save extra energy while working the same load. VSK plants gain an edge over the rotary plants as they occupy less space. We offer **VSK plants ranging from 20 TPD to 600 TPD,**

The raw materials used in a VSK plant comprise of cement, bauxite, lime and high aluminum cement. These plants come with a list of equipment including screw conveyor, rotary vent feeder, wet screeber, bucket elevator, kiln feed hopper, jaw crusher, nodulizer, etc. The vertical shaft kiln cement plants that we offer can be installed at various sites conveniently and are available at a competitive market price.

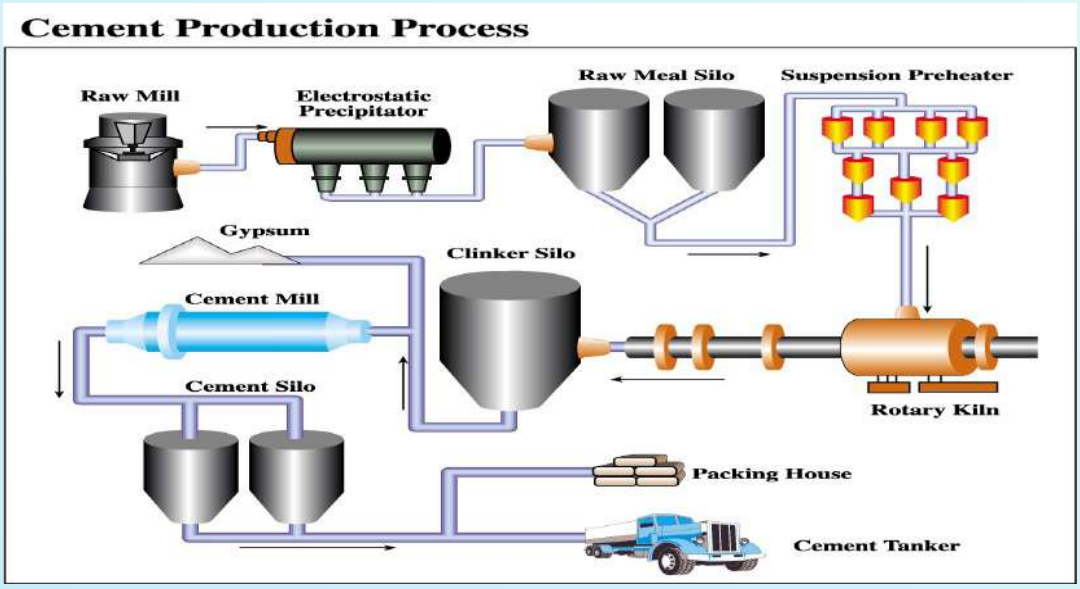


Equipments :

1) Rotary Vent Feeder
2) Screw Conveyor
3) Kiln Feed Hopper with Overflow Screw
4) Nodulizer
5) Bucket Elevator
6) Vertical Shaft Kiln
7) Wet Screeber
8) Belt Conveyor
9) Jaw Crusher

CEMENT PLANT MACHINERIES

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SUGAR PLANT MACHINERIES

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A **sugar refinery** is a refinery which processes raw sugar into white refined sugar or that processes sugar beet to refined sugar.
Many cane sugar mills produce raw sugar, which is sugar that still contains molasses, giving it more colour (and impurities) than the white sugar which is normally consumed in households and used as an ingredient in soft drinks and foods. While cane sugar does not need refining to be palatable, sugar from sugar beet is almost always refined to remove the strong, usually unwanted, taste of beets from it. The refined sugar produced is more than 99 percent pure sucrose.
Whereas many sugar mills only operate during a limited time of the year during the cane harvesting period, other cane sugar refineries work the whole year round. Sugar beet refineries tend to have shorter periods when they process beet but may store intermediate product and process that in the off-season. Raw sugar is either processed into white refined sugar in local refineries, and sold to the local industry and consumers, or it is exported and refined in the country of destination.

Sugar containing juice is boiled until it thickens into a syrup from which the sugar crystallises, the crystals are spun in a centrifuge where a portion of the molasses is removed to produce raw sugar, and the raw sugar is traditionally dried before shipment to a refinery. White sugar is then crystallised, dried and packaged. K.K. products can be found throughout the processing of sugar extract.

