

mechanicz

Thermal covers for foodstuff transportation



ABOUT US

Mechanicz company is one of the largest developers and manufacturers of soft isothermical packing as well as thermal covers. This direction has already been developing for more than 7 years.

Manufacturing opportunities are constantly growing, and at the moment the company is working over more than 300 thousand square meters of textiles into the ready sewn products per month.

Our engineering and designing staff will provide with the decision of any task requested.

ABOUT THE PRODUCT

Guarantee period is 12 months

Service life is 5 years

Thermal cover is a soft isothermical packing, and is represented as an article of industrial-use, manufactured by piercing technique of several layers of material.

Thermal cover is designed for providing packed foodstuff with necessary temperature conditions, which allows to protect the cargo from damage and losses caused by environmental effect. By means of opportunity to keep a fixed temperature within itself during the set time, thermal cover can be used both for simultaneous transportation of food products with different temperature requirements, and for transportations either in a vehicle with a refrigerator or without it. Moreover, it will keep the products preserved from the temperature vibrations when the truck is repeatedly been closed and opened. It allows to reduce the expenses for transportation and to increase the quality of the transported goods reservation.

ENVIRONMENTAL SAFETY AND COMPLIANCE

Goods and materials used in production are not dangerous for life/health of people and environment both during the operation and after finishing it. Waste utilization is organized according to the Sanitary Rules and Regulations **SanPiN 2.1.7.1322-03.** During production no waste dangerous for people or environment appears.

CONSTRUCTION CHARACTERISTICS OF THERMAL COVER SUPPOSE:



A comfortable "pocket" for documents divided into two segments allows to keep all the necessary information about the cargo

Special butt joints provide with minimal heat loses



Adjoining solidity, improved systems of double-joint closing also are responsible for the keeping the cargo temperature



The article opens in the front

A secure mounting of the thermal cover to the rollcontainer provides with the possibility of using the external handles without the package moving what lightens the cargo transportation

Additional gains of the blankets at the spots of ledges, angles and ridges of the product

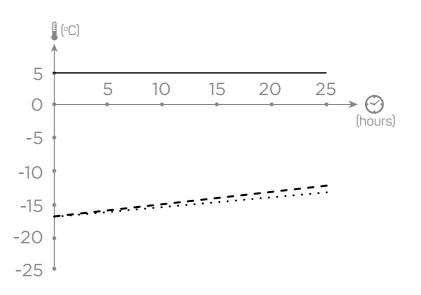
THERMAL COVER (REDUCED-WEIGHT) FOR FOODSTUFF **TRANSPORTATION** (TCL)

1770*800*610

- A three-layered article with outer layer made of the textile based on the extra strong spinning polyester fiber with PVC-coat, and inner layer made of polyethylene foam.
- During the 16,5 hour transportation of the product group «Freezing» in thermal cover with the initial product temperature -18,5°C, with the environmental temperature +2- +6°C, temperature shift within the foodstuff will not exceed 6.5°C
- Working temperature range of thermal cover is from -30°C to +30°C.

Results of the test of the keeping the temperature of the products placed in the thermal cover

- Air temperature in a cell (five degrees above zero)
- - Temperature in the upper compartment of a thermal cover No. 7 (max - 12,4 min
- • • Temperature in the lower compartment of a thermal cover No. 7 (max - 13,6 min





CONSTRUCTION CHARACTERISTICS OF THERMAL COVER SUPPOSE:



A comfortable "pocket" for documents divided into two segments allows to keep all the necessary information about the cargo

Special butt joints provide with minimal heat loses



Adjoining solidity, improved systems of double-joint closing also are responsible for the keeping the cargo temperature





A secure mounting of the thermal cover to the rollcontainer provides with the possibility of using the eternal handles without the package moving what lightens the cargo transportation



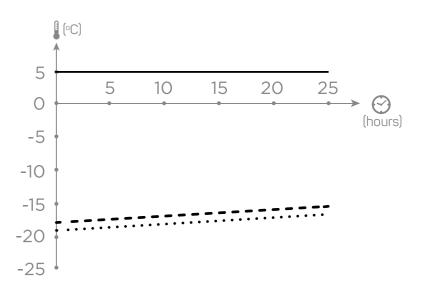
Using of an additional middle tray at the shelf allows to transport the foodstuff with different temperature conditions THERMAL COVER **ENFORCED EXTERNAL,** WITH HINGES, polyester/polyether 400g/m² (TCE)

