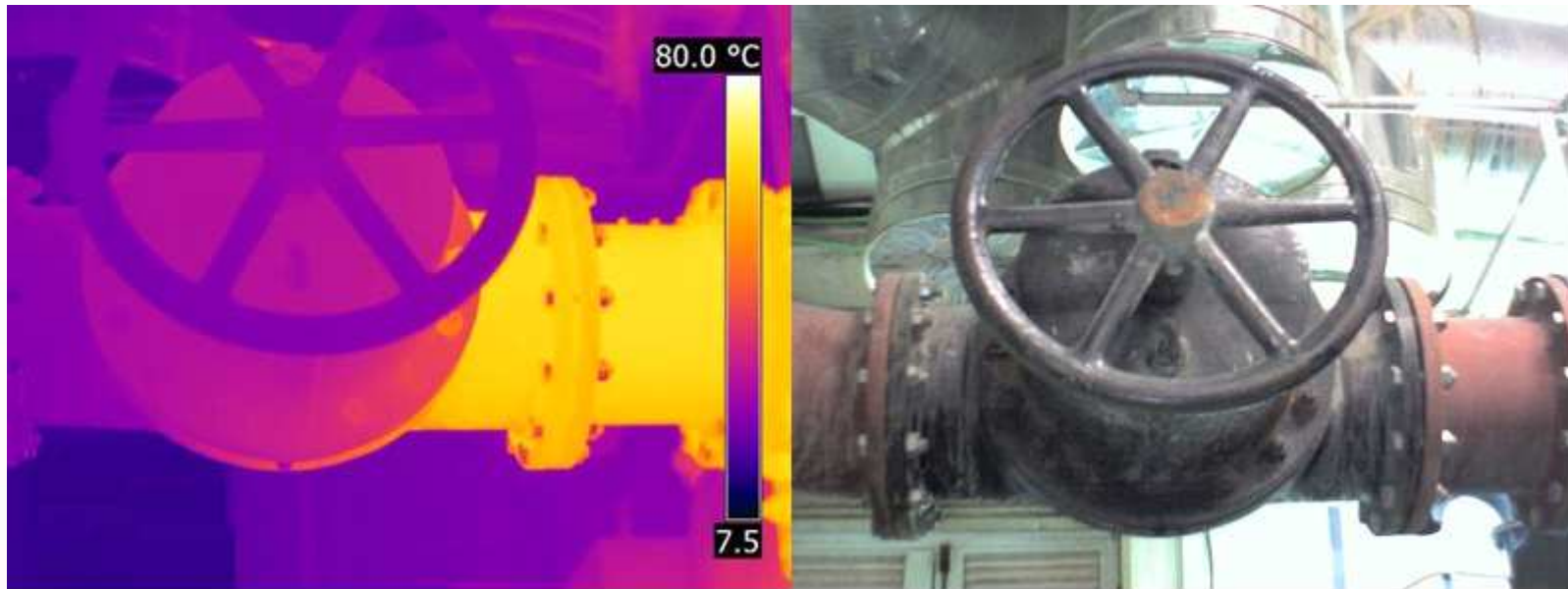




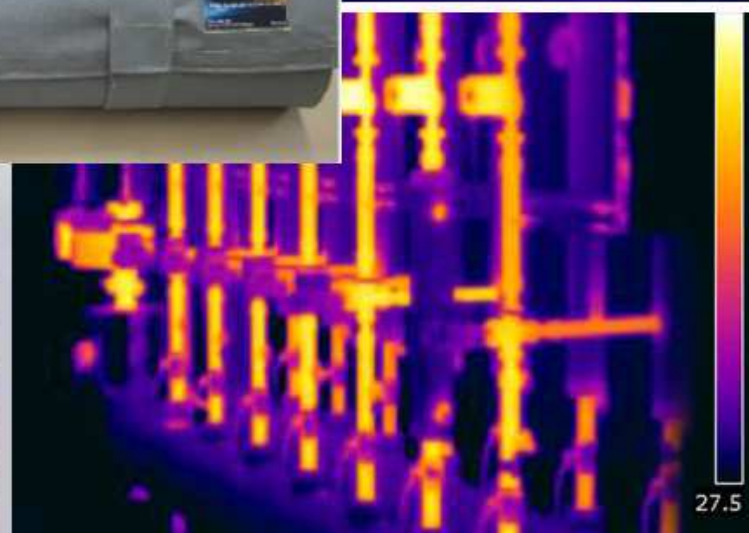
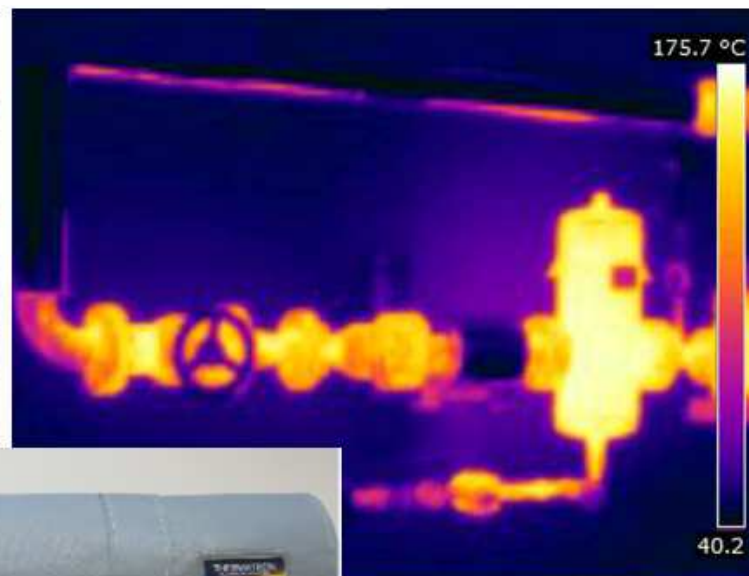
## Thermatron Insulating System

Fiber Glass Fabric With Polymer Release Coating





## THERMATRON FRC Fiber Glass Fabric With Polymer Release Coating.





# What are the benefits of our system?

- Energy control.
- Cost Efficiency.
- Prevents injuries to employees.



# Why integrate our system?

- This system it had been engineered for the reduction of heat/energy loss.
- Pre-designed covers for all pipes and valves.
- System covers piping packages quickly and can be re-installed.



**Thermatron** offers several standard designs used to cover pipes that are part of an insulation system that include: straight pipes, 90° elbows, T's, valves, and flanges. These covers can be used with temperatures up to 300°C.

## • 90° Elbows Pipe.







**Thermatron** offers several standard designs used to cover pipes that are part of an insulation system that include: straight pipes, 90° elbows, T's, valves, and flanges. These covers can be used with temperatures up to 300°C.

## • Tee





**Thermatron** offers several standard designs used to cover pipes that are part of an insulation system that include: straight pipes, 90° elbows, T's, valves, and flanges. These covers can be used with temperatures up to 300°C.

- **Fitted valve 2/2.**





**Thermatron** offers several standard designs used to cover pipes that are part of an insulation system that include: straight pipes, 90° elbows, T's, valves, and flanges. These covers can be used with temperatures up to 300°C.

- **Fitted valve 3/2.**







**Thermatron** offers several standard designs used to cover pipes that are part of an insulation system that include: straight pipes, 90° elbows, T's, valves, and flanges. These covers can be used with temperatures up to 300°C.

- **Straight Flex Pipe.**

50 + 25 + 50 +25 + 50 +25 cm





**Thermatron** offers several standard designs used to cover pipes that are part of an insulation system that include: straight pipes, 90° elbows, T's, valves, and flanges. These covers can be used with temperatures up to 300°C.

## • Tube Pipe.

0,1 - 0,2 - 0,3 - 0,4 - 0,5 - 1 Mt.



