

**ENGINEERING COMPANY** 







- Development of refrigeration installations
- "Turnkey" projects
- Technical re-equipment of ammonia-based objects
- Emergency response plan implementation
- **Ventilation** and conditioning of industrial premises
- Refrigerated warehouses construction
- **‡** Installation and commissioning
- Service and technical support

### Company activities



- Refrigeration solutions for food and processing industry. Technological equipment design and production
- Explosion-proof refrigeration systems and compressors for oil, gas, mining and nuclear industries
- Shopfitting, commercial, technological and related equipment for trade enterprises



### Our advantages



- Manufacturing and storage base
- Substandart equipment production experience
- Eco-safe and energy efficient refrigerants (NH₃, CO₂)
- **Hazardous industrial facilities**
- **Resign office**
- **Logistic service**
- Direct deliveries from Europe
- Express delivery of equipment and spare parts









## Company activities



## We offer refrigeration and technological equipment for following industries:

- Meat and poultry processing industry
- Seafood and fish processing industry
- Report the stry industry
- Storage and processing of fruits and vegetables
- **Bakery and confectionery industry**
- Refrigerated warehouses
- lce cream factories and cold storage facilities



### Meat processing industry





- **Solution** Design and construction documentation development
- Refrigeration, technological, ventilation and pumping equipment supply and delivery
- Turnkey commissioning of cooling systems
- Production of refrigeration and conveyor systems
- **†** Technical, guarantee and service support
- Technical re-equipment of refrigeration systems and engine rooms
- 🗱 Energy audit
- Development of emergency response plans

### Meat processing industry



- Technical re-equipment of ammonia-based engine rooms
- **\*** Ice water production
- **\*** Ice accumulation
- Intensive cooling
- Shock freezing
- Monitoring and visualization



## Meat processing industry





#### **Equipment:**

- Refrigeration lines
- Shock freezing equipment
- Plate freezers
- Refrigerated tables
- Tunnel fast freezing machines
- Ice generators
- Cold accumulators
- Chambers with microclimate support
- Box freezers and blastfreezers
- Hanging rails for carcasses transportation
- Logistic conveyor systems
- Deboning, sorting, inspection and trimming lines
- **\*** Transport conveyor systems
- **‡** Injection lines

## Poultry industry



- Design
- Development of project, engineering and work documentation
- Delivery of refrigeration, technological, ventilation and pumping equipment
- **Turnkey comissionning of cooling systems**
- Production of refrigeration and conveyor systems
- **Technical**, guarantee and service support
- Technical re-equipment of refrigeration systems and engine rooms
- 😽 Energy audit
- Development of emergency response plans



## Poultry industry





- Technical re-equipment of ammonia-based engine rooms
- 🗱 Ice water production
- **#** Mist cooling
- lce accumulation
- **‡** Intensive cooling
- **\$** Shock freezing
- Monitoring and visualization

## Poultry industry



#### **Equipment:**

- Refrigeration lines
- Shock freezing equipment
- Plate freezers
- Refrigerated tables
- **Tunnel fast freezing machines**
- lce machines
- Cold accumulators
- Chambers with microclimate support
- Box freezers and blastfreezers
- Hanging rails for carcasses transportation
- Logistic conveyor systems
- Deboning, sorting, inspection and trimming lines
- **Transport conveyor systems**
- Injection lines



## Seafood and fish processing industry





- 岸 Design
- Development of project, engineering and work documentation
- Delivery of refrigeration, technological, ventilation and pumping equipment
- **Turnkey commissioning of cooling systems**
- Production of refrigeration and conveyor systems
- **Technical**, guarantee and service support
- Technical re-equipment of refrigeration systems and engine rooms
- Energy audit
- Development of emergency response plans

# Seafood and fish processing industry



- Technical re-equipment of ammonia-based engine rooms
- **k** Ice water production
- **k** Ice accumulation
- Intensive cooling
- Shock freezing
- Monitoring and visualization



## Seafood and fish processing industry





#### **Equipment:**

- Refrigeration lines
- Shock freezing equipment
- Plate freezers
- ; Glazing systems
- Tunnel fast freezing machines
- lce machines
- Cold accumulators
- Chambers with microclimate support
- Box freezers and blastfreezers
- Logistic conveyor systems
- Sorting and inspection lines
- **Transport conveyor systems**
- **#** Injection lines
- **Refrigerated tables**

