ENVIRONMENTAL PROTECTION SOLUTIONS

Respect for environment is a natural outgrowth of FABCON's legacy of responsible innovation. Through solutions in dry scrubbers, electrostatic precipitators, water treatment plants and baghouse filters we assist a range of industries to reduce emissions and improve eco-friendly operations.

FABCON
DESIGN & ENGINEERING (PVT) LTD.

ENVIRONMENTAL IMPACT OF STEEL PRODUCTION

Steel production has a number of impacts on the environment, including air emissions (CO, SOx, NOx, PM2), wastewater contaminants, hazardous wastes, and solid wastes. The major environmental impacts from integrated steel mills are from coking and iron-making.

Climate change

Virtually all of the greenhouse gas emissions associated with steel production are from the carbon dioxide emissions related to energy consumption.

Emissions to air

Coke production is one of the major pollution sources from steel production. Air emissions such as coke oven gas, naphthalene, ammonium compounds, crude light oil, sulfur and coke dust are released from coke ovens.

Emissions to water

Water emissions come from the water used to cool coke after it has finished baking. Quenching water becomes contaminated with coke breezes and other compounds. Most pollutants can be removed by filtration.

Waste

Slag, the limestone and iron ore impurities collected at the top of the molten iron, make up the largest portion of iron-making by-products. Sulfur dioxide and hydrogen sulfide are volatized and captured in air emissions control equipment and the residual slag is sold to the construction industry

Industrial Hazards

Sugar, chemical, Textile, Steel, Fertilizer, FMCG, Cement, Paper and other industries contribute to air, water and land pollution. Emission of hazardous gases from power plants disturbs soil fertility, reduces rate of seed germination and hinders growth of macro and micro nutrients in plant. Hazardous chemical exposures, uncontrolled reactions and flammable gases results in pollution. Nitrogen and sulfur oxides from boilers, waste water carrying chemicals, carbon dioxide emissions, fertilizer waste, food waste, working of heavy machinery, discarded paper waste contributes to air, water and land pollution to a greater extent and hence endangering our environment.

How We Work

We provide an array of solutions for emissions and effluent problems. Throughout our history we have applied the principles of science to create products that help reduce emissions and create eco-friendly environment. We provide an array of solutions for emissions and effluent problems, help reduce emissions and create eco-friendly environment.

WATER TREATMENT PLANT

Our water treatment plant deals with boiler water treatment.

The boiler water treatment includes removal or chemical modification of substances damaging to the boiler. Our water treatment prevents corrosion, scale and foaming. We also treat external raw water that is to be used within the boiler for removal of impurities before they reach the boiler. Our chemical treatments include chemical precipitation, chemical disinfection, chemical oxidation, ion exchange. Our physical treatment include filtration using rapid gravity filter or a mechanical filter. We also employ slow sand filters as a biological process to purify raw water to produce potable water.

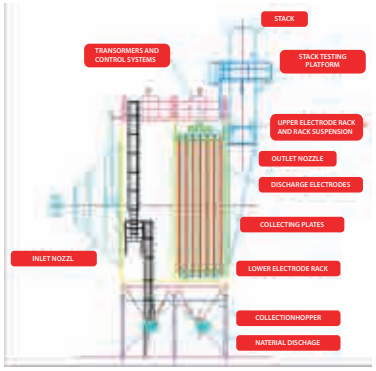
AIR TREATMENT PLANT

Dry Scrubber

Our dry scrubber combines carefully chosen chemical reagents with exhaust stream at incredibly high speed that react with or absorb the compounds in the stream. The working diagram has been shown.

Electrostatic Precipitator

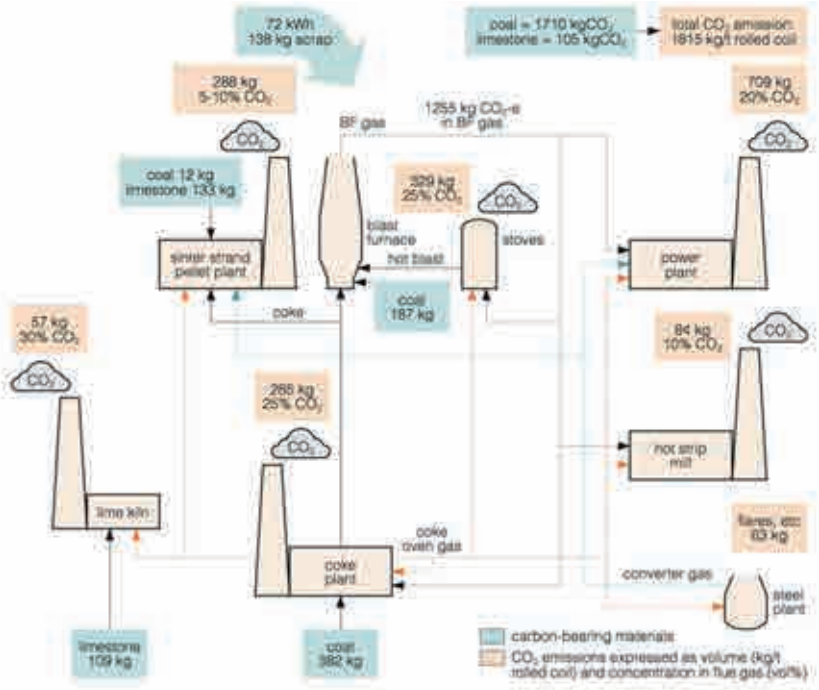
Our Electrostatic Precipitators continue to be excellent devices for control of many industrial particulate emissions, including smoke from electricity-generating utilities (coal and oil fired).



