



1963 M443 Model semi Vacuum Gas chlorinator - capacities up to 50 kg/hr Indigenously Designed gas chlorinator system first time India installed in public health department in Ahmadabad, Gujarat





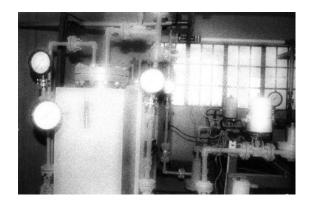
Mr. P. S. Nathan - on right side (Founder)

Powai water works - Central chlorination house for greater Bombay at powai. Replacement of 40 - 50 tonner connections for gas withdrawal replaced with electrically heated water bath evaporator for the first time in India. using only one tonner for chlorine supply - 150 kg/hr/





1972 First indigenously designed and manufactured steam heated chlorine vaporizer of capacity -300 kg/hr at Dombivili Mumbai.



1972 First indigenous sea water chlorination plant for THERMAL POWER STATION -consultant - Czek consultants.-Installation at Ennore thermal power station- 1x 300 kg/hr evaporator & 2 x 150 kg/hr gas chlorinator.



1974 First export of 2 x100kg/hr Gas chlorination system for Prai thermal power station at Malaysia.

1975 First LPG vaporizer - 100 kg /hr for L&T powai, Mumbai - Indigenously designed and manufactured for heat treatment

furnace firing.



- 1976 First Ferrous sulphate dosing system for Passivation of Sea water circuit at Madras atomic power plant kalpakkam.
- 1977 CEA -constructed power station at Badarpur,to meet Delhi power requirement operated by National thermal power corporation today 2 x 150 kg/hr- First higher capacity semi- vacuum & semi automatic gas chlorinator being operated till today.
- Replacement and refurbishment of imported W & T Chlorination system with indigenous supplies 100 kg/hr for Atomic power plant,, kalpakkam ,Chennai, India.
- 1979 Replacement and Refurbishment of imported W & T Chlorination system with indigenous supplies 150 kg/hr for Rajasthan Atomic power plant, unit 1,kota,Rajasthan, India.
- **1978-** Indigenous total chlorination system Narora Atomic power station & Kakrapra Atomic power station.
- 1979 R5 ZERO ENERGY POWER PLANT SEA WATER CHLORINATION



In house demonstration of Chlorine Gas leak absorption system capacity 1000kg/hr caustic neutralization facility - using absorption tower and caustic recirculation facility. Subsequently worked with many consultants to frame specification for Neutralization system.



- 1987- Nitrogen and chlorine -mixture fluxing system to sparge in to molten aluminum in furnace for slag removal Indigenously designed and developed system for INDAL Cochin, Hirakud, Howrah.
- 1990 6 x 100 m3/hr Side stream filtration system, H2SO4 storage and handling and dosing system for Nagarjuna Fertilizer, kakinada-based on in-house design & detail engineering under DCPL Kolkata.

1993 Indigenously designed fluidized bed reactor dryer using Hcl @ 600 Deg C for drying of Mg cl2 - a defense initiative. IEC is a team member for design & execution in a team of DMRL, NFC, CECRI, IGCAR & TMML All Inconel – 600 constructions.





First Refinery Installation - 2 x 150m3/hr and 2 x 200m3/h Side stream filtration system for IOCL panipat refinery, India for CWTP based on In house Design and detail engineering under EIL,INDIA consultancy.







At site as Installed

- **1996** IEC converted into a Limited company.
- 1998 First 2500kg/hr Chlorine vaporizer indigenously designed, Manufactured, commissioned for an Indian customer.



1999 First PLC based Auto - chlorination facility (slug dosing) designed, installed at Lanco Kondapalli power - 355MW CCPP, India.







2000 First sea water Electro chlorination system for NTPC, at Simhadri 2 x 20 kg/hr. IEC joined hands with M/s Electro catalytic Ltd, UK and fully executed the project successfully. This plant was the Countries first System for power plant application.





2 x 20 kg/hr

2 x 20 kg/hr

A computer generated - To scale- model of 2 x 20kg/hr Electro chlorination plant.

- 2003 APPROVED by NTPC as an only Indigenous vendor for Design, Manufacture and supply of Power plant Gas chlorination systems for their Power projects.
- 2004 Bayonet type steam heated chlorine vaporizer – Indigenously designed manufactured & installed for an Indian customer. Capacity -2500 kg/hr. Special Feature - Large capacity - Small foot print.





2004 First export to China - SO2 vaporizer system Installed at Chengdu, Central China & subsequent installations at

- Kunshan, Shanghai
- Donguan, Province, Near Hong Kong
- Tianjin, Near Beijing



2005 Jointly Promoted First Biomass power project of size - 7.5 MW

2005 Tamilnadu, INDIA - A Govt. approved CDM project and successfully registered

2006 UNFCC- eligible for carbon credit

First indigenously designed, manufactured vaporizer system for R 23 - 100kg/hr for a Clean development mechanism project for an Indian customer using German technology for incineration of R23. Installed in Gujarat, for 2 different Indian customers.



**2008** IEC successfully registered with ISO 9001:2000 Quality Management System.

IEC successfully bagged order from NTECL a joint venture of NTPC & Tamil Nadu Electricity Corporation Limited for Hybrid CW Gas Chlorination + Makeup Water Electro chlorination System along with Civil, Mechanical, and Electrical on Turnkey basis EPC order for Indian Rupees 105 millions.

By bagging this order IEC becomes the first and the only qualified Chlorination System Vendor in India as a "Direct Contractor" to NTPC GROUP, a leading Power Major in India.

Tie up with Daiki-Ataka Japan for Sea Water ECS plants for Indian Projects.

IEC FABCHEM Limited & overseas Japanese partner M/s. DAIKI ATAKA, Tokyo, Japan jointly bagged the 3x125 kg/hr Sea water Electro Chlorination system order for Coastal Energen Private Ltd in Tuticorin.

Successfully formed a strategic business alliance with Helcraw International, Zimbabwe & received an order for execution of replacement & revamping of CW Treatment plant at Hwange Thermal Power station – Unit I in Western Zimbabwe and successfully supplied, erected, commissioned & handed over the system in 8 months.

After successful, satisfactory & quick implementation of CW Treatment plant at Hwange Thermal Power station – Unit I M/s. Zimbabwe Power Company has placed a repeat order for Zimbabwe Thermal Power Plant – Unit II.