### Diary industry



- **#** Design
- Development of project, engineering and work documentation
- Delivery of refrigeration, technological, ventilation and pumping equipment
- Turnkey commissioning of cooling systems
- Production of refrigeration and conveyor systems
- Technical, guarantee and service support
- Technical re-equipment of refrigeration systems and engine rooms
- Energy audit
- Development of emergency response plans





### Diary industry





- Technical re-equipment of ammonia-based engine rooms
- **k** Ice water production
- 🌟 Ice accumulation
- 🛊 Intensive cooling
- Shock freezing
- \* Monitoring and visualization

### Diary industry



#### **Equipment:**

- **Refrigeration lines**
- Shock freezing equipment
- Tunnel fast freezing machines
- **Cold accumulators**
- Chambers with microclimate support
- Logistic conveyor systems
- Transport conveyor systems



## Storage and processing of fruits and vegetables





- 岸 Design
- Development of project, engineering and work documentation
- Delivery of refrigeration, technological, ventilation and pumping equipment
- Turnkey comissionning of cooling systems
- Production of refrigeration and conveyor systems
- 🗱 Technical, guarantee and service support
- Technical re-equipment of refrigeration systems and engine rooms
- Energy audit
- Development of emergency response plans

## Storage and processing of fruits and vegetables



- Technical re-equipment of ammonia-based engine rooms
- **Reserve :** Ice water production
- **!** Ice accumulation
- Intensive cooling
- Shock freezing
- Monitoring and visualization



## Storage and processing of fruits and vegetables





#### **Equipment:**

Refrigeration lines

Shock freezing equipment

Tunnel fast freezing machines

Cold accumulators

Chambers with microclimate support

Logistic conveyor systems

Sorting and inspection lines

Transport conveyor systems

## Bakery and confectionery industry



- Design
- Development of project, engineering and work documentation
- Delivery of refrigeration, technological, ventilation and pumping equipment
- Turnkey commissioning of cooling systems
- Production of refrigeration and conveyor systems
- Technical, guarantee and service support
- Technical re-equipment of refrigeration systems and engine rooms
- Energy audit
- Development of emergency response plans



## Bakery and confectionery industry





- Technical re-equipment of ammonia-based engine rooms
- **Residual** Ice water production
- **!** Ice accumulation
- 🛊 Intensive cooling
- Shock freezing
- Monitoring and visualization

# Bakery and confectionery industry



#### **Equipment:**

Refrigeration lines

Shock freezing equipment

Tunnel fast freezing machines

Cold accumulators

Chambers with microclimate support

Logistic conveyor systems

Sorting and inspection lines

Transport conveyor systems



### Refrigerated warehouses





- 🍀 Design
- Development of project, engineering and work documentation
- Delivery of refrigeration, technological, ventilation and pumping equipment
- Turnkey commissioning of cooling systems
- Production of refrigeration and conveyor systems
- technical, guarantee and service support
- Technical re-equipment of refrigeration systems and engine rooms
- 🗱 Energy audit
- Development of emergency response plans

## Refrigerated warehouses



- Technical re-equipment of ammonia-based engine rooms
- **\*** Intensive cooling
- \* Monitoring and visualization



### Refrigerated warehouses





#### **Equipment:**

Cold accumulators

Chambers with microclimate support

Box freezers

Water cooling systems

Logistic conveyor systems

Refrigerated warehouses and complexes

Mobile warehousing

Multi-temperature warehousing

High-rack warehouses

Warehouses with variable-geometry chambers

Automated order collection system

Automated warehouses

## Ice cream factories and cold storage facilities



- 🍀 Design
- Development of project, engineering and work documentation
- Delivery of refrigeration, technological, ventilation and pumping equipment
- Turnkey commissioning of cooling systems
- Production of refrigeration and conveyor systems
- Technical, guarantee and service support
- Technical re-equipment of refrigeration systems and engine rooms
- **Energy** audit
- Development of emergency response plans



## Ice cream factories and cold storage facilities





- Technical re-equipment of ammonia-based engine rooms
- **The Water production**
- Ice accumulation
- 🧱 Intensive cooling
- Shock freezing
- 麘 Monitoring and visualization

## Ice cream factories and cold storage facilities



#### **Equipment:**

- Refrigeration lines
- Shock freezing equipment
- Tunnel fast freezing machines
- Cold accumulators
- Chambers with microclimate support
- Chilling chambers
- Logistic conveyor systems
- **Sorting and inspection lines**
- Transport conveyor systems







Technical re-equipment of ammonia based refrigeration system OAO "Baltic Milk", Wimm-Bill-Dann (PepsiCo) branch.

