

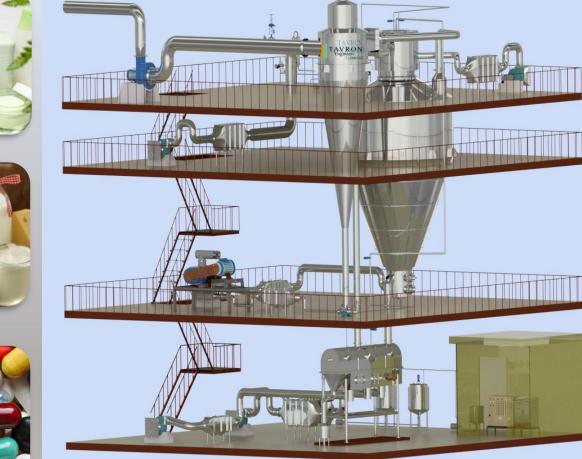


# PROFILE









### Dairy, Beverage, Chemical & Pharmaceutical Industries

# **INTRODUCTION**

We are glad to inform you that we are one of the leading manufacturers of various kinds of equipment for **Dairy, Food, Beverages, Cosmetics & Chemical** industry . We also undertake the work of establishment of Automatic & Semi Automatic Liquid Milk Plant, Curd & Yogurt Plant, Ice cream Plant, Milk Powder Plant, Milk By Product Planton Turn key basis

TAVRON ENGINEERS is a professionally managed company with ISO 9001-2008 Certification. We started our journey in the year 2004, with Chennai as our base.

We have successfully completed many Turn Key projects in Food Processing Industries across India and Globally.

#### TAVRON AT A GLANCE

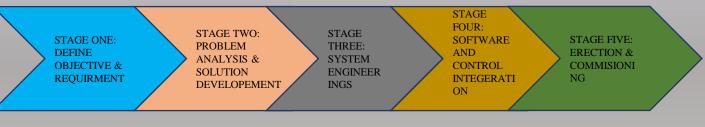
- Profile: OEM, Solutions Provider, System Integrator
- Year of Establishment: 2004
- Industries: Food and Beverages, Dairy Industry, Chemical & Pharmaceutical Industries
- Factory Location: Chennai, Tamil Nadu, INDIA
- Total Factory Area: 20,000 Sq.ft
- Shop Floor Area: 5,500 Sq.ft

#### WHY CHOOSE TAVRON ENGINEERS?

TAVRON is your single source partner to manage and control the entire integrated engineering and process flow in Food, Dairy and its related industries.

We are responsible for all aspects of system integration from defining the business objectives and solution development, to engineering, installation and long-term support over the operational and physical life of the system.

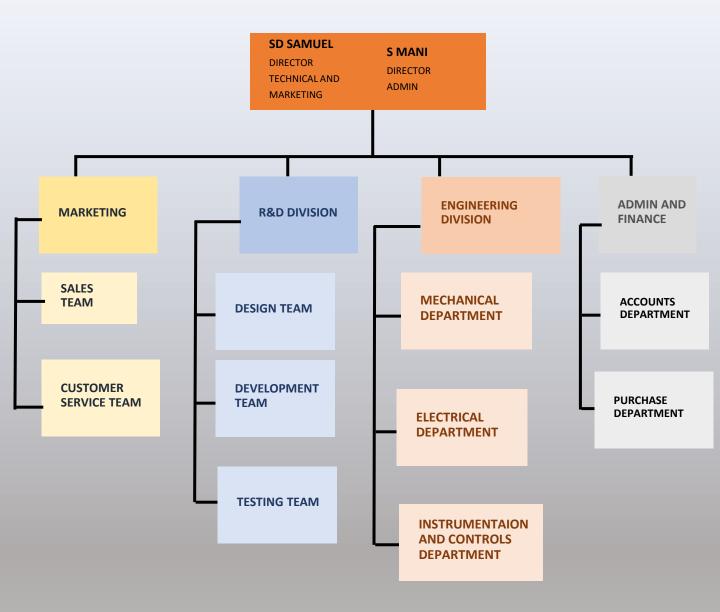
The implementation methodology includes these program phases (shown below):



Tavron has developed in-house infrastructure to manufacture products like plate type heat exchangers, centrifugal pumps, evaporators, spray drying plants. The company has installed required plant and machinery for such research and development work and have produced the necessary infrastructure. The equipment manufactured by the company are at par with the European Standard Equipment.



