

Multi Effects...

EVAPORATORS

... with New Edge Technology

The background of the page features a blue-tinted photograph of industrial machinery, specifically large cylindrical vessels and piping. A prominent feature is a large, perforated metal screen or filter. The right side of the page is overlaid with a white diagonal grid pattern.

NE NEW FAB
Engineering
System Pvt. Ltd.



EVAPORATORS | HEAT EXCHANGER | REACTORS | RECEIVER | VESSELS | SULPHONATOR
SPRAY DRYER | ESTER MACHINE | GYPSUM PLANT | CONVEYER | STORAGE TANK....



WHO WE ARE

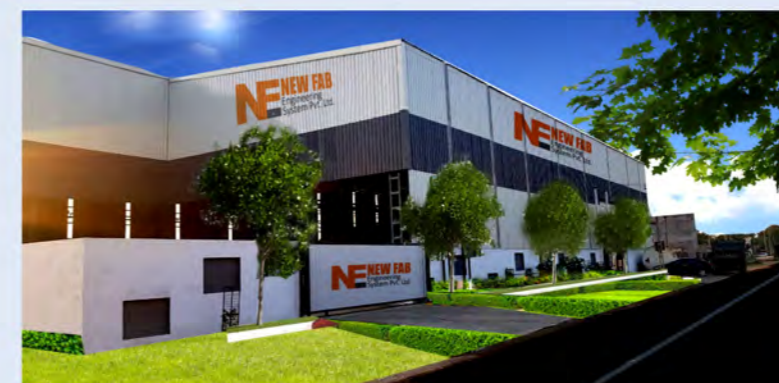
inspiring ... the next millennium

“New Fab Engineering System Pvt. Ltd. “was founded in year 1993 with the team of technocrats, who has the vast experience in the field of manufacturing Chemical, Textile and Pharma Process Equipment and Machinery Parts. The company is managed by team of directors Mr. Pitambar Patel, Mr. Alpesh Patel, and Mr. Nilesh Patel with vast experience and proficiency in their respective fields of Operation. Our proprietor states his future goals to optimize and to increase production capabilities by implementing best

management practices and further increase of facilities.

We believe in customer satisfaction and adequate steps to be taken to make sure that they get nothing short of the best. Our products cater to Chemical, Pharma, Textile, Water Treatment, Dyes & Intermediate, Food and Pharma etc...Industry needs. Our products are designed with the emphasis on Comfort, Safety and Speed, which offers the superior performance under a wide range of environmental conditions in specific applications.

We at New Fab Engineering System Pvt. Ltd. incorporate with the modern technology to keep pace with the changing needs of the various industries with the high quality material and experienced Manpower. We provide Quality Products and Excellent after sales service.



NEW FAB
Engineering
System Pvt. Ltd.



Our Vision

“Develop Customer Satisfaction and Our Image Globally and Accomplish exponential growth to Leadership through world class products and services.”



Our products are designed with the emphasis on **COMFORT, SAFETY** and **SPEED**.



EVAPORATORS FOR SALT AND PRODUCT RECOVERY.

- Aluminum Chloride
- Ammonia
- Ammonium Chloride
- Ammonium Nitrate
- Ammonium Sulphate
- Calcium Chloride
- Calcium Sulphate
- Ferrous Sulphate
- Manganese Sulphate
- Mercerizing Caustic
- Monoethylene Glycol
- Phosphoric Acid
- Potassium Chloride
- Potassium Sulphate
- Sodium Acetate
- Sodium Carbonate
- Sodium Chloride
- Sodium Hydroxide
- Sodium Nitrate
- Sodium Phosphate
- Sodium Silicate
- Sodium Sulphate
- Sodium Thiosulphate
- Sulphur Dioxide
- Sulphuric Acid

MULTIPLE EFFECT EVAPORATORS

STRIPPER COLUMN

ATFD

CRYSTALLIZERS

DRYERS

EVAPORATORS

We hold enormous proficiency in manufacturing, exporting and supplying quality proven range of Multi Evaporator. These machines evaporate the unwanted volume of water or any other kind of solvent substance from solid substances. This evaporator is manufacturing using the advanced technology and is quality tested to make sure their conformity with the pre-defined industry standards.

The process of Evaporation is energy intensive; any evaporator system design needs to take great consideration into the heat recovery philosophy and overall utilities usage of the final system design. Product characteristics also need to be considered in the system design. These are designed in such a way that the steam from outside source is condensed in the heating element of first effect and further for the second effect boiling temperature of the first effect is just too high that evaporated water can serve as the heating medium.

There are several varieties of evaporator designs

commonly used throughout different industry sectors. The selections of the appropriate design are based on many factors that consider the efficiency of the system and the appropriate uses of a specific evaporator type to maintain final required product characteristics.