**Saint-Petersburg** 

#### **Completed works:**

**2014-2015.** Complex technical re-equipment of production rooms cooling system and loading racks.

**2015.** Delivery and installation of natural cooling system in the refrigerator.

**2015.** Project of ammonia drainage and exhaust oil system.

**2015-2016.** Delivery and installation ammonia drainage and exhaust oil system.

**2016.** Delivery and installation of maintenance of floating condensing pressure control system

**2016.** Delivery installation of the remote control system to maintain the floating condensing pressure on the ammonia refrigeration system.



Technical re-equipment of ammonia based cooling system on OAO "Vladivostok sea fishing port" enterprise. Vladivostok.

#### **Completed works:**

Development of project and engineering documentation for ammonia-based refrigeration system. Industrial safety expertise.

Refrigeration unit R717 (NH₃)







Reconstruction of the compressor workshop with administration, on-site facilities and condenser platform. Cheese factory. Udmurt Republic, Kez.

(Subcontract "GEA Refrigeration Rus")

#### **Completed works:**

Development of project and work documentation for ammon ia-based refrigeration unit reconstruction (New facilities for the condensing branch, remodeling the existing condensing unit, redevelopment of the trestle on 2<sup>nd</sup> and 3<sup>rd</sup> floor for the condenser platform).

Refrigeration unit R717 (NH₃)



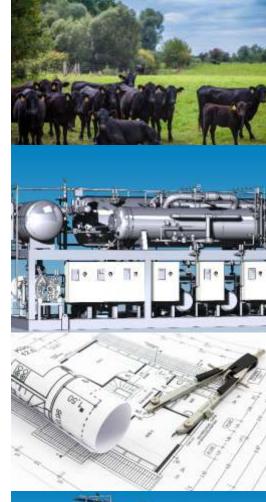
Construction of a new complex for the slaughtering and processing of beef capacity of 100 heads per hour. Bryansk oblast.

Subcontract "Johnson Controls"

#### **Completed works:**

Development of project and work documentation of cooling system complex. Connecting air coolers. Connecting of tile, packaged and pallet freezers. Ventilation system for engine room. Installation and connection of control and power boards of refrigeration system. Design of cascade refrigeration units R717/R744 ( $NH_3/CO_2$ )

**Low-temperature unit R744 Mid-temperature unit R717** 









Reconstruction of slaughtering and meat cutting production buildings. Belgorodskaya oblast.

(Subcontract "Johnson Controls")

#### **Completed works:**

Installation and commissioning of cooling and ventilation systems (engine room and condenser platform). Delivery and installation of technological equipment, pipelines and ventilation units. Electrical work. Installation of a cascade refrigeration system R717/R744 (NH $_3$ /CO $_2$ ).

Low-temperature unit (R744)
Medium temperature unit (R717)





## We offer





- Chillers and cooling machines
- Industrial ventilation systems
- Installations for circulating water cooling (cooling tower)
- Pumping stations
- Gas compressors
- Heat exchange equipment
- Petrol stations equipment

# Installations for circulating water cooling (cooling tower)



- Design, construction and commissioning of installations
- \* Modular equipment
- **Explosion-proof versions Ex**
- **\$** Suitable for a variety of climate zones
- Energy-saving technologies
- Complex nodes



## Industrial ventilation systems





- Project, construction and commissioning of installations
- Extract and input ventilation installations
- Natural and forced ventilation systems
- Conditioning systems
- Monoblock installations
- 🗱 Explosion-proof versions (Ex
- Suitable for a variety of climate zones

