



TECHNOCHEM GROUP

Address: 31-A, Giriraj Industrial Estate, Mahakali Caves Road, Andheri (E), Mumbai 400093, India.

Phone: 91-22-40473800/66916206/26873930 Fax: 91-22-26873933

Email: admin@technochemgroup.com

COMPANY PROFILE

MISSION STATEMENT:-

- To deliver Cost Effective Solutions by transforming New Technologies and Ideas into products & services.
- To build long-term, dependable relationships with our Customers and Principals.

BUSINESS CONCEPT:-

- Over the years Technochem has emerged as a strong link between its Clients/Buyers and Principals/Suppliers.
- Our expertise comprises more than mere trading, marketing and distribution. To meet our customer's needs, we deliver a wide range of services in association with our Overseas Principals & Suppliers, such as identification of products, process & technology selection, and product procurement.
- Customer satisfaction is not just our priority; it's our purpose. We provide value through Specialty Products, Quality Performance and Uncompromising Service & Support.

THE MOVING FORCE BEHIND TECHNOCHEM:-

Technochem is the result of unflinching dedication of its founder & Chairman Mr. N.B.H. Kulkarni. He has been providing a vital helping hand to Indian Industry & Foreign Associates for over Five Decades, & has won several International Trade Awards.

THE TEAM:-

DIRECTORS

Shrikrishna Kulkarni
Sriram Kulkarni

OPERATIONS

Deepak Deshpande
Keshav Bhat
Ajay Kumar
Bhaskar Thukrul
Atish More

MARKETING

Pradeep Naik
Yeshwant More
Saurabh Jain
Sandip Singh
Ashwin Kallapgol

SERVICE

Dipak Mahajan
Nilesh Patil
Dilip Nar
Vikas Baviskar
Amit Pardule

ENGINEERS

Vikas Salunkhe
Kunal Sethi
Sachin Kate
Pawan Yadav
Shrikant Kadechkar

With all experienced Executives trained to our Philosophy, the ongoing development and efficient utilization of our cross-functional technical & commercial team, in a learning organization, is our bridge to continued success.

INDENTING & TRADING DIVISION:-

This Division is handling Imports & Exports of Chemicals & Allied Products, serving our Principals (Manufacturers & Suppliers), & Customers last five decades spread across Asia, Israel, Europe, USA, Canada, South America and South Africa.

ICL-IP – ISRAEL:

Technochem is exclusive Representative in India for **ICL-IP** through its regional office **ICL Asia Ltd. Hongkong**, the largest producers of Bromine & Bromine Compounds in the World, our Chairman Mr. N. B. H. Kulkarni is associated from 1972. ICL-IP Israel subsidiaries are: **1) ICL-IP, 2) ICL-IP Europe, 3) ICL-IP America, 4) ICL-IP Japan, 5) ICL Asia Ltd. Our Indian Territory is administered through ICL Asia Ltd., Hongkong.**

CHEMADA FINE CHEMICALS – ISRAEL:

M/s Chemada Fine Chemicals is an associate company of ICL-IP Group, manufacturers of Bromine based specialty fine chemicals used in Pharma & Agro Industries.

**ENGINEERING, PROJECT MANAGEMENT & TECHNICAL CONSULTANCY DIVISION:-**

This Division, in collaboration with various reputed International Associates, promotes Sales, Marketing, Installation, Operations, & Maintenance of:

- **IDE, Israel** – Seawater Desalination (MED/MVC/RO), EcoFriendly Industrial Refrigeration, Evaporation.
- **ORMAT, Israel** – Organic Rankine Cycle for Geothermal Power & Waste Heat Recovered Energy Power.
- **ARAD, Israel** – Automated Meter Reading Technology for Water, Electricity & Gas Utilities.
- **ICL-IP, Israel** – Potable & High Purity Water Disinfection Systems for Rural & Industrial Applications.
- **DOROT, Israel** – Water Pressure/Flow/Level/Surge Management & Non Revenue Water Management.
- **ROSEMAN, Israel** – Fuel Automation & Fleet Management Systems.
- **PRS, Israel** – Soil Stabilization, Load Support (Roads, Railways), Slope Protection, Retaining Walls.
- **ENER-T, Israel** – Solar Thermal Power.
- **GILAT SATCOM, Israel** – Satellite Communications & Services.
- **TECHNOCHEM, India** – Industrial Pure Water, Effluent Treatment & Wastewater Recycle/Reuse Technologies & Plants. In-house Services for Engineering, Design, Fabrication, Erection, Commissioning & After-Sales Services.

IDE TECHNOLOGIES LIMITED – ISRAEL:

IDE are the pioneers & global leaders in the development, design, manufacture & execution of projects with all the Advanced Desalination Technologies such as Multiple Effect Distillation (MED), Mechanical Vapor Compression (MVC), Reverse Osmosis (RO), etc. With the largest installed base of over 450 desalination units worldwide, they have designed & built the world's largest Desalination Plants on BOOT basis 350 MLD SWRO at Ashkelon Israel in 2006, 380 MLD SWRO at Hadera Israel in 2010 & 500 MLD SWRO at Sorek Israel in 2013. As pioneers in Cogeneration of Electric Power & Seawater Desalination, IDE's State-of-the-Art MED technology produces ultra pure water from low-grade backpressure waste steam at 0.35 bar absolute. They have designed & built the largest single location of MED with total capacity of 165 MLD at RIL Jamnagar India and largest single location MVC with total capacity of 18 MLD at Sarlux Sardinia Italy & 10.5 MLD MED at NPCIL Kudankulam India. IDE also undertakes services to operate, maintain & support Desalination Plants.

IDE extends its proprietary technology for effluent concentration, purification of industrial streams and water treatment. In recent years, IDE's product line has expanded to include a range of eco-friendly refrigeration systems, heat pumps and ice machines, which have also been based on the Company's in-house R&D.

Desalination Projects In India installed by IDE/Technochem:

- As exclusive partners of IDE in India, Technochem is providing ground support, from Sales & Marketing, to Negotiation & Order Finalization, and assisting in Erection, Commissioning and Start-up.
- Largest installed capacity of Desalination Plants in India having successfully executed following projects:
 - 4 x 12,000 m³/day MED, Power & Desal Cogeneration, Reliance Industries, Jamnagar, Gujarat – 1999
 - 1 x 14,400 m³/day MED, Power & Desal Cogeneration, Reliance Industries, Jamnagar, Gujarat – 2005
 - 4 x 24,000 m³/day MED, Power & Desal Cogeneration, Reliance Industries, Jamnagar, Gujarat – 2007
 - 2 x 1,200 m³/day MVC, Process/Potable Water, Reliance Industries, Kakinada, Andhra Pradesh – 2008
 - 2 x 8,450 m³/day MED, Power & Desal Cogeneration, ESSAR Oil, Vadinar, Gujarat – 2006
 - 2 x 24,000 m³/day MED, Power & Desal Cogeneration, ESSAR Oil, Vadinar, Gujarat – 2012
 - 1 x 5,500 m³/day MED, Waste Heat Boiler, Sanghi Cement, Kutch, Gujarat – 2002
 - 1 x 1,560 m³/day MED, Waste Heat Boiler, EID Parry/Coromandel Fertilizer, Chennai, TamilNadu – 1995
 - 4 x 2,560 m³/day MVC, Nuclear Power Corporation of India Ltd., Kudankulam, TamilNadu – 2006
 - 100 MLD SWRO, Municipal/Potable, Chennai Metropolitan Water (CMWSSB), Chennai, TamilNadu – 2012

ORMAT SYSTEMS LIMITED – ISRAEL:

ORMAT is a multi-disciplinary Power Technology firm with over 46 years of experience in Design, Engineering, Manufacturing, Construction & Operation of Organic Rankine Cycle (ORC) based Electrical Power Plants that utilize locally available Industrial Waste Heat & Geothermal Energy sources. They have supplied over 450 Large Systems (Greater than 1 MW) for over 60 Power projects globally producing over 1300 MW of Total Electric Power having over 98% Availability. They have also supplied over 4,000 Small Systems (Up to 6 KW) for SCADA, Telecommunications & Cathodic Protection applications. ORMAT's Organic Rankine Cycle is the best available technology for Recovered Energy Generation for hot gases/fluids at temperatures of 130 to 450 deg C.



