# INDUSTRIAL TANK INSULATION SOLUTIONS





Firwin Corp is a leading manufacturer of custom insulation products for diesel and gas engines & exhaust systems, and industrial applications.

# INDUSTRIAL TANK INSULATION **SOLUTIONS**

Storage tanks are crucial in a wide range of industries, from mining to oil and gas to food and beverage. Regardless of the contents they hold, these containers often require insulation to keep them within a set temperature range. This ensures the stored substance remains stable and can be processed efficiently. Tank insulation also helps reduce energy consumption and costs.

Firwin is a leading provider of custom insulation solutions for industrial applications, including outdoor and indoor industrial tanks. Discover the benefits and applications of industrial tank insulation and how Firwin's products can help.











## BENEFITS OF INDUSTRIAL TANK INSULATION

Here is an overview of the benefits of using industrial tank insulation.

## Improves Employee Safety

Uninsulated tanks containing hot substances can dissipate excessive heat into the surrounding environment or facility. Proper insulation systems improve worker safety by shielding them from heat stress and lowering the risk of burns.

## Ensures the Stability of the Stored Substance

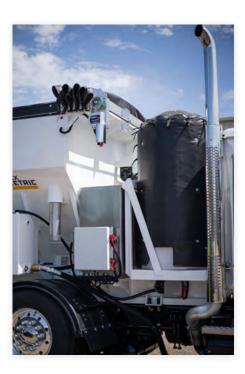
Various applications, including water, chemical, and oil and gas tanks, require substances to remain at stable temperatures to ensure high quality production. A dip or rise outside the acceptable temperature range can greatly affect both upstream and downstream processes. Insulating processing tanks and vessels helps ensure the stability of the tank's contents and supports optimal output and efficiency.

#### Prevents Mold/Mildew Growth

Mold and mildew thrive in warm, wet environments. Proper insulation systems prevent moisture buildup on the surface of industrial tanks, discouraging mold from growing. This helps improve cleanliness on the premises of your facility while extending the life of your tanks.















# BENEFITS OF OUTDOOR INDUSTRIAL TANK **INSULATION**

Industrial tank insulation is especially important for outdoor tanks, which face harsher conditions due to weather exposure. Here are the unique benefits of insulation for outdoor tanks:



**Improved Tank Performance:** Outdoor storage tanks must deal with varying weather conditions that may impact their performance. Uninsulated outdoor tanks would absorb and transfer cold and heat from their environment. Hot weather may lead to overheating of tank contents, while excess cold causes freezing. Insulating the tanks improves their thermal efficiency in all weather conditions.



**Longer Tank Service Life:** The outdoor environment exposes tanks to sun, frost, rain, and snow, which can wear them down faster than indoor tanks. Metal tanks begin to rust after some years, compromising their integrity over time. Outdoor insulation creates a protective barrier that keeps moisture and rain from the surface, preventing corrosion and extending the tank's service life.



**Reduced Energy Consumption:** When a tank cannot maintain an acceptable temperature, it requires the system to consume more energy and time regulating that temperature. However, outdoor tank insulation keeps temperatures stable without consuming excess energy, helping mitigate heat loss to save energy and time.











# TANK INSULATION APPLICATIONS

Firwin offers quality industrial insulation products for a wide range of applications, including:



#### **HVAC**

Firwin supplies tank insulation products that can help maintain proper temperature ranges for HVAC refrigerant tanks. The insulation system helps ensure the safety of the workers, the facility, and the equipment itself.

## Mining

Mining companies need water storage tanks in case a fire breaks out in their facilities. Thermal tank insulation is crucial in these applications to prevent the tank's contents from freezing.





#### Oil & Gas

Liquid storage and return tanks in the oil and gas industries must have efficient temperature control. Firwin provides thermal insulation products that help keep tank contents in safe temperature ranges.

## **Transportation**

Highway vehicles—including trailers, semi-trailers, trucks, concrete mixers, special purpose vehicles, and RVs—require insulation products that can offer robust protection for their operating conditions and temperature requirements. Firwin can recommend and provide the appropriate materials at the right thickness for your transportation vehicles.