Baghouse Filter & Cyclone Dust Collectors

Our baghouse filter and cyclone dust collector is manufactured according to the need of the customer to incorporate filter bags or any other filter media as per use. Various types include mechanical shakers, reverse air cyclone type and pulse jet.

The following diagram portrays the amount of C02 emitted from carbon bearing materials in terms of volume. Carbon dioxide emissions i.e. the black soot are the by-products in steelmaking. This black soot collected can be used in industry as a pigment for inks and dyes. Further it is used in the vulcanization process to treat rubber and in toners for laser printers and copiers.



OUR SPECIALIZATION

Our equipment specializes for use in every industry. Our dry scrubbers, remove effectively ammonia, chlorine, hydrochloric acid, chlorinated silanes, metallic compounds, sulfur dioxide, hydrogen sulfide, boron tri-fluoride, amines. Our Electrostatic Precipitators remove effectively unreacted carbon from smoke and Baghouse filter efficiently removes dust particulates from air. Our supplied equipment can:

- Handle high temperature streams
- Versatile
- Capable of abating very acidic streams
- Spent media can be a source of revenue
- Smaller space requirements
- Can be retrofitted into current equipment (in some cases)
- Lower cost of purchase
- Able to neutralize highly corrosive gases
- Several customizable options, based on specific output and applications, often allowing for a reduction in cost.
- Eliminates as much or more than 99% of dangerous gases, which meets all EPA requirement

OUR MASTERPIECES

From the inception of FABCON, the following masterpieces executed by us incorporate the water and air treatment plants such as:

- Reverse Osmosis Plant and Dust Collection System with Bagasse Fired Boiler 35-ton Serena Textiles (Sefam)
- Reverse Osmosis Plant and Dust Collection System with Bagasse Fired Boiler 30-Ton Hunza Sugar Mills Unit-1

- Reverse Osmosis Plant and Dust Collection System with Bagasse Fired Boiler 30-Ton Chashma Sugar Mills Ltd. In 2013
- Reverse Osmosis Plant and Dust Collection System with Package type Coal Fired Water Tube Boiler 10-Ton Mumtaz Mahal Textiles
- Reverse Osmosis Plant and Dust Collection System with Package type Coal Fired Water Tube Boiler 10-Ton Millac Foods
- Reverse Osmosis Plant and Dust Collection System with Bagasse Fired Water Tube Boiler 94-Ton Alman Seyyam Sugar in 2017
- Reverse Osmosis Plant and Dust Collection System with Bagasse Fired Water Tube Boiler 100-Ton Hunza Sugar Mills Unit-2

FEATURES & OPTIONS

Competitive packages including instrumentation and controls, skid mounting of equipment, acid storage tanks, metering pumps, and installation

- Vertical and horizontal configuration
- Efficiencies up to 99.99%
- Capacities of 50 to 75,000+ SCFM
- Custom designed systems
- Options to be retrofitted with current equipment
- Media options
- Sized system process fans
- Portable options and sizes available

SERVICES

Competitive packages including instrumentation and controls, skid mounting of equipment, acid storage tanks, metering pumps, and installation:

- System and Equipment Design
- Fabrication
- Training
- Preventive/Predictive Maintenance
- System and Equipment Engineering
- Installation, Commissioning and Start-up
- Insulation Repairs
- System Relocation

Protect
Protecting bio-diversity

Save
Recycle, Reuse and Resupply

Values
Reducing industrial pollution is our core value

As environmental concerns mount day by day, various industries are looking forward to incorporate eco-friendly practices and products to help obtain and maintain a sustainable environment. Since Fabcon's founding we have been compelled to share our technological expertise with several industries as have we felt the need to do so with respect and responsibility for our environment. As industries rethink and change their practices for the betterment of our planet, we at FABCON extend our partnership as innovators who also consider ourselves as environmental protectors.

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