Conventional Waste Heat Boilers & Steam Turbines are very inefficient at such temperature ranges. Applications include Geothermal, Cement Plants, Steel Manufacturing & Hot Rolling, Glass Manufacturing, Process Industries, Petroleum Refineries, Petrochemicals Manufacturing, Coal Gasification/Liquefaction Plant, Gas Turbine Compressor Stations, DG Set Exhaust Gases, Biomass Power Plants, etc. For renewable sources of Geothermal energy, the ORC technology operates at lower temperatures of 110-130 deg C. Ormat's environmentally friendly technology has helped decrease the dependence on expensive oil imports & diminishing fossil fuel, and thereby reduce the risks of the environmental impact of transportation/use of fossil fuels. Their cement clinker cooler waste heat recovery system installed at Hydelberger Cement Company in Germany is producing 1.5 MW power since 1999. ORMAT has successfully set up a 4.8 MW Gross ORC based Waste Heat Recovered Energy Power Plant for UltraTech AP Cements at Tadipatri, Andhra Pradesh from hot Clinker Cooler gases with fluctuating temperatures and has completed four years of continuous trouble-free operation to the complete satisfaction of the plant team. No additional operators are hired by APCW to operate & maintain our plant. Implementation of the innovative ORC technology for power generation can confirm waste heat recovery projects to get the valuable CDM benefits, thereby ensuring the highest Return on Investment (ROI) for the client. Presently Technochem is in discussions with several Clients in the Cement Industry & Gas Pipeline for Sales & Marketing of Ormat's Waste Heat Recovery System to generate Power.

ARAD LIMITED & ARAD TECHNOLOGIES LIMITED – ISRAEL:

Arad specializes in innovative water measurement technologies, developing, manufacturing, and marketing leading water metering and management systems. Founded in 1941, Arad has built up a worldwide reputation for quality and precision in measuring, reading, collecting and managing data from water metering to billing systems. Arad received the 2003 Frost & Sullivan Market Engineering Award for Quality Control Leadership. In 2004 Arad became a public company and is now traded on the Tel-Aviv stock exchange. They have captured over 10% of market share in USA & have very strong presence in over 60 countries & meet world standards of quality & performance including ISO 9001:2000, AWWA standards & hold the CE mark. Arad Ltd. manufactures very high quality EEC Marked Domestic & Bulk (Woltman) Mechanical Meters as per ISO 4064 standards, very high accuracy Ultrasonic Meters for extremely low & high flowrates, Irrigation & Agriculture Meters, etc. Arad Technologies Ltd. develops, manufactures, and markets novel automated reading systems, for touch, walk by, drive by and fixed area network systems. They are the undoubted Global leaders in RF & Advanced GSM based AMR Metering Solutions using state-of-the-art **3-G Wireless Technology** in Automated Water, Gas & Electricity Metering application, including Data collection, Control & Billing Capabilities.

ARAD has the largest installed base of AMR systems of various types in India with prestigious clients such as Municipal Corporation of Greater Mumbai (MCGM), Maharashtra Jeevan Pradhikaran (MJP), Hyderabad Metropolitan Water Supply & Sewerage Board (HMWSSB), Larsen & Tubro Campus (L&T), Thane Municipal Corporation, etc. We have developed a Meter Repair (15 mm to 300 mm Meters) & Meter Test Bench Center (15 mm to 40 mm Meters) and a trained Technical Team located in Mumbai India for local service, testing & warranty coverage.

ICL-INDUSTRIAL PRODUCTS – ISRAEL:

ICL Group, Israel, is the largest manufacturers of specialty products used in Water & Waste water applications. ICL has developed "**ChloRun**" Technology, a potable water chlorination system consisting of *Chlorun dosing machine*, which is a state of art dosing system and NSF approved CDB 56. This technology has several advantages over conventional systems with chlorine gas, sodium hypochlorite or bleaching powder.

Salient Features

- Simple dosing System & operation.
- Accurate, safe & easy to operate, no manual handling.
- Fresh solution is made on site.
- Automatic monitoring & Control system.
- Concentrated Solid V/s Chlorine Gas or Sodium Hypochlorite unstable liquid.
- Does not require special expertise or expensive MOC.
- Better safety, storage stability & Handling characteristics.
- Non-DOT oxidizer.
- No Calcium-no scaling tendency.
- Approved by US-EPA & WHO, certified by NSF.



This technology has been successfully implemented in Israel, including a well known water company Mekorot for almost five years. We are now introducing it in India with demo Pilot Plant for past over 2 years at MIDC Murbad water works, MJP Mangi Water Works, Punjab Rural Water Supply (RWS), AP RWS, Uttarakhand Jal Sansthan, etc. We also have successful Commercial installations for past 12 months at MJP Mangi, MJP Igatpuri, MJP Nimgaon, Village of Hosur, Uttarakhand Jal Sanstan, etc. We invite you to visit our installations and look forward to our personal visit for a presentation.

DOROT MANAGEMENT CONTROL VALVES LIMITED – ISRAEL:

DOROT, Israel, are the leaders in Pressure/Flow/Level Management and Surge Anticipatory Solutions. DOROT has undertaken thousands of projects worldwide using their Hydraulic Actuated Valves & Air Valves technology in Pressure/Flow/Level Management and Surge Anticipatory Solutions applications. DOROT has installations throughout India at valued clients including MIDC, PHE Goa, KWA Calicut, GIDC, TWAD Board TamilNadu, PHED Rajasthan, KWA Kerala, KUWS&DB Karnataka, KUIDFC Karnataka, NTPC, NRTC Nashik, CPWD Nashik, TACID TamilNadu, CWSS TamilNadu, Public Health Orissa, etc.

DOROT is a Miya Group Company, which provides comprehensive water efficiency solutions for municipal distribution systems, with an initial emphasis on Non Revenue Water (NRW) management. NRW is the gap between the amount of water put into the distribution system and the amount of water for which customers are actually billed, directly reflecting the utility's revenue losses. The aim of Miya's solution is to reduce the utility's NRW to an economic level with long term sustainability. Miya's solution is based on best-practice methodology developed by the International Water Association (IWA). Miya is proud to have in its team globally recognized experts including prominent members of the IWA's Water Loss Task Force, thereby holding the largest accumulated know-how and experience in NRW projects globally.

ROSEMAN ENGINEERING LIMITED – ISRAEL:

Roseman Engineering Ltd is a pioneer and key player in innovative fuel retail and fleet management solutions. Roseman, since 1978, has been serving the commercial fleet management, mobile tankers and automotive OEM sectors worldwide. The company has cultivated in-depth knowledge and a strong network of partnerships, generating a growing global market.

ROSEMAN FUELING SIMPLICITY, the Fueling Division of Roseman Engineering Ltd designs and manufactures computerized refueling and Automatic Vehicle Identification (AVI) Systems since 1978. As a worldwide pioneer in AVI technology Roseman is a market leader providing complete solutions for automatic refueling and operational data collection for vehicle fleets. They have provided their solutions for various prestigious clients including:

1. In Israel: Paz, Dor Alon, Ten and Sadash – fuel retail companies. Egged, Dan – public transportation, IDF
2. In USA: AssetWorks, FedEx, Fina
3. In India: IOCL
4. In Greece: EKO
5. In Panama: PetroPASS
6. In Brazil: Petrobras, Ipiranga

Roseman highly skilled in-house R&D division includes interdisciplinary professionals from various areas such as Hardware (Control systems, RF, FO, Wireless), Software (Data communication, IT applications, and Database management), Mechanics and more. Our design and production is done according to strict international standards (ISO9000, CE, ETL, etc.) to assure long-lasting reliability.

PRS MEDITERRANEAN – ISRAEL:

PRS Mediterranean Ltd., Israel, having extensive global experience with its state-of-the-art Neoweb technology for soil stabilization and large civil construction works, combining a unique proprietary technology, professional engineering expertise and specialized know how.

Salient Features of Neoweb Technology

- Global network of fully owned subsidiaries
- Thousands of successful projects in 40 countries
- Cost savings on installation, project logistics, aggregate materials, extended life cycle & maintenance
- Reduced vibration effects
- ISO certified quality

**Applications:**

- Load Support: Perforated Neoweb system for reliable Foundation, Roads, Railroads, Ports, Airports, etc.
- Slope & Channel Protection: Perforated cell walls increase system stability
- Earth Retention System: Perforated Neoweb stacks up in this application
- Reservoir & Landfill: Neoweb teams up with geo-membrane for impermeable & protected surface

This technology has been successfully implemented for National & State Highways, Airports, Railways, Access Roads-Mining/Drilling/Pipelines, Military Border Roads, Rural Roads, Highway/Canal/Reservoir Slopes, Flood Control, Coastal Retaining Walls, Hilly Terrain Retaining Walls, etc. in many countries.

ENER-T INTERNATIONAL LIMITED – ISRAEL:

Ener-t International is an experienced and qualified technology provider and engineering, procurement, and construction manager of solar thermal power plants. The company is focused on the execution of EPC and EPCM type projects in all of their phases: Design, Engineering, Procurement, Construction, Commissioning and Operation and Maintenance. The Ener-t team includes many of the engineers and scientists that developed, manufactured and installed Luz's original parabolic trough technology that were used in the monumental 354 MW SEGS project in southern California. Those nine parabolic trough power plants have set the current technology standard, generating electricity continuously since 1984 to supply reliable power to more than 200,000 homes. Over the past few years, Ener-t team is participating in the EPC activities of 3x50MW solar thermal projects in Spain. Ener-t with a local India partner Shriram EPC has recently been awarded a 50 MW Solar Thermal project by Abhijeet Group under the NVVN scheme at Jaisalmer, Rajasthan.

GILAT SATCOM – ISRAEL:

Gilat Satcom is a communication solutions provider that offers domestic and international satellite based connectivity services in Africa, Asia and the Middle East. With successful deployments in over 40 countries worldwide, Gilat Satcom delivers high quality, cost-effective and efficient communication solutions to Telcos, ISPs, governments, enterprise customers and international organizations. Gilat Satcom provides world class solutions for the challenging, global communication needs. The company offers broadband internet connectivity and a comprehensive MPLS solution with guaranteed quality of service (QoS) to service providers and global organizations. Gilat Satcom offers mobile satellite services (MSS) on land, at sea and in flight. With complete coverage of the earth, Gilat Satcom can connect you on the move, at the top of the highest mountain and anywhere in the vast oceans. At Gilat Satcom, we are committed to delivering the highest caliber service to our customers. Our experienced teams of technical experts and customer support centers ensure fast resolution to any service issues, thus guaranteeing business continuity. Founded in 1992, Gilat Satcom is part of the Eurocom Group, the largest communication group in Israel.

INDUSTRIAL PURE WATER, EFFLUENT TREATMENT & WASTEWATER RECYCLE/REUSE PROJECTS:-

- Technochem's dedicated Division, with support & collaboration of Overseas Technology Partners, delivers the highest value water & wastewater solutions by providing the best combination of technology, functionality and risk management, with maximized Return on Investment for clients.
- Industrial Pure Water Systems – Multimedia Filter, Activated Carbon Filter, Water Softener, Ultrafiltration, Nanofiltration, Reverse Osmosis, Membrane Degassifier, Two-Bed Deionizer, Mixed Bed Deionizer, USP Purified Water Systems, Water For Injection Systems, Ultra-pure Water Systems for Microelectronics/Semiconductor Manufacturing.
- Industrial Effluent Treatment Systems – Oil-Water Separator, Reaction Tank Systems, Inclined Plate Clarifier, Dissolved Air Flotation, Microfiltration, Ultrafiltration, Enhanced Oxidation, Biological Treatment.
- Wastewater Recycle/Reuse & Heavy Metals Recovery Systems – Ultrafiltration, Reverse Osmosis, Ion Exchange

We provide the following services:

*Plant Audit & Feasibility Studies
Equipment/Systems Fabrication
Commissioning & Start-up*

*Treatability & Pilot Studies
Automation & Controls Integration
Project/Construction Management*

*Process Design & Detailed Engg.
Installation & Erection Supervision
Operations, Maintenance, Service*

**NEW PRODUCTS DEVELOPMENTS:-**

- Full-Fledged R & D Laboratory jointly with other Renowned Laboratories.
- Developing New Molecules/Products for Clients in the field of Pharma, Agro, Organics & Finechemicals.
- Strict Confidentiality is maintained.

GOALS & OBJECTIVES:-

- Develop expertise & capabilities for execution of large design-built & build-own-operate-maintain projects.
- Provide engineered solutions for complex industrial water and wastewater applications.
- Align with technology partners for niche markets.

KEY ISSUES:-**Near term –**

- Effective co-ordination of newer technology with our expanding capabilities and infrastructure, to provide Total Water Solutions.

Long term –

- To successfully integrate our scale of operation with newer & efficient technologies.
- To provide enhanced value addition to marketing, logistics, procurement and intellectual capital.
- Provide support & infrastructure to develop & commercialize entrepreneurial ideas & concepts.

ACHIEVEMENTS:-

- In recognition of an outstanding contribution for forging the international trade links with Israel, Technochem received “Israel Trade Awards” from the Government of Israel in 1980, 1996 & 2006.
- Our Chairman, Mr. N.B.H. Kulkarni has been honored by the Government of Israel for laying down the foundation of Indo-Israeli thriving relations and has been bestowed with a special award in 1995. Also Ten Trees were planted in his name in Jerusalem.
- Our Chairman, Mr. N.B.H.Kulkarni has been honoured with a Certificate by Israel-Asia Chamber of Commerce & Israel-India Chamber of Commerce in Commemoration of over 3 Decades of activity to develop Trade & Business between India and Israel. This was awarded by Ex-Prime Minister of Israel Mr. Shimon Peres on 11th Dec.'2002.
- Mr. N.B.H.Kulkarni was Presented Rotary Excellence Award 2003, by Rotary Club of Bombay Queens' Necklace for his Outstanding Contribution in the Field of Community Service for Senior Citizens.

M/S. TECHNOCHEM AGENCIES (BOMBAY) PVT. LTD.**MARKETING & ADMINISTRATIVE OFFICE**

31-A GIRIRAJ INDUSTRIAL ESTATE
1ST FLR., MAHAKALI CAVES ROAD,
ANDHERI (E), MUMBAI-400 093, INDIA.

Phone: 91-22-40473800 / 26873930

Fax: 91-22-26873933

E-mail: admin@technochemgroup.com

Web: www.technochemgroup.com

REGISTERED OFFICE

16 KITAB MAHAL, 1ST FLR.,
192 DR. D.N.ROAD,
FORT, MUMBAI-400 001, INDIA.

Phone: 91-22-22074739 / 22079975

Fax: 91-22-22074869

E-mail: tcafort@technochemgroup.com

Web: www.technochemgroup.com