# Chillers and cooling machines



- Project, construction and commissioning
- **Explosion-proof versions Ex**
- Absorption
- **\$** Low temperature (brine)
- \* Modular equipment
- **\*** Ice water production
- Energy-saving solutions



## Pumping stations





- Design, construction and commissioning of installations
- Oil and emulsion pump stations
- Chemical dosing installations

Fresh water supply stations

Stratal water pump stations

Sewage water pump stations

Design and construction according to customer's specifications

# Gas compressors



- Design, construction and commissioning of installations according to customer's specifications
- Natural and associated petroleum gas pumping
- **Booster compressor stations**
- Vacuum compressor stations
- **Explosion-proof versions Explosion-proof versions**



## Heat exchange equipment





- Design, supply and commissioning of equipment
- Air cooling equipment (ACE)
- Air coolers
- Dry coolers and cooling towers
- Plate heat exchangers
- Air coolers, evaporators, condensers

## Petrol stations equipment



- \* Design, construction and installation
- Liquefied natural gas (LNG) installations
- Gas refueling stations and gas service stations components
- Commercial refrigeration equipment
- Commercial shelving equipment





# Completed projects





## **OAO «ALROSA»**

Design, construction and delivery of three brine-using and soil-freezing refrigeration units with a pumping station and free cooling technology in a block-modular design, including conditioning, ventilation and heating systems.



## OOO «LUKOIL-Perm»

Design, delivery and commissioning of the chiller with an explosion-protected pumping station for outdoor applications.

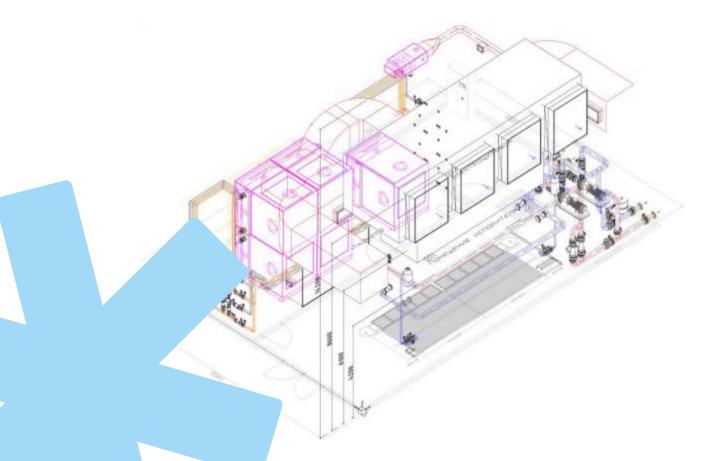


# Completed projects



#### **OOO «LUKOIL-Komi»**

Project, delivery, supervised installation and commissioning of the integrated water recirculating cooling plant based on an open-type cooling tower combined with a pumping station and conditioning, ventilation and heating systems.









# Norpe (Viessmann Group)





Norpe was founded in 1954, in Finland.
Since 2012 the company is a part of the Viessmann Group (Germany)

- Complete range of commercial refrigeration equipment
- Solutions for upright and island options of refrigeration equipment



#### **Multidecks**

- Optimized usage of the floor space
- **\$\rightarrow\$** Larger display area
- Increased product visibility in the trading floor





#### Freezer islands

- 👛 Horizontal, semi-vertical design
- 🧱 Maximum assortment for a given floor space
- Vertical backlight for better product visibility
- **lconic** vertical freezer island has up to 50 % more capacity than horizontal freezer islands

#### **Serve-over cabinets**

- Retail sales increase of a new store opening
- Improving the efficiency of the trading floor to make staff working time more productive



## ISA-Tasselli





- Tasselli company was founded in 1943 in Italy
- ISA SpA company was founded in 1963 in Italy
- Companies merged in 2001 to create ISA-Tasselli company



#### **Multidecks**

- Upright and island options
- Innovative, energy-efficient solutions



- Original design
- Better ergonomics
- Superior product visibility
- Wide choice of lowtemperature cabinets
- More than 20 models



#### Freezer islands

- Horizontal and semi-vertical freezer islands
- Upright and island options
- LED light for better visibility and display



## ES-System





- **ES-System K** was founded in 1994 in Poland
- **ES SYSTEMS K equipment** were evaluated several times in competitions on the latest industrial design achievements



