

PATKOL

Public Company Limited

SINCE 1965

LEADER OF FOOD AND BEVERAGE PROCESSING
REFRIGERATION AND ICE MACHINE WITH

FRIENDLY ENGINEERING



PATKOL Public Company Limited

www.patkol.com



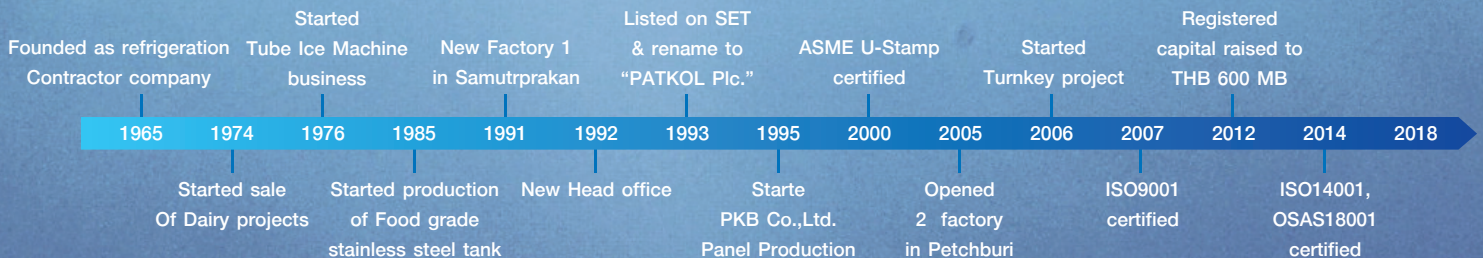
PATKOL

Public Company Limited

PATKOL has been recognized as the Asean leader in refrigeration and food machinery for 50 years. Known for having excellent engineering capability and high quality products, we work on the principle of

"We Offer Quality Products & Services with Integrity and Reliability"

Timeline



Quality Product

PATKOL's factory, opened in October 2005, is operated under the name PATKOL Manufacturing Co., Ltd. Located in Thailand's Phetchaburi Province and occupying an area of approximately 15,000sq.m., it has a great manufacturing capacity, and its activities are promoted by the BOI. The winner of the 'White Factory' provincial award strives to ensure high quality and high efficiency.



ISO 14001

Environmental Management System



OHSAS 18001

Occupational Health and Safety Management



ISO 9001 : 2008



ASME U-stamp



Certifie



Conformité Européene



Our Products & Solutions

Ice machine



Control & Automation



Refrigeration



PATKOL

Tank & Pressure Vessel



Freezer



Liquid Processing



Technical
Supporter



Service



R&D



Engineering
Center



Process
Improvement/
Consultancy



Automation



Outstanding
Technologist Award 2004

For being the Thai pioneer in design and production of Tube Ice Machines that meet the GMP standard Presented by HRH Mahachakri Sirindhorn



Prime Minister's Export 2001
For Thai brands
For our Ice Making Machine

Prime Minister's Export 1993
For Thai designs
For our Ice Making Machine



Second runner-up
Machinery Technology Award 2016

Major :Technology and Machinery for
Manufacturing
Machine :Tube ice Packing Machine





Ice Machine



■ Tube Ice - Self Contained Unit



■ Plate Ice



■ Scale Ice



■ Block Ice

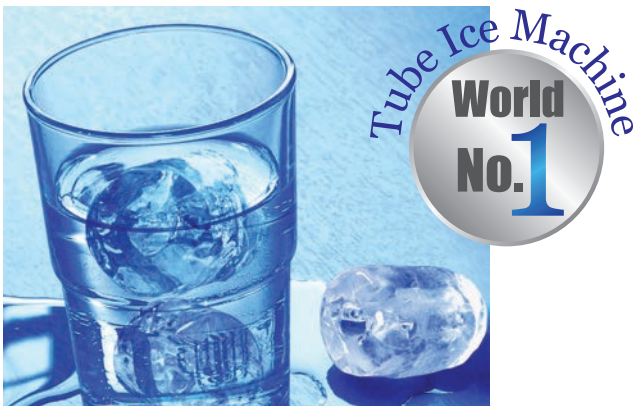
Ice Machine



We built first PATKOL® tube ice machines in 1976 and committed to continuously enhance its own capabilities to retain leadership in the industry.