# **ORGANIZATION CHART**





# In short our manufacturing range covers the following for Dairy Industry.

- 1. Equipment for Reception : Roller / Power Can Conveying system, Straight Through / Rotary Can Washer, Can Scrubbers, Milk Tanks, Can Drip Saver, Feed Milk Pumps etc.,
- **2. Equipment for processing :** Plate heat exchangers for Milk, Cream, Butter Milk, Ice Cream Mix, HTST Pasteurizers for Milk, Cream etc,.
- 3. Pumps : SS centrifugal pumps for transfer of Milk, Cream, Ghee, Butter Milk, Ice Cream etc.,
- 4. Heat Exchangers: Plate & Tubular Heat Exchanger with Various capacities & Temperature Profile
- **5. Equipment for Storages:** Milk storage tanks with storage capacities up to 1,00,000 Litre's either on Horizontal /vertical design.
- 6. Jacketed Tank: Jacketed Tank for Storing Cream & Ice creams.
- 7. Milk Silos: Milk Silos from 10 KL to 100 KL with Automation.
- 8. Bulk Milk Cooler: Bulk Milk Cooler from 300 L to 10,000 L
- **9. Dairy Automation:** Complete Automatic Dairy up to 10,00,000 LPD with State of Art Valve Cluster and SCADA control.
- **10**. **Milk Powder Plant:** Automatic & Semi Automation Evaporation plants & milk spray drying plants up to 60 Ton- Day
- 11. CIP System Auto & Semi Auto: Various CIP System with Auto SCADA control with Various capacities.
- **12. Equipment for by Products:** Ice Cream Plant, Cream Plant, Butter Plant, Ghee Plant, Panner Plant with Various tanks & Vats.
- 13. Instant Milk Chilling unit: Instant type of milk chilling units of cap.1000 LPD, 2000 LPD & 4000 LPD.
- 14. Equipment for Refrigeration: Shell & Tube Ammonia Condenser, Ammonia Evaporator, Plate Type Ammonia Condenser, Ammonia Evaporator, Ammonia Receiver, Ammonia IBT Coils, Freon IBT System, Falling Film Chiller, Ice Silos.

Tavron has executed many Turn-Key projects like Milk Processing Plant, Milk Conversion Plant, Ice Cream Manufacturing Unit, Yogurt Manufacturing Unit, Fruit Pulp unit, Tube-in-Tube Fruit Pulp Heater, Direct Expansion Milk Cooler, Plate Heat Exchanger and SS Centrifugal Pump.



### **TAVRON VISION**



We would like to introduce TAVRON ENGINEERS as a professionally managed company with ISO 9001-2008 CERTIFIED started by the promoters whose bio data is enclosed vide separate annexure.

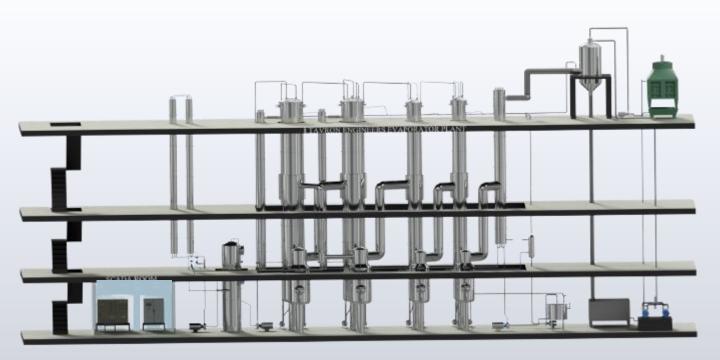
The company has been formed by our ambitious promoters having ethical values and concept to contribute towards the development of equipment for food, beverages and dairy industry and engineering products particularly having the nature of import substitution.

We are a customer-friendly company that supplies quality products and solutions to help our customers become more productive and competitive. We as an OEM believe that our success lies in the growth and achievements of our customers and employees.

#### **OUR VISSION MEANS:**

- We want to be known by our customers for providing solutions that help them be even more successful
- We are the place where passionate employees have room for creativity and entrepreneurship to make us unique
- We will focus on products and solutions to fulfill our customer needs and satisfactions in an economical way with zero compromise on quality and performance.