## **Agriculture**

Outdoor tanks are crucial in the agriculture industry for storing fertilizer, fuel, and harvested products. Firwin offers tank insulation solutions that help maintain appropriate temperature levels for these items.









# **ALTERNATIVES TO REMOVABLE INSULATION BLANKETS**

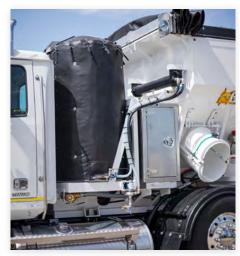
DIY (do-it-yourself) and permanent insulation are alternatives to removable insulation blankets. However, they fall short in a number of areas.

#### **DIY Insulation**

Removable designed blankets are superior to DIY insulation solutions, especially for industrial applications. Here are a few reasons why you should choose removable, professionally-made insulation blankets:

- **Convenient installation and removal**: Removable designed blankets are easy to assemble and disassemble in case maintenance is required. If your tank or components are difficult to access, easy removability of insulation will be more convenient for your needs.
- **Custom cut-outs, sizes, and configurations**: Our tank insulation blankets come with custom cutouts for easy access to valves or other controls. Firwin can also customize blankets for equipment of varying shapes and non-standard sizes. We offer various fasteners to create a tight fit around pipes, generators, and other components. This close fit allows the insulation to retain heat, dampen noise and vibration, and prevent condensation.
- **3-Layer Construction**: Firwin removable insulation blankets consist of an outer protective cover, the insulation media, and the inner liner. The outer protective cover protects the blanket from harsh outdoor environments. The insulation mat contains the heat containment material and usually ranges from 0.5" to 4" in thickness. The inner liner keeps the insulation mat in position and protects it from fluid seepage. These three components work together to give the blankets robust insulation properties.















DIY insulation is not professionally installed or custom designed for your tanks' unique dimensions. Consequences of choosing a DIY option include heat loss due to inadequate coverage, safety issues for employees, and improper fit.

Insulation blankets should snugly fit the part being covered and take into account all the screws, brackets, and other protrusions that could be present. Firwin takes pride in providing high-quality removable insulation blankets in an extensive range of designs and materials. We recognize the different needs of each application and consider all variables to ensure that customers get the perfect insulation that meets their needs.

#### Permanent Insulation

Permanent insulation, such as spray foam insulation, is applied directly to the tank or component and cannot be removed. It requires frequent maintenance to verify it is still intact, as any deterioration can compromise the insulation's effectiveness. On the other hand, removable insulation blankets have high versatility and are customizable to fit a wide range of industrial tanks and other components. They are a reliable, adaptable option to manage heat in various industries, including transportation, mining, marine, and power generation.

Removable insulation blankets provide excellent thermal retention and long-term performance while being manufactured in a way that allows them to be removed if desired. Firwin provides a complete array of customization options from specialty materials to custom cut-outs, ensuring each blanket performs well in its intended environment. Our experts can guide you in choosing the perfect insulation solution for your industrial tanks.



# **QUALITY INDUSTRIAL TANK INSULATION FROM FIRWIN**

Proper insulation helps mitigate common problems in industrial facilities, including poor performance, excessive energy use, and shortened service life. Firwin Corporation recognizes that each industrial tank has unique needs, so we offer various tank insulation products that can be customized to fit your particular specifications. Contact us today or request a quote for a quality industrial insulation solution from Firwin.









# **About Us**

Firwin Corporation is a leading manufacturer of custom insulation products for diesel and gas engines & exhaust systems, and industrial applications. Our 2 main product lines are removable and reusable insulation blankets (also known as removable insulation covers and removable insulation jackets) and permanent Hard Coat™ composite insulation. We also stock a wide range of off-the-shelf high temperature tapes and sleeves.

We service a diverse range of industries, providing insulation solutions for applications such as diesel and gas powered generating stations, gensets, on-road and off-road vehicles, as well as industrial applications such as process and steam line valves, flanges, and piping.

Firwin Corp is committed to excellence in customer service. We strive to respond to all inquiries within 24 hours. Have a rush order? We will do our best to accommodate you. Our in-house design team is ready to help you determine what insulation solution is right for you. If there is ever a problem with one of our insulation products, we will do whatever is necessary to make it right. Just ask our customers – most of our business comes from their referrals.





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