1770*800*610

- For the articles production the following materials are used: for the outer layer - the heat-resistant textile based on the polyester with the internal one-sided PVC-coat: the inner layer consists of two layers of the heat insulation which provide the permanent temperature inside the article.
- During the 16,5 hour transportation of the product group «Freezing» in thermal cover with the initial product temperature -18,5°C, with the environmental temperature +2- +6°C, temperature shift within the foodstuff will not exceed 4,5°C
- Working temperature range of thermal cover is from -30°C to +30°C.

Results of the test of the keeping the temperature of the products placed in the thermal cover

- Air temperature in a cell (five degrees above zero)
- - Temperature in the upper compartment of a thermal cover No. 1 (max - 14.2 min
- • • Temperature in the lower compartment of a thermal cover No. 1 (max - 15,3 min





A comfortable "pocket" for documents divided into two segments allows to keep all the necessary information about the cargo

Special butt joints provide with minimal heat loses



Adjoining solidity, improved systems of double-joint closing also are responsible for the keeping the cargo temperature

CONSTRUCTION CHARACTERISTICS OF THERMAL COVER SUPPOSE:



The article opens in the front

Using of an
additional middle tray
at the shelf allows to transport
the foodstuff with different
temperature conditions



A secure mounting of the thermal cover to the roll-container provides with the possibility of using the eternal handles without the package moving what lightens the cargo transportation

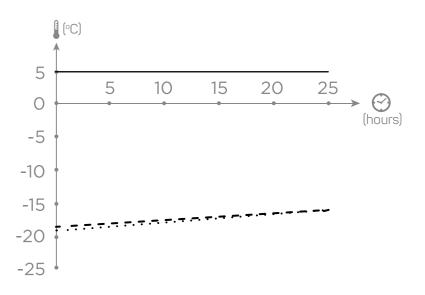
THERMAL COVER (STANDARD) FOR FOOD STAFF TRANSPORTATION (TCS)

1770*800*610

- The article consists of three layers: external ones are made of heatand water-resistant textile; the internal one is one layer of the heat insulation based on the polyether fibres.
- During the 16,5 hour transportation of the product group «Freezing» in thermal cover with the initial product temperature -18,5°C, with the environmental temperature +2- +6°C, temperature shift within the foodstuff will not exceed 5°C.
- Working temperature range of thermal cover is from -30°C to +30°C.

Results of the test of the keeping the temperature of the products placed in the thermal cover

- Air temperature in a cell (five degrees above zero)
- Temperature in the upper compartment of a thermal cover No. 1 (max – 14,9 min 18,7)
- Temperature in the lower compartment of a thermal cover No. 1 (max – 14,9 min 19,1)













ADVANTAGES OF USING OUR THERMAL COVERS IN CARGO LOGISTICS

Thermal covers (TCE) produced by our company allow to withdraw from using the thermoboxes without losing of the operational requirements.

1) The number of package places increases in a vehicle:

| Vehicle | Thermal cover at the container roll (Mechanicz), (pcs.) | Thermobox (pcs.) |
|----------------------|---|------------------|
| Truck (10 tons) | 38 | 18 |
| Road-train (20 tons) | 74 | 36 |
| Truck (20 tons) | 66 | 33 |

- 2) The thermal cover weight together with the container roll is 36 kg (max), thermobox of the similar capacity weighs 130 kg. Using our technology while transporting your cargo you economize with the package weight (one place is up to 94 kg). So within one transportation you can deliver up to 7 tons payload additionally.
- **3)** The cost of one thermal cover usage is much lower than the cost of the thermobox of similar capacity.

QUALITY CONTROL

Quality control of all the products is provided within all the stages of manufacturing, beginning from the documentation and the components from the suppliers to the double quality control of the finished products. Testing of the finished articles takes place in the companies which control the quality of the defense industry products, and in modern scientific laboratories. All the company products are fully-qualified.

SPHERE OF APPLICATION

Our company developments are introduced into the logistic policy of the largest Russian trade networks, are successfully being introduced into the large chemical, petrochemical, energetic and other factories.



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