#### SOME OF OUR TURN KEY PROJECTS



Tavron has successfully commissioned Four Effect Evaporator of Cap 6000 LPH to M/s Mahalakshmi Dairy, Coimbatore.

We have also commissioned Double Effect Evaporator of Cap 1500 LPH to M/s Saravana Foods Pvt Ltd and M/s Winner Dairy Pvt Ltd.

Tavron has designed Man Evaporator and Dryer for the Whey Product to M/s Dindugal Dairy Famrs Pvt Ltd.

The company has Established Evaporator of Falling Film and Force circulation Evaporation to Concentrate the RO Reject in Effluent Treatment plant of 16 No to M/s Windsor Satyam Ltd, Chennai.

The company is Manufacturing the Single Section and Multi section plate heat Exchanger and the Plate heat exchanger system (Pasteurizer) using the Imported Plates. The company has made the Pasteurizer from 250 LPH to 20000 LPH and exported to many countries.

The company has supplied the Fruit Line including the Equipment like Primary washer, Secondary Washer, Inspection conveyors, Tube- in Tube Pre heaters and Storage vessels.





The company is manufacturing the Bulk Milk Cooler using the Laser welded Dimple Jacket Evaporator Plate from Cap 250 L to 10000 L.

The company is supplying around 500 No SS Centrifugal pumps every year from 0.5 HP to 20 HP.





# ACTIVITIES

### **TURN KEY PROJECTS**

- Milk Processing Plants
- > By products manufacturing like milk powder, paneer, cream, butter, ghee, cheese.
- Fruit juice and pulp manufacturing.
- > Ice cream manufacturing.
- > Equipment's for breweries and soft drinks plants.
- Whey Processing Plant
- > Refrigeration and Cold store plants for above industries.
- Equipment for making Skim milk powder, whole milk powder, Condensed milk, Evaporated milk etc.







### PRODUCTS

- Plate Heat Exchangers for milk, fruit juice, breweries, water and chemicals.
- > Falling Film evaporators.
- Bulk Milk Coolers
- > Spray dryers.
- > Centrifugal Pumps for various applications.
- Various types tanks for milk breweries and beverage industries.
- Tubular Heat Exchanger
- Force Circulation Evaporator
- Dimple / Limpet Jacketed Vessel



### THE KEY PEOPLE



### S.D.SAMUEL (DIRECTOR-TECHNICAL)

Mobile: +91 9444015442 Email: samuel@tavron.net

The graduate in mechanical engineering started his career as Trainee Engineer in M/s Heavy Vehicles Factory, Avadi has developed his skill in detail engineering and in designing of food process equipment Thermal Engr equipment and in flow component.

He has handled many project for the earlier company he has associated M/s Jektron Engineers and handling complete turnkey projects of liquid milk and milk powder plant.

In the process he has involved in sales, detail engineering and execution process and developed his skill on the same.

Now he is the Director-Technical and handled many highlighted project of milk powder plant, liquid milk plant, special vessel design, evaporator and spray dryer plant and installed them to the entire satisfaction of the customer.

He has hand led complete automation of the liquid milk plant and milk powder plant from mechanical to SCADA system.



### THE KEY PEOPLE



### S. SUBRAMANI (DIRECTOR-ADMIN)

MOBILE: +91 9444026415 EMAIL: mani@tavron.net

The well learned businessman has developed his skill in Project Execution, Production and Man Power Management.

He started his career in Alfa Laval and executed many projects to various leading companies in Food, Beverages and Pharmaceutical industries.

He then joined Pray Industries and executed projects in distilleries and Breweries Industry

He has developed his knowledge in automation of sheet metal fabrication and heavy engineering fabrication and executed many highlighted project in stipulated timings.

Under his guidance and Leadership Tavron has staged in a respectable position in the Food Processing and Dairy Engineering Industry having completed many Turn-Key projects to the entire satisfaction of the customers.



## **TURN KEY PROJECTS**

We design, manufacture, supply and install milk processing plants to meet Milk reception in tankers, customer requirement from milk reception to final end products.



#### **1. MILK RECEPTION SECTION**

Milk reception in tankers, cans, milk weighing equipment mechanical or electronic, can conveying system, can washer, can scrubbers, milk receiving tanks, milk pumps, chillers, and raw milk storage tanks etc.,

#### 2. MILK PROCESSING SECTION

HTST type pasteurizer, with automatic / semi automatic control system for milk heating and chilling with re- generation efficiency up to 90% for energy saving, pasteurizer also provided with heating system with direct steam hot water.