#### **Multidecks**

- Upright and island solutions
- 🛑 Ergonomic design
- **Solution** Dynamic refrigeration



#### **Serve-over cabinets**

- Complex solutions both for supermarkets and small shops
- Optimized usage of the internal space



#### Freezer islands

- **Ergonomic design**
- LED light for better visibility and display
- **!** Island solutions



## **Enteco-Master**





- **ENTECO-MASTER** was founded in 1994 in Belarus
- **VILIA** model range with a built-in aggregate
- NEMIGA model range with a central cooling system



#### **Multidecks**

- 👛 Upright and island options
- 🛑 Ergonomic design
- Dynamic refrigeration



#### **Serve-over cabinets**

- **Ergonomic design**
- **Solution** Enlarged cooling reserve stock
- 👛 Static refrigeration



#### Freezer islands

- Ergonomic design
- Suitable for various kinds of shop formats
- **!** Island solutions
- Dynamic refrigeration



## HoReCa

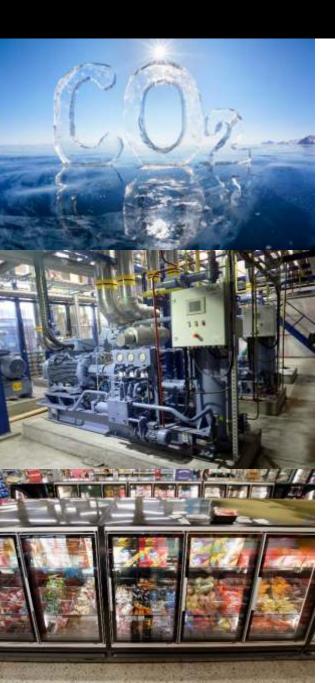


- We provide complex shopfitting: refrigeration and technological equipment for restaurants, canteens, cafes, pizzerias.
- We offer high range of professional equipment for catering enterprises made in Finland, Poland, Italy, China and Russia.



# Technical re-equipment with use of CO<sub>2</sub> refrigerant





TEHNOMIR company is one of the first that began to offer technical re-equipment of cooling systems with energy-efficient natural refrigerant CO<sub>2</sub>

## CO₂ advantages

- Reduced pipes and compressors size
- Low pressure ratio between stages of high and low pressure
- 🗱 Highly-efficient compressor
- Low greenhouse potential (GWP=1)
- 🗱 Zero ozone depletion potential (ODP=0)
- Enviromentally safe and reliable

## Our clients





#### Trade floor square 11 000 m<sup>2</sup>

Delivery, installation, commissioning of the refrigerating systems in the hypermarket. **Norpe** commercial equipment (Finland), cooling chamber and cooling plants based on screw and piston compressors Bitzer, ADAP COOL system.



#### Trade floor space 5 000 m<sup>2</sup>

More than 30 stores of a retail chain were provided with refrigeration equipment. Delivery and installation of **Norpe** refrigeration systems and refrigeration plants produced by **«TEHNOMIR» Ltd.** 



### Floor space 1 500 m<sup>2</sup>

Complex equipping of more than 20 stores with Norpe, Storebest, AHT, Polair technological solutions. Refrigeration system is provided by **«TEHNOMIR» Ltd.** production based on semi-hermetic compressors.





