List of Equipment:
1. Shredder
2. Cane Milling Plant
3. Industrial Boiler
3. Diffuser
4. Filter
5. Evaporator
6. Crystallizer
7. Centrifugal
8. Drier
9. Cooler





SUGAR PLANT MACHINERIES

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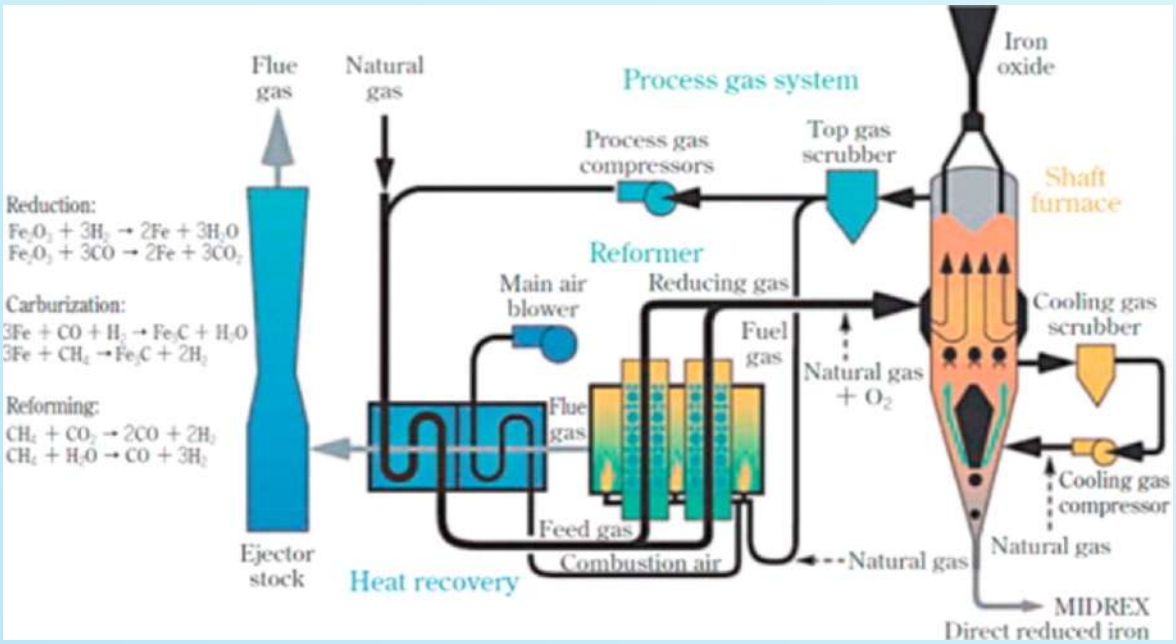