The varied system designs can utilize different technologies within the evaporator system. Many individual evaporator systems and components can be customized to best suit your needs. Some of the most common types of evaporators supplied by **NewFab Engineering System** include:

- Forced Circulations Evaporator
- Falling film Evaporator
- Rising falling film Evaporator
- Flash Evaporator
- Natural circulation Evaporator



Our Mission

“By providing quality product to our customers with complete aggressive solutions through new technology and manufacturing excellence that are responsive to dynamic market needs.”



Forced Circulation Evaporator

'NewFab' Forced circulation Evaporator is a combination of shell & tube type Heat exchanger, a Vapour separator and Circulation Pump, Circulation pump is Axial flow pump with high discharge flow and low head. The pump maintains good velocity in of liquid in tube. This combination with adequate hydrostatic head above top tube sheet suppresses boiling inside the tube. Therefore scaling of tube during evaporation is minimized.

Falling film Evaporator

Falling film Evaporator most frequently used evaporation system design. A very short residence time and efficient heat transfer are the main benefits of this design. The system are most suited for liquids which are temperature sensitive, have a high rate of specific heat transfer, particularly for non-crystalline solutions. FFE is a combination of vertical shell & tube type heat exchanger (Calandria) and Vapour Separator mounted at bottom. At the top of the Calandria, the product is introduced via a distributor system and get distributed in such a way that it flow down as a thin film on inside surface of the tube. Heat is given on shell side through heating medium. As the feed receives the heat, vapour generated

moves at centre of tube co-currently with liquid. The drag of vapour increases the turbulence and improves heat transfer performance. The mixture of liquid and vapour get separated in Vapour separator at bottom.

Natural Circulation Evaporator

Natural circulation evaporators are very simple and are normally used where the effluent has a high viscosity, higher levels of hardening agents, un-dissolved solids, for products which are affected by their own high temperatures and longer residual times. The operation could be continuous, batch or semi-batch and do not require pumps for recirculation or intermediate product transfer.

Rising falling film Evaporator

One of the very early "modern" evaporator designs, a rising film evaporator utilizes either a plate heat exchanger or a vertical shell and tubular heat exchanger with process fluid in the tubes. As the liquid boils, it creates a film on the inside of the plate or tube as a consequence of the vapour volume generated. As with any film style design, the resulting heat transfer coefficient makes the design very efficient in terms of heat transfer area required.

ENERGY EFFICIENCY AND EVAPORATOR CONFIGURATION

The operating costs of an evaporation plant are largely determined by the energy consumption. It must be a balance between the energy entering and leaving the system.

There are three basic possibilities to save energy

- Multiple-effect evaporation
- Thermal Vapour Recompression, (TVR)
- Mechanical vapour recompression (MVR)

Multiple-effect evaporation

If the amount of vapour produced by primary energy is used as heating steam in a second effect, the energy consumption of the overall system is reduced by about 50 %. This principle can be continued over further effects to save even more energy.

Thermal Vapour Recompression (TVR)

A certain steam quantity, the so-called motive steam, is required for operation of a Thermal

vapour re-compressor. The vapours from the first effect is compressed to a higher pressure by the Thermal Vapour re-compressor and steam portion is transferred as heating media to the next effect or to the condenser. The energy of the excess vapours approximates the energy of the motive steam quantity used.

Mechanical Vapour recompression (MVR)

MVR designs utilize a compression device to increase the pressure of the process vapour and reuse it as the heating medium for the evaporator. Typical mechanical devices used in an MVR design are: centrifugal fans, compressors, and blowers. MVR designs can theoretically provide the efficiency of 100 equivalent effects of a multiple effect evaporator design. The cost of electricity to drive the compression is a factor in the equivalent effect comparison.



INDUSTRIES THAT WE SERVE

CHEMICALS



AGRICULTURAL CHEMICAL

WATER TREATMENT



PETROCHEMICALS & REFINERIES



PHARMACEUTICALS



TEXTILES



DYES & INTERMEDIATE



FOOD & BEVERAGES



OIL AND GAS & POWER



PULP AND PAPER



QUALITY CERTIFICATION



AN ISO 9001:2015 CERTIFIED COMPANY

In order to make sure constant quality in our products, we have designed and implemented a clear quality policy. This policy entails standards and strategy that are in fulfilment with the industry standards. Our quality control

professionals are constantly affianced in maintaining the standard of our product range. For ensuring the quality parameters of the finished products, our professionals keep a severe vigil on the production process. Further, prior the dispatch of the products, we conduct various tests on them.