PATKOL® ice machines are specially designed for using in tropical areas and heavy duty work with very long life time. Many of them are still functional even after 25 years of operation. Our ice machines are highly popular in Asia and expanding to more than 30 countries around the world.

World leader in Ice Machine



Ice from PATKOL® ice machines are suitable for consumption and supplying to various types of industry. Our new “High Efficiency” ice machines have lower electrical consumption which create more profit to user.

We can offer all equipments as complete system for ice business with various options to suit your requirements under global manufacturing standard and global warranty with after sales services from our overseas staff and local agents nearby your place.

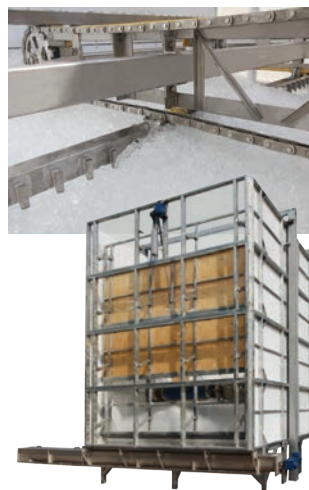
Ice Handling & Storage



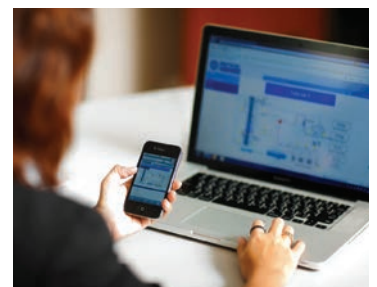
■ Ice Packing



■ Ice Compactor



■ Ice Storage Bin & Raking



■ On-line Monitoring



Stainless Steel
Evaporative Condenser

Freezer & Chiller



Reciprocating and
Screw Compressor



Ammonia (NH₃) / R404a / R22 / CO₂
Refrigerants

Freezing & Cold Room

Freezer & Chiller



- | | | | |
|---------------------------|---------------------------------|-------------------------|------------------------------|
| ■ Fruit Cold Storage | ■ Humidity Control Storage | ■ -60°C Freezer | ■ Ripple Plate Water Chiller |
| ■ Vegetable Cold Storage | ■ Controller Atmosphere Storage | ■ Blast Freezer | ■ Shell & Tube Chiller |
| ■ Ultra low Temp. Storage | ■ Processing Room Cooling | ■ Contact Plate Freezer | ■ Ammonia Chiller |



Refrigeration



We are the leading manufacturer and contractor of refrigeration components and systems. Our extensive range of high quality, reliable refrigeration products, which feature excellent designs and incorporate professional installation, commissioning and related services, can be supplied to virtually any industrial or commercial refrigeration plant.

Your solution in Refrigeration

- Engineering design and project management services
- Instrumentation lines, panel and automatic operation systems
- Upgrades of existing production lines