#### **3. STORAGE AND PACKING**

Pasteurized / Chilled milk storage, pumping, pouch filling system cold rooms to store milk.

#### 4. SPRAY DRYER AND FLUID BED DRYER:

#### **5. FALLING FILM EVAPORATOR:**



TAVRON





#### 6. AXILLARY:

We design and supply Freon / ammonia based refrigeration system, Glycol system and cold store system.

We also design and supply boilers with accessories, hot water boilers with accessories, complete refrigeration systems for milk processing by product manufacturing etc.,

#### 7. BY PRODUCT MANUFACTURING:

We design and supply various equipment's for manufacturing powder, ghee cream paneer, butter, cheese. We supply equipment's like ghee boilers, cheese vats, settling tanks butter churn, cream separators etc.,

#### 8. FRUIT JUICE AND PULP MANUFACTURING:

Complete plant for manufacturing fruit juice and pulp puree, etc.,, for various fruits like tomato, mango, pineapple etc.,

#### 9. ICE CREAM MANUFACTURING:

We design manufacturing and supply various equipment for ice cream manufacturing on turn key basis. We also supply equipment's like pasteurisers for ice cream mix, ice cream mixing vat aging vats, refrigeration system, cold store ventury and funnel for mixing powder butter.





#### **10.BREWERIES:**

We supply equipment like plate heat exchanger for wort and beer. Cooling pumps for various applications, ferment or, vessels, lagger vessel,

mash kettle, yeast kettle and vats.

#### **11. CIP SYSTEM:**

We supply the complete CIP system to suit the standard dairy and brewery washing. These CIP system can be supplied with manual system, auto system with PLC control.

#### **12.MATERIAL HANDLING :**

We supply Power / Roller conveyor, elevators for various food products.





- 1. Our product range consists of centrifugal pump of various capacities with single and double mechanical seal arrangements. Double mechanical pumps are suitable for working against vacuum.
- 2. Tanks and vessels fabricated out of SS 304 and 316 for different products like milk, cream, beverages etc.,
- 3. Bulk milk Cooler of DX type with the Evaporation plate of Laser welded technology. The Capacity from 300 L to 10,000 L
- 4. Plate type heat exchangers for various products like milk, cream, food products, ice cream mix, fruit juices, water, beverages etc., We can offer plates of different sizes, material of construction for plates SS 304 and 316.
- 5. Falling film evaporators of various size and capacities working under vacuum evaporating products like milk, chemical products etc.,,
- 6. Force Circulation Evaporators for various viscous and scaling product. Material of construction SS 304 / SS 316
- 7. Spray dryers: Spray drying plants for drying products like, milk, gum Arabic chemicals and other products. Spray dryers are designed to meet the ultimate products properties.







#### **PROJECT MANAGEMENT**

- ➤ Unloading
- Material Handling
- Storage Indoor
- Material control and issues
- Erection procedure
- Erection control
- Progress report
- Cost documents
- Quality procedures
- Liaison with sub-contractors
- > Liaison with customers
- Record maintenance
- ➤ Trial runs
- > Handing over documents

Management information system to:

Head Office Regional Office Customers

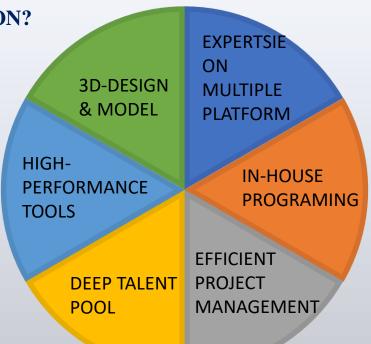




# **AUTOMATION SOLUTION**

### WHY GO FOR AUTOMATION?

- Reduces Production Cost
- Increases Production Efficiency
- Better Quality Control
- End To End Traceability
- Improved Worker Safety
- Brand Protection
- Standardized Product Output