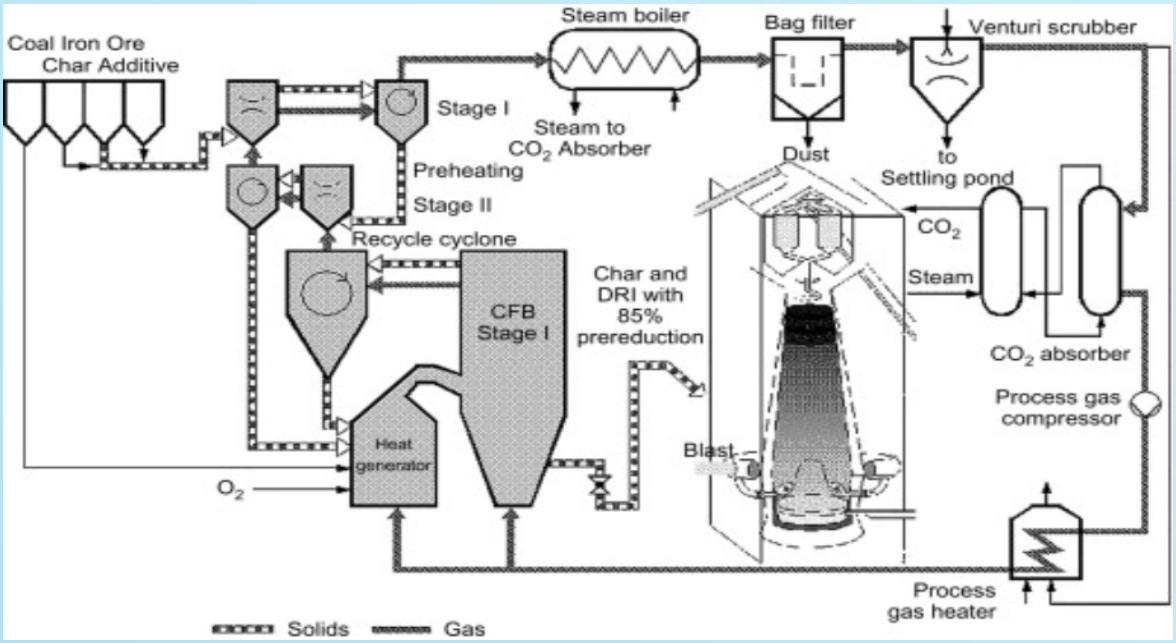
D R I PLANT MACHINERIES

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DRI :

In a DR process, iron ore pellets and/or lump iron ores are reduced by a reducing gas to produce DRI or hot briquetted iron (HBI). Depending on the generation of the reducing gas, two different DR processes are commercially available: gas-based and coal/oil-based. In the gas-based DR process, the reducing gas is produced by chemically reforming a mixture of natural gas and off-gas from the reducing furnace to produce a gas that is rich in hydrogen and carbon monoxide. Typical examples of the gas-based DR process include MIDREX® and HYL, which are often the preferred technology in countries where natural gas is abundant. However in the coal/oil-based DR process, the reducing gas is generated from hydrocarbons (primarily coal, but sometimes oil and natural gas) in the reduction zone of the furnace, which is typically a rotary kiln. Typical examples of the coal-based process include the SL/RN and ACCAR processes. The coal-based DR process is more popular in India and China. Different types of reactors, such as shaft furnaces, fluidized beds, rotary kilns, and rotary hearth furnaces, have been used in different variations of the process to achieve the metallization required.





D R I PLANT MACHINERIES

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Coal Fired Power Plants Machineries

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The introduction and increasing penetration of renewables is changing the realities of the power market. Coal now has a different, but still very important, role to play in the energy mix, and is helping to enable renewables growth.

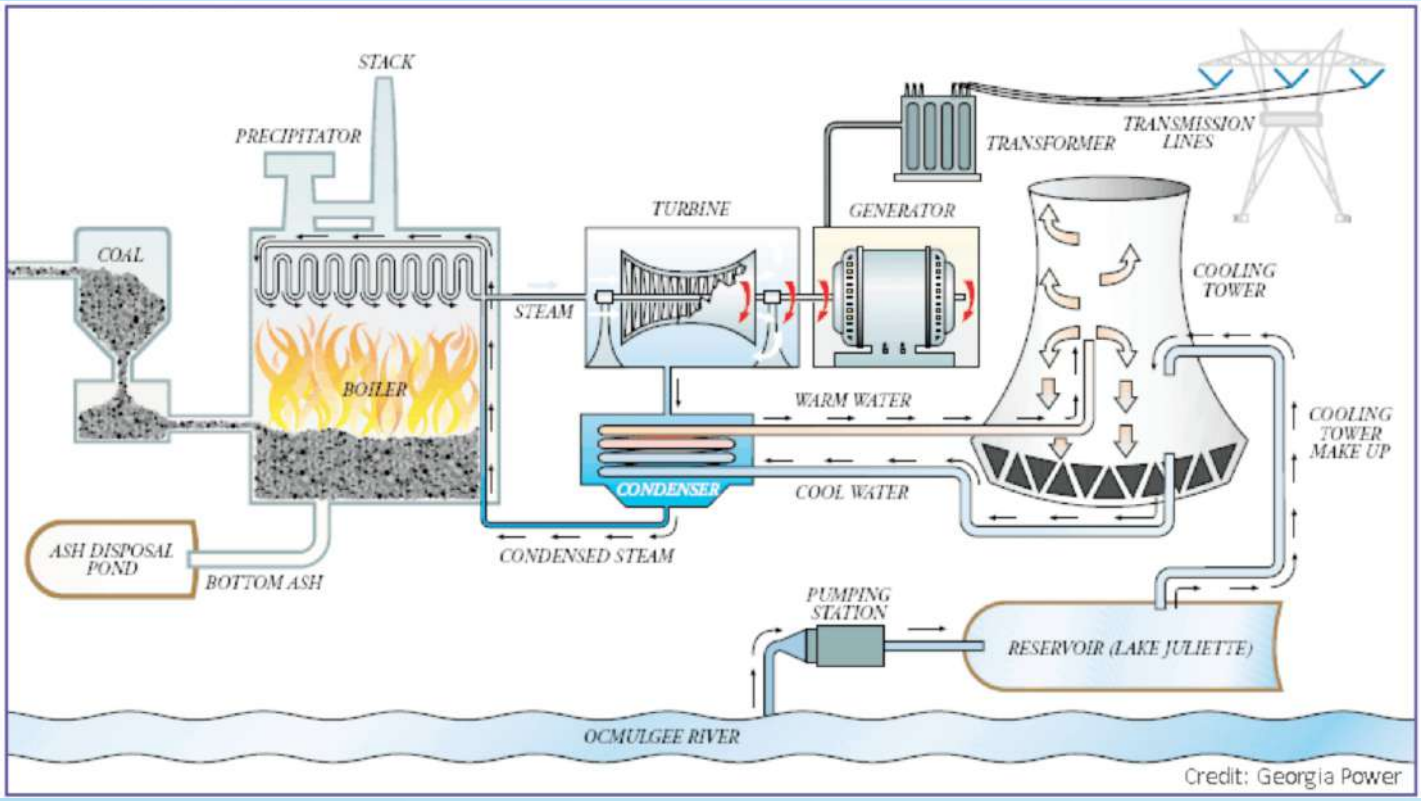
A **coal-fired power station** or **coal power plant** is a thermal power station which burns coal to generate electricity. Coal-fired power stations generate over a third of the world's electricity.