Supermarket Showcase

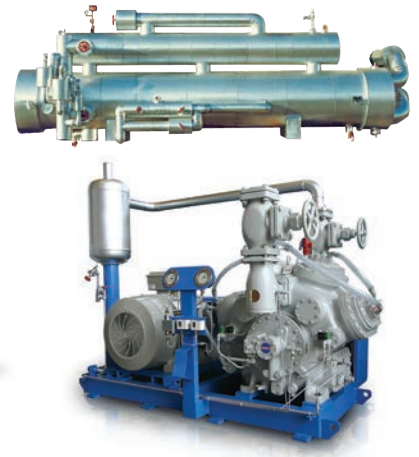


- Supermarket Showcase
- Compressor Rack

Equipments



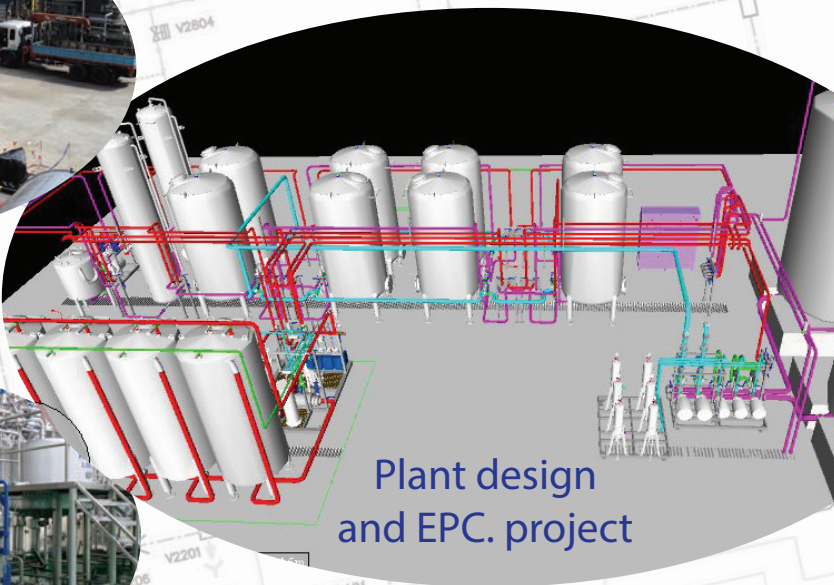
- Industrial Ice Maker
- Shell & Tube Condenser
- Evaporative Condenser



- Compressor
- Ammonia Pump
- Energy Saving Equipment



Machine/ Piping installation



Plant design
and EPC. project



Automation Processing

Dairy

Beverage & Brewery



- Milk Collection Center
- Pasteurization System
- UHT System

- Yoghurt and Drinking Yoghurt
- Ice Cream Plant
- Condensed Milk Plant

- Juice / Tea Extractor
- Dissolving System
- Fermenter System

- Carbonated Drink
- Central CIP
- Turnkey Project



Liquid Processing



Plant renovation / upgrading



Utility system

We have an extensive experience in dairy processing and liquid processing industries with highly various skilled of Engineers and Technicians. Project teams are expertise in specialized field of construction with safety mind.

Our capabilities are able to supply Turnkey project by our professional experiences to meet your project timeline, project budgetary and satisfy quality.

Providing automated plant solution

We supply plant solutions, plant automations, innovation and cost-effective processing equipment and utility equipment to many well-known leading manufacturer, local and oversea under conceptual of hygiene, operation efficiency and product quality.

GMP

HACCP

Cosmetic & Pharmaceutical

Chemical



- Plant Engineering Design
- Automatic Plant Controlling System
- Raw Material Feeding System

- EPC. Project
- Energy Saving Project
- DI Watering System

- ASME Equipment Design and Fabrication
- Chemical Storage and Transfer System
- Explosion Proof Processing



Aseptic Tank

PATKOL could supply stainless steel tanks, vessels, mixers and processing equipment. With our experience and technical know-how from Europe, food grade and Hygienic tanks are our main products.

- Stainless Steel grade 304, 304L, 316L, 316Ti and Duplex
- Surface roughness $R_a \leq 0.8 \mu\text{m}$ or up to $R_a \leq 0.4 \mu\text{m}$
- CIP (Clean In Place) spray ball
- Heating and cooling jacket ; half pipe, dimple, spiral etc.
- Meet GMP, HACCP, FDA standards
- Pressure vessel design to ASME code
- Radiographic testing and 3rd party inspection
- Chemical passivation and cleaning

Dairy & Beverage



Brewery



- Truck Tanker
- Blending Tank
- Jacketed Tank

- Silo
- Hygienic Process Tank
- Aseptic Tank

- Spent Grains Silo
- Pre-Fermenter Tank
- Fermenter Tank

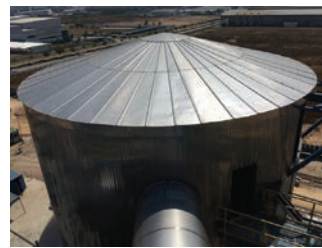
- Bright Beer Tank
- Buffer Tank
- CIP Tank



Tank & Pressure Vessel



We are specialized
in manufacturing
all kind of tanks



Spray Dryer

Cosmetic



Petrochemical Equipment



- | | | | |
|-----------------------------------|--------------------------|-------------------|-----------|
| ■ Storage Tank | ■ Pressure / Vacuum Tank | ■ Tank Farm (API) | ■ Reactor |
| ■ High Viscos Product Mixing Tank | ■ Mobile Tank | ■ Pressure Vessel | ■ Stack |
| ■ High Shear Mixer | ■ DI Water Tank | ■ Heat Exchanger | ■ Column |



Individual Quick Freezer (IQF.) & Washer

FREEZER



Compact freeze

Capacity 60 - 80 kg/hr.