To sustain our quality management system, we have established diverse quality certifications from the certified bodies. These certificates make sure that by following the parameters, we meet the wide-ranging requirements of our clients all over the world

PROJECT STARTUP, COMMISSIONING AND AFTER SALE SERVICES

New Fab Engineering System Pvt. Ltd. is the synonyms of service. Our scope of services starts with engineering and ends up with delivery, erection, commissioning. Our specialized engineers have the expertise and experience required to ensure a smooth first commissioning and to provide an excellent training to the customer's personnel who will later operate the plant. We manage with the customer to appear the right predetermined specification and processes.



NEW FAB Engineering Evaporator is built to last for decades. Our **After Sales services** is your guarantee and is an important part of our **concept.**"

Overview on Our Product Range



EVAPORATORS

HEAT EXCHANGERS

SPRAY DRYER

SULPHONATOR

REACTORS

New Fab Engineering System Pvt. Ltd.

supplies an extensive range of engineering needs like comprehensive Ester Machine, Chemical Reactors, Heat Exchanger, Condenser & Chillers, Cast Iron Vessels / Cast Iron Sulphonator, Storage Tank, Planetary Gears, Agitator Assembly, Spray Dryer, Rotary Dryer, Nitrators, Separator. During this period, we have set our best efforts to supply Quality & Services to our precious Customers with

the help of technically accomplished personnel; and well-organized organizational staffs back us.

Our manufacturing base is built upon sound fundamentals, knowledge of the industry and awareness about customer needs. We are more than an engineering firm.

“We strive to create end to end solutions that meet our Client’s needs and exceed their expectations.”



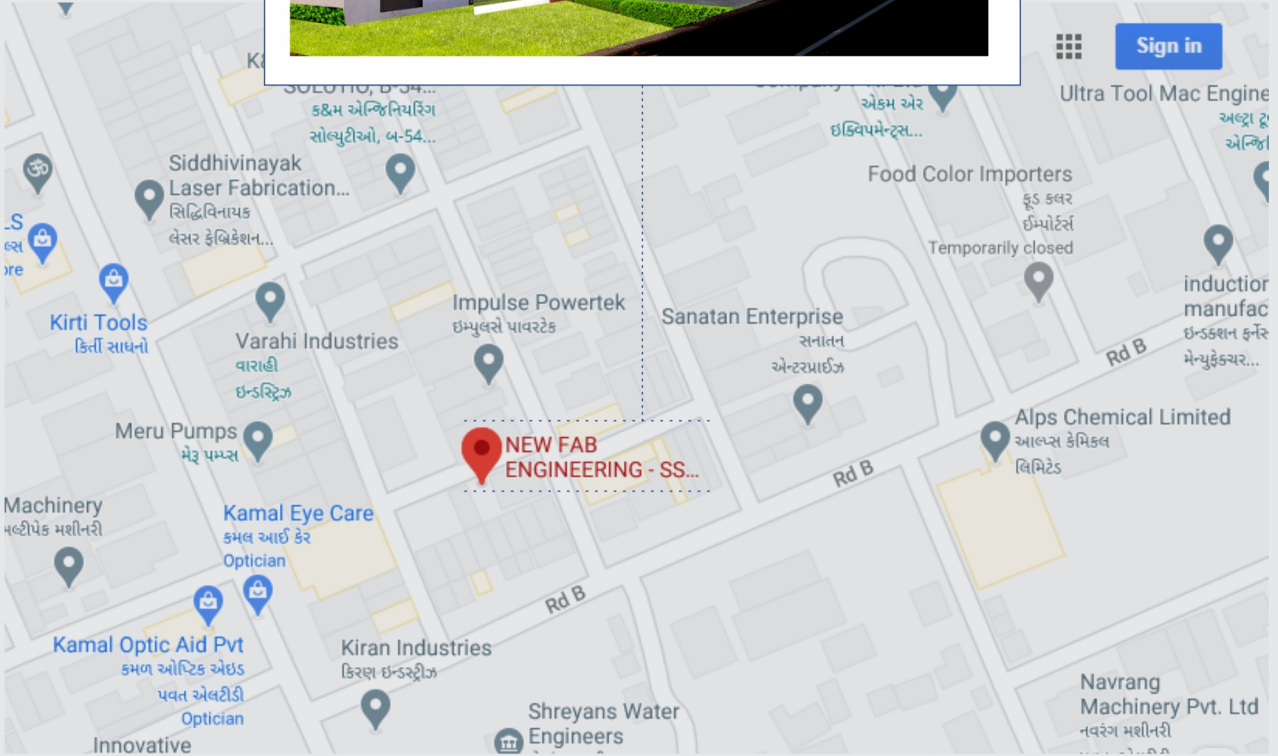
GYPSUM PLANT

ESTER MACHINE

VESSELS

STORAGE TANK

CONVEYER



NEW FAB

Engineering System Pvt. Ltd.

Unit-I :

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