A coal-fired power station is a type of fossil fuel power station. The coal is usually pulverized and then burned in a pulverized coal-fired boiler. The furnace heat converts boiler water to steam, which is then used to spin turbines that turn generators. Thus, chemical energy stored in coal is converted successively into thermal energy, mechanical energy and, finally, electrical energy.

We provide best grade Service to our valuable clients. The Installation Services offered by us are performed under the supervision of our highly experienced professionals. With the help of our designers, we are able to provide our customers exquisite and exclusive designs. The services are available at very reasonable rates to our clients and highly appreciated by them also.

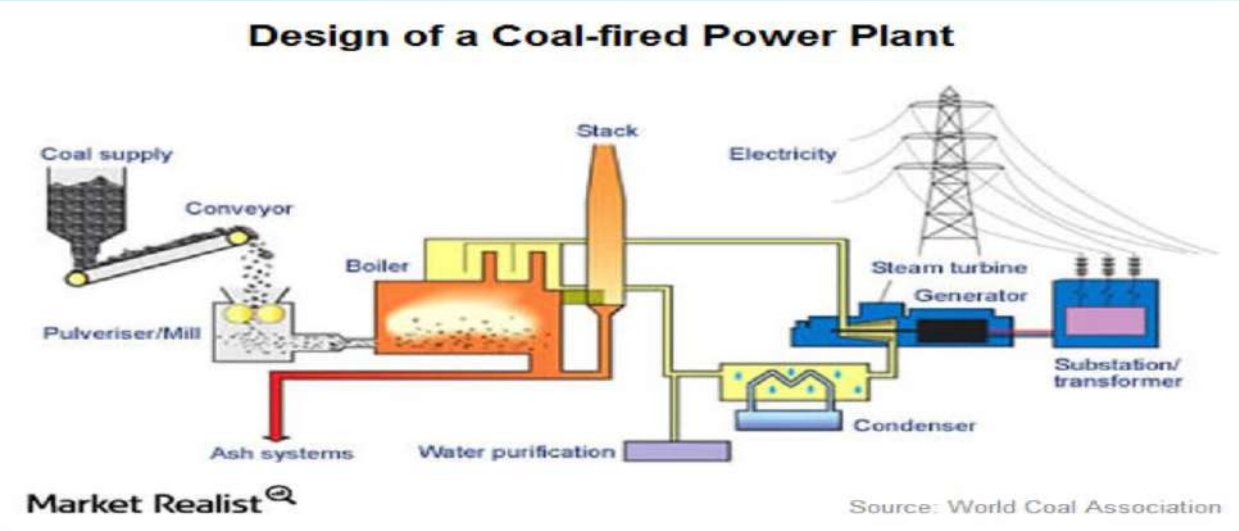
List of Equipment:

1. Gas Turbine
2. Steam Turbine
3. Generators
4. Boiler
5. Conveyor
6. Flue Gas Desulfurizer
7. Selective Catalytic Convertors
8. Electrostatic Precipitators
9. Ash treatment facility
10. Heat exchanger



Coal Fired Power Plants Machineries

ENGINEERING CONSULTANTS















OUR MISSION

ENGINEERING CONSULTANTS

To provide the latest state-of-the-art continuous casting solutions to customers in India and the world. The ultimate goal of K K Machineries Pvt. Ltd. is to have its own identity in the Steel Equipment industry as a most trusted service provider in all aspects and a one stop solution for high quality, time bound and cost effective of all Type Continuous Casting Machine services.

K K Machineries Pvt. Ltd. Engineering Consultants is committed to maintain 100% client's satisfaction by certain values Deep Integrity & Ensuring Code of Conduct, Precious Timekeeping & Highest level of Accuracy, Potential Leadership with an Energetic Team, Sufficient infrastructure for anytime Expansion, Continuous Growth & 100% Success.

OUR POLICY :

"We are committed to meet our customer requirements and fulfill their high expectations by using consistent processes and technologies with highly motivated employees"

Quality systems and procedures have been carefully evolved over a period of time and adopted at every stage to ensure consistency and high quality of services. We have set standards when it comes to quality and our policies are open to all for mutual benefit. Custom made solutions are designed to fit each publisher and each project, with a drive to deliver quality on time, every time.

Salient features of our range are as follows :

Longer functional life
Dimensional accuracy
Low maintenance
Corrosion & abrasion resistance
Sturdy construction





OUR CLIENTS

ENGINEERING CONSULTANTS

Our organization is backed by a team of enthusiastic, hardworking and dedicated professionals, which uses all the available resources for Design and Fabricating a wide array of **Steel Plant Machineries, Cement Plant Machineries, Sugar Plant Machineries, D R I Plant Machineries, Coal Fired Power Plant Machineries** having decades of experience, our professionals work in synchronization with clients to clearly understand their exact requirements. Their client centric working styles have helped us in attaining utmost client satisfaction.

Our team comprises the following members :

Design Engineers	Technocrats
Productions Engineers	Site Engineers
Technicians	Quality controllers
R & D Experts	Sales and marketing executives

Skilled and semi - skilled workforce

Clientele :

We are a customer oriented organization, in which all endeavors are directed towards achieving utmost client satisfaction. Apart from this, our team of experts enable us to provide design of continuous Casting Solutions & Complete Fabrications a Erection Services and supply machines & spare parts to more than 8 & 37 companies respectively. For the convenience of our clients, we accept payment through cash / cheque / DD and provide easy terms like D/P & D/A. In addition to this, we also deliver all our consignments via road & sea to meet the requirements of our prestigious customers. Moreover, all these factors have helps us in garnering a huge clientele that includes the below mentioned names :

Our Client List :

- Concast India Ltd. (Erection of various size machine and other equipments)
- Concast Standard - Zurich (Erection of various size machine and other equipments)
- Conin Engineering Ltd. (Piping)
- Nikko Technologies (I) Pvt Ltd. (Piping)
- Western Ministeel Ltd. (Pollution control)
- Special Steels Ltd (CCM)
- Ramkishan Ispat Ltd. (Dismantling of CCM Furnace Etc.)
- Sanghvi Steel Ltd. (CCM)
- Mukand Ltd. (Furnace maintenance)
- Essar Steel Ltd. (Cutting machine, erection of shearing machine)
- Mahindra & Mahindra Ltd. (Water softener plant)
- Panchmahal Steels Ltd. (Water complex, Pollution control stystem)
- Jindal Strips Ltd. (Cutting Machine Erection)
- Volvo Steels Ltd. (Furnace)
- Euro Gulf Steels L. LC. (Furnace)
- Remi Metals Gujarat Ltd. (Furnace)
- Vardhman Special Steels (CCM - 4/7 mtr)
- Aarti Steels Ltd (CCM 4/7 mtr)
- Indian Seamless Steels & Alloys Ltd. (Furnace)
- Bellary Steels & Alloys (Furnace)
- Nova Udyog Ltd. (Furnace)
- East Coast Steel Ltd. (Maintained all equipments)
- Mahindra Ugine Steel Co. Ltd. (CCM Furnace)
- Yogsiddhi Merchandiser, Sonepat(3/6 2 Strand Caster)
- Prime Gold International,hosur (4/7 Single Strand Caster)
- Sun Metal And Alloys, Wada(4/7 2 Strand Caster)
- Balbir Alloys Pvt Ltd, Wada(4/7 Single Strand Caster)