Tunnel Freezer

Capacity 250 - 1,500 kg/hr.



Spiral freezer

Capacity 500 - 3,000 kg/hr.

WASHER



Kleen Crate Automatic Tray Washer

Capacity 500 - 4,000 eas./hr.



Atanomat Automatic Tray Washer

Capacity 300 - 1,000 eas./hr.

■ Poultry & Meat

■ Ready to eat

■ Frozen food & Seafood

■ Distribution Center

■ Fruit & Vegetable

■ Bakery



Control and Automation

Everything's we can control.

PATKOL is the Thailand company, that we can design and develop software for automatic machine with online monitoring system for control & monitor your machine.

The Automation Control System will be working replace of human which able to control quality of products also certainly about quantity of production more than working by human.

Productivity Quality and Safety are the key factors to be integrated by PATKOL innovative process automation systems and services for control, monitoring , reporting and analysis according to the GMP and HACCP regulations.



Plant Operations



Smarts Technology



On-line Monitoring



Solutions & Services





- Researching and Developing new products to serve business units to maintain the lead in each industry.
- Improving existing products to have higher reliability, more energy saving, more customer friendly and more cost effectiveness.
- Being technical center of the company to keep all technical information and knowledge systematically.
- Providing technical training to staffs.

R&D



Nowaday, every system regional accuracy and continuous automatic control due to the growth rate of world labour cost and human errors. The automatic controlling system is the solution and easy to increase production capacity in low investment.

Productivity, Quality and Safety are the key factors to be integrated by "PATKOL" innovative process automation systems and services for controlling, monitoring, reporting and analysing according to the GMP and HACCP regulations.

Automation

Technical Supporter

Process Improvement / Consultancy

Patkol is professional in providing engineering solution to our customer. We can do all process design, process improvement and consultant in the food and petrochemical industry. Moreover, we can scale up from laboratory to pilot plant and commercial scale.

Engineering Center

- Our work to meet a variety of needs based on customer's enquiry
- Design pressure vessel and heat exchanger according to ASME Code, TEMA Standard, we also continuously recieved the U-Stamp Certificate as well
- Design storage tank according to API-650, API-620 Standard, etc.
- We have been focusing on high quality, high efficiency and environmental friendly products.



Packing Machine

PATKOL has continuously developed the packing machine with the main target aiming on customer's by highest precision with extreme efficiency in order to increase your profit, such as energy saving, reducing film lost, operation time and man power, the minimum use of consumption supply as well as keeping friendly environment.

Complete Set Automatic Packing Machine



High Speed
Pouch Filler
Automatic



Automatic
Ice Packing
(2kg)



Automatic / Manual
Ice Packing
(20kg)

Patkol is more than just a manufacturer of refrigeration products, It is also a major certified supplier of a vast array of high quality and can be used for storage, transportation and production requirements.

Spareparts

Industrial Refrigeration Equipments



Refrigeration Pump
Impeller & Axial Fan
Refrigeration Equipments
Compressor Equipments



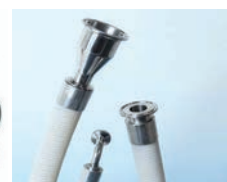
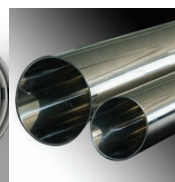
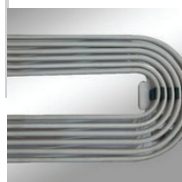
Gas Respirators
Gas Detector
Heater
Instruments



Sanitary Stainless Steel Flow Equipments



Pumps
Fitting & Valve
Tube





PATKOL

Public Company Limited

SINCE 1965



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