## Certificates









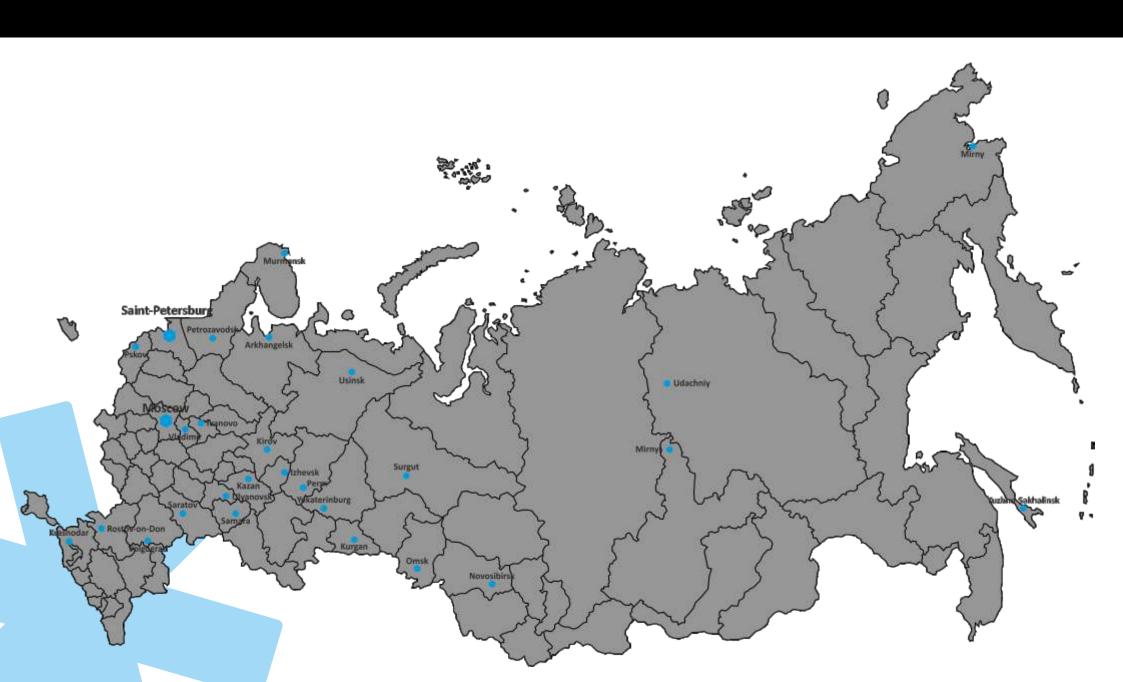






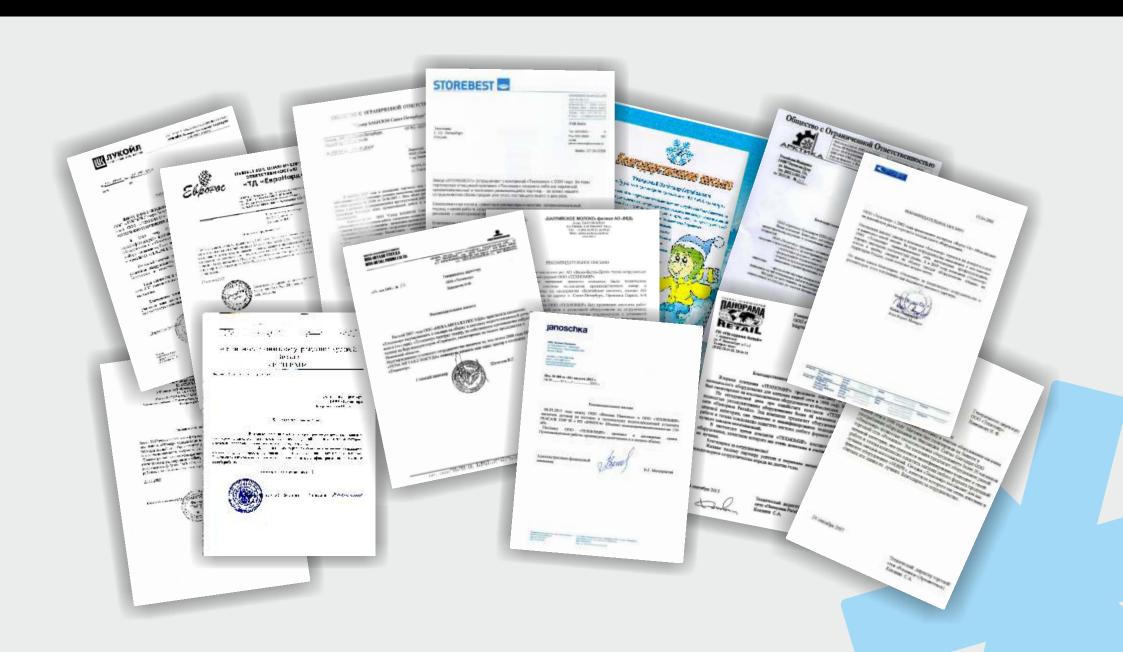
# Projects geography





## Feedback











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