

# Catalysts and SCRs



## Removable Insulation Blankets Catalysts and SCRs



# SCR's and Catalysts

## Helping Meet Emissions Control Requirements

Mandated emissions targets are becoming increasingly stringent, and proper insulation is an important aspect of ensuring that emission reduction targets are achieved. Many of the technologies in use require a high exhaust heat, in some cases in excess of 800°F (425°C), in order to function properly.

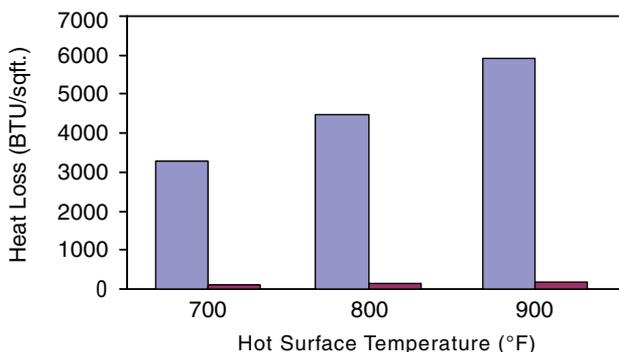
Without proper insulation, exhaust gases lose heat as they travel along the various pipes and components of the engine and exhaust system. Indeed, major engine users, as well as major catalyst manufacturers recommend removable insulation blankets as an important component of their emissions reduction strategy.

### **Insulation blankets on Purifiers and Catalytic Converters contain heat flow from the housing which:**

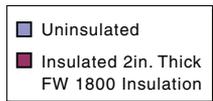
- Brings the catalyst up to its effective operating temperature much faster.
- Ensures that the catalyst is kept at the highest operating temperature possible given the exhaust flow temperatures of the exhaust system.
- Gives personnel protection against burns for technicians working on an operating piece of equipment.



### SCR HEAT LOSS WITH AND WITHOUT FIRWIN INSULATION BLANKET



Values based on 80° F ambient temperature and no airflow.



## Technical Specifications:

Layers	Material	Temperature Limit	Function
Outer	Silicone Impregnated Fiberglass	Grey: 500° F (260° C) Red: 600° F (316° C)	Protective Cover
	Heavy Silicone Impregnated Fiberglass <sup>1</sup>	Grey: 500° F (260° C) Red: 600° F (316° C)	
Middle	Fiberglass	Firwin 1200: 1200° F (649° C)	Insulation Media <sup>2</sup>
	CMS Wool	Firwin 1800: 1800° F (982° C)	
Inner	Stainless Steel Mesh	Firwin 304SS: 1200° F (649° C) Firwin 309SS: 1800° F (982° C)	Contains Insulation Media

<sup>1</sup> For outdoor or larger indoor applications

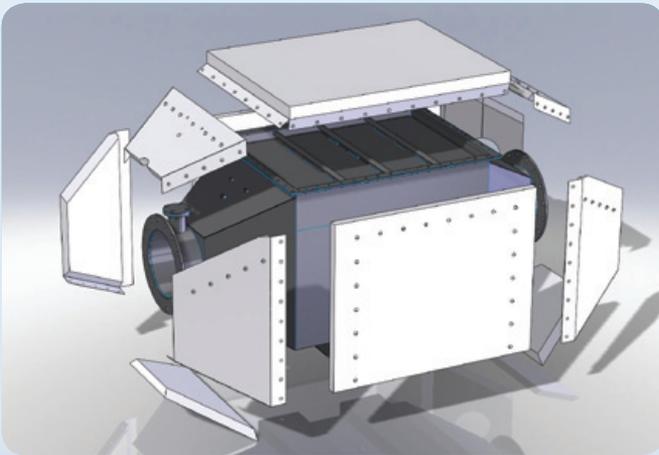
<sup>2</sup> 2 inch insulation recommended for SCRs and larger catalysts; 1 inch insulation suffices for smaller catalysts

## Benefits of Firwin Removable Insulation Blankets:

- Modular design for easier installation and removal.
- Installation does not require skilled labor.
- Custom-fit designs for maximum insulating performance.
- Blanket assembly instructions are in easy to-follow 3-dimensional renderings.



Firwin Corp's removable insulation blankets can be installed on indoor and outdoor SCR systems. The standard outer layer used in removable insulation blankets, silicone impregnated fiberglass, can withstand temperatures as low as  $-67^{\circ}\text{F}$  before cracking, and has a UV resistant coating. For demanding outdoor applications, Firwin's design team can also incorporate design modifications into the blankets, such as extra flaps, to provide an extra measure of protection from the elements.



*“ We send hand written drawings with engine information and we get a detailed quote with confirmed professional drawings with measurements soon after. Firwin Corp. has been very easy to do business with. ”*

- Paul Millson, Sales & Marketing,  
Gencare Services Limited.

# Why Firwin?

## Over 25 years of experience

Firwin has been in the insulation blanket business since 1982.

## Blankets are custom designed to fit your precise needs

Different applications call for different insulation solutions. The type of insulation material, blanket thickness, outer cover, and other factors can vary from one customer to the next.

At Firwin, we work with you to arrive at the best insulation solution for your application.

## Commitment to excellence in customer service

We strive to respond to all inquiries within 24 hours. Our design team is ready to help you determine what insulation is right for you. If there ever is a problem with one of our blankets, we will do whatever is necessary to make it right. Just ask our customers – most of our business comes from their referrals.



Firwin insulation blankets are typically fastened using stainless steel lacing wire. While this method is the most versatile, alternative fastening systems are available. Our staff will work with you to decide which system is right for you.

*“Dealing with Firwin is always professional and very easy. The staff is well-versed in insulation technologies, and are prompt with a reply to my various technical inquiries. Firwin has consistently produced custom fabricated insulation blanket orders for me with an attention to detail and level of customer service unsurpassed in the industry.”*

- Ted Karas, Sales Engineer,  
Boulden Energy Systems

## Noise Barrier and Absorption Composite

Firwin supplies acoustical attenuation configurations where noise is a concern in addition to heat loss. We also stock off-the-shelf fiberglass tapes and sleeves.



**Firwin Corp provides removable insulation solutions to a number of industries:**

- Mining
- Power Generation and Genset
- Off Highway Vehicles
- On Highway Vehicles
- Military
- Marine
- Locomotive
- Industrial Process Industries

**Our blankets are designed to fit:**

- Engine Manifolds
- Elbows
- Flex Connectors
- Turbo Chargers
- Pipes
- Silencers
- Purifiers and SCRs.



**firwin**

*We've Got You Covered*

**Contact Firwin**