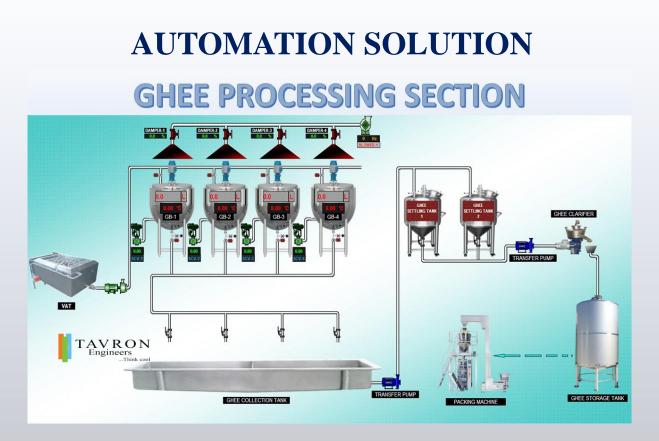
### **AUTOMATION PROJECTS**

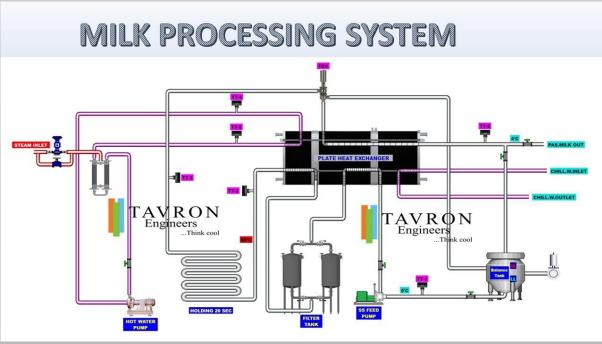
We have provided Complete Turn Key Solution with Automation Solution of SCADA and PLC for

- CIP System
- Evaporator Section
- Dryer Section
- Lab Model Spray Dryers
- Butter & Ghee Plant
- Milk Processing Plant
- Sterilizer
- Refrigeration Systems Etc.
- Cosmetics Plants.

We also provide Tailor Made Automation Solution as per customer requirement in other domains.



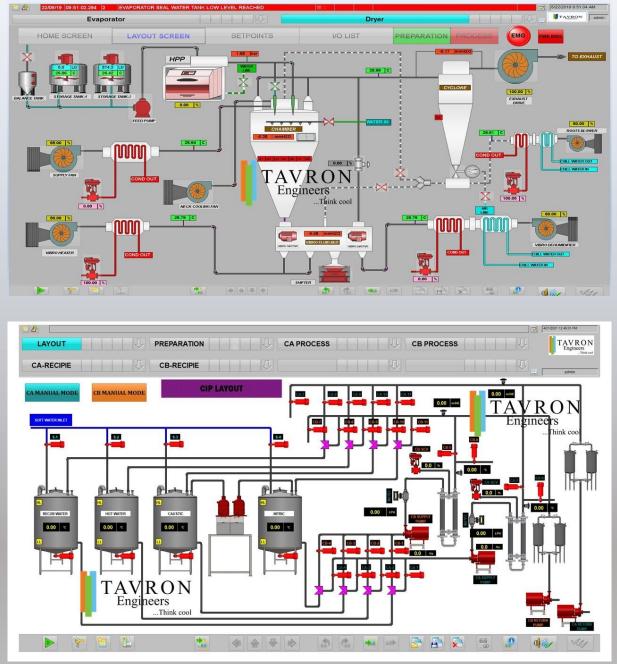






### **AUTOMATION SOLUTION**

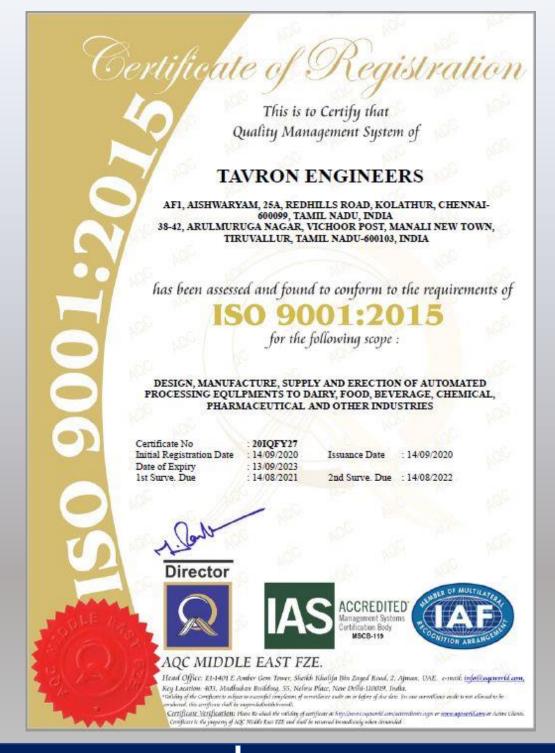
### SPRAY DRYER PLANT



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### CERTIFICATION



#### FACTORY TAVRON ENGINEERS

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#### HEAD OFFICE TAVRON ENGINEERS