OUR CLIENTS

ENGINEERING CONSULTANTS

- Bhushan Steel, Orissa (spares)
- Keyvan Steel, Iran (6/11 2-strand Caster)
- Keyvan Steel,iraq (4/7 2 Strand Caster)
- New Laxmi Steel & Power Pvt. Ltd,salem(3/6 2 Strand Caster)
- Rathi Super Steel (spares)
- Rimjim Ispat (spares)
- Thermax Ltd. (Piping for ready concrete mix)
- Malhotra Steel Ltd. (Furnace 12 to & B Ton)
- Nikko Industries Co. Ltd. (Ducting works)
- U. B. Engineering Ltd (Piping works)
- ISPL Industries Ltd. (CCM various size)
- Co-nick Alloys India Ltd, (Furnace)
- DLF Cements Ltd. (Pollution Control)
- Hindustan Lever Ltd. (Water complex, water softener plant)
- Tata Pharma Ltd. (Pollution control System)
- Bharat Gears Ltd. (Structure erection works)
- Merind Ltd. (Piping works)
- Zenith Steel Ltd. (CCM 4 mts Revamping)
- Atrois Chemicals Ltd. (Piping works)
- Rastriya Metals Industries (15 ton Furnace)
- Bombay Forgings Ltd. (Pollution Control system)
- Mafatlal Fine Spinning Ltd. (Pollution control system)
- AL Gasim Rerolling Mill sudan (CCM 6/11 mtr)
- African Industries Nigeria (CCM 4/7 mtr)
- Dolphin Steels Nigeria (CCM 4/7 mtr 15 ton furnace)
- Eastern Steels Nigeria (On process) 4/7 mtr and 3/6 mtr)
- Roofing Steels Uganda (CCM 4/7 mtr)
- Cathodic Protections System Factory Saudi Arabia (6 ton X 5 furnace with shed)
- Energy Horizon System Factory Saudi Arabia (furnace 12 ton)
- Paris Ispat Sangammer (CCM 3/6 mtr)
- Vellabh Steels Bavanagar (CCM 4/7 mtr)
- Amba Sankhi Steel Muzaffer Nagar (CCM 4/7 mtr)
- Super steels Iraq (On process) (CCM 4/7 mtr)
- Jai Jagadamba Steels Wada (CCM 6/11 mtr)
- Ratnesh Metal Mehasna Gujrat (6/11mtr)
- Kamal Gases Tanzania East Africa (3/6 CCM)
- Elephant Steels Nigeria (4/7 CCM)
- Hi-Tech Engineering Co (Navi Mumbai) (CCM, Engineering Consultancy)
- Sreeji Engineering (Navi Mumbai) (CCM Engineering Consultancy)
- Kiscol TMT Coimbatore
- Steefo Engineering corporation Pvt Ltd. (12 various projects in abroad)
- Steefo Industries Ahamadbad Gujrat (Various projects)
- JHV Steels Ltd. Chunar Mirzapur U.P. (4/7 CCM Electrotherm Make)
- RLJ Concast PVT Ltd. Chunar Mirzapur U.P. (Concast India make 4/7 mtr CCM)
- Fabrimetals (MMD Group) 7 projects (African countries)
- AONE Ispats Hindupur Billary (2 projects CCM)
- South Malabar TMT Palakkad Kerala (CCM)
- PMP Steels Chennai (CCM)
- Hindpur Steels (CCM)
- Continues .....

We hope you will give us a chance to work with you, and also we assure you that we will work to your entire satisfaction and expectation.



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