AF-1 Aiswariyam, 25 A Redhills Road, Kolathur, Chennai - 600 099, India. Tel:- +91 44 25567211. Mobile : +91 9444015442. Email:- sales@tavron.net| Website: www.tavron.net

### **CLIENT LIST**

TAVRON ENGINEERS - CLIENTS LIST						
SL.NO	CLIENTS NAME	COUNTRY	EQUIPMENTS			
1	ACCESS INTERNATIONAL	SRILANKA	DAIRY EQUIPMENTS			
2	A.R DAIRY FOOD PRIVATE LIMITED	INDIA	FALLING FILM EVAPORATOR , SPRAY DRYER			
3	ADYAR ANANDHA BHAVAN	INDIA	DAIRY EQUIPMENTS			
4	AGAS INTERNATIONAL	BHARAIN	DAIRY EQUIPMENTS			
5	AACHI SPICES AND FOODS PRIVATE LIMITED	INDIA	GHEE EQUIPMENTS			
6	AMS MILK PRODUCTS	INDIA	GHEE EQUIPMENTS			
7	AUM CONSULTANCY	INDIA	STORAGE TANKS			
8	AAGARWAL SWEERS	INDIA	GLYCOL SYSTEM			
9	APEX COCO AND SOLAR ENERGY LIMITED	INDIA	PLATE HEAT EXCHAGER			
10	CAVINKARE PVT LIMITED	INDIA	DAIRY EQUIPMENTS			
11	CAVINESTATE PRIVATE LIMITED	INIDIA	BMC			
12	CAVIN INTERNATIONAL PRIVATE LIMITED	INDIA	DAIRY EQUIPMENTS			
13	COSMO PURIFICATION SYSTEM PVT LTD	INIDIA	DAIRY EQUIPMENTS			
14	CREAMLINE DAIRY PRODUCT LIMITED	INIDIA	DRYER			
15	DINDIGUL FARM PRODUCT PVT LIMITED	INDIA	WHEY PROTEIN, CASINE PLANT			
16	DODALA DAIRY LTD.,	INDIA	GHEE EQUIPMENTS			
17	DE ROKEN COMPANY LTD.,	TANZANIA	COOLING TANKS			
18	DOT LINE CONSULTANCY	INDIA	PLATE HEAT EXCHAGER			
19	ENER LIFE (INDIA) PVT LIMITED	INDONESIA	DAIRY EQUIPMENTS			
20	EXEL WATER SYSTEMS PVT LTD.,	INDIA	DAIRY EQUIPMENTS			
21	FARADAY OZONE PRODUCTS LTD.,	INDIA	DAIRY EQUIPMENTS			
22	GRB DAIRY FOODS PVT LIMITED	INDIA	DAIRY EQUIPMENTS			



23	GOWER VIEW FOODS LTD (SKYR)	ENGLAND	DAIRY EQUIPMENTS
24	G.K.DAIRY	INDIA	GHEE EQUIPMENTS
25	GOKUL DAIRY PRODUCTS PVT LTD,	INDIA	DAIRY EQUIPMENTS
26	GOMATHI FARM FOODS PVT LTD.,	INDIA	DAIRY EQUIPMENTS
27	HATSUN AGRO PRODUCT LIMITED	INDIA	DAIRY EQUIPMENTS
28	HARISH MILKS & MILK PRODUCT PVT LTD.,	INDIA	DAIRY EQUIPMENTS
29	HARVEST HI TECH EQP INDIA PVT LTD.,	INDIA	DAIRY EQUIPMENTS
30	HEMA GANGA FOOD PRODUCTS	INDIA	DAIRY EQUIPMENTS
31	HAIDER GHEE	NEWZELAND	GHEE EQUIPMENTS
32	HIGH RANGE DEVELOPMENT CENTER	INDIA	DAIRY EQUIPMENTS
33	HARSHVIN KARE PRODUCTS	INDIA	DAIRY EQUIPMENTS
34	INTERNATIONAL MARBLE FACTORY	KUWAIT	CHILLING UNIT
35	INTEK ENGINEERS	INDIA	DIMPLE JACKETED TANKS
36	ITC LIMITED	INDIA	DAIRY EQUIPMENTS
37	JEPPIAAR MILK PRODUCTS PVT LIMITED	INDIA	MILK SILO 'S 50 KL
38	JYOTHY INDUSTRIES	INDIA	SPRAY DRYER
39	JANATHA CHARITABLE SOCIETY	INDIA	DAIRY EQUIPMENTS
40	JEEVODAYA MILK PROJECT	INDIA	DAIRY EQUIPMENTS
41	KC DAIRY PRODUCTS PVT LIMITED	INDIA	FALLING FILM EVAPORATOR 4 EFFECT, SPRAY DRYER
42	KWALITY MILK FOODS LIMITED	INDIA	DAIRY EQUIPMENTS
43	K.L.CHILLING CENTER	INDIA	MILK SILO
44	KULFI HOUSE	INDIA	BMC
45	KRISHNA DAIRY PRODUCTS	INDIA	CHILLING UNIT
46	KAYAL AGRO FOODS	INDIA	BMC
47	LIFE SPARING WATER (I) PVT LTD	INDIA	CHILLING UNIT
48	LAVANYA MILK COLLECTION CENTER	INDIA	РНЕ
49	MELLOW ICE CREAM	INDIA	DAIRY EQUIPMENTS
50	NELLAI FARM PRODUCT PVT LIMITED	INDIA	MILK SILO'S
51	NANDHS DAIRY	INDIA	
52	NUMAX FOODS PVT LTD.,	INDIA	FALLING FILM EVAPORATOR

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...Think cool

53	NARA COCO LAND	SRILANKA	PASTURIZER
54	PENNWALT LIMITED	INDIA	DAIRY EQUIPMENTS
55	PEPSICO INDIA HOLDINGS PVT LIMITED	INDIA	DAIRY EQUIPMENTS
56	PEOPLES DAIRY DEVELOPMENT PROJECT	INDIA	FALLING FILM EVAPORATOR 4 EFFECT, SPRAY DRYER
57	PRAKASH DAIRY FARM FRESH	INDIA	PLATE HEAT EXCHAGER
58	PT ESSAR	INDONESIA	PLATE HEAT EXCHAGER
59	ROWLEY FARM DAIRIES LIMITED	ENGLAND	DAIRY EQUIPMENTS
60	RICH DAIRY PRODUCT INDIA PVT LTD	INDIA	DAIRY EQUIPMENTS
61	RKR DAIRY PRODUCT PVT LTD	INDIA	DAIRY EQUIPMENTS
62	RAINBOW CHICKEN	KENYA	HTST MILK PASTEURIZER
63	ROHINIS FOODS	INDIA	DAIRY EQUIPMENTS
64	RENUKA AGRI FOODS PLC	SRILANKA	SKID MOUNTED HOT WATER GENERATOR
65	SAB AUTOMATION MARKETING	BHARAIN	DAIRY EQUIPMENTS
66	SAB DAIRY MACHINERY PVT LIMITED	BHARAIN	DAIRY EQUIPMENTS
67	SARAVANA STORES FOOD PVT LIMITED	INDIA	EVAPORATOR
68	SHRUTHI MILK PRODUCTS PVT LIMITED	INDIA	SPRAY DRYER
69	SRI MAHALAKSHMI DAIRY	INDIA	FALLING FILM EVAPORATOR 4 EFFECT
70	SRI MEENACHI	INIDIA	BMC
71	SHISSI & Co.,	INDIA	DAIRY EQUIPMENTS
72	SRI RAM AND CO	INDIA	DAIRY EQUIPMENTS
73	SUGUNA FOODS LIMITED	INDIA	MILK SILO'S
74	SUNFRESH AGRO INDUSTRIES PVT LIMITED	INDIA	MILK SILO'S 100 KL
75	SWEDINOX INTERNATIONAL FZC	BHARAIN	PUMP COMPONENTS
76	SRI GANGJALA BEVERAGES	INDIA	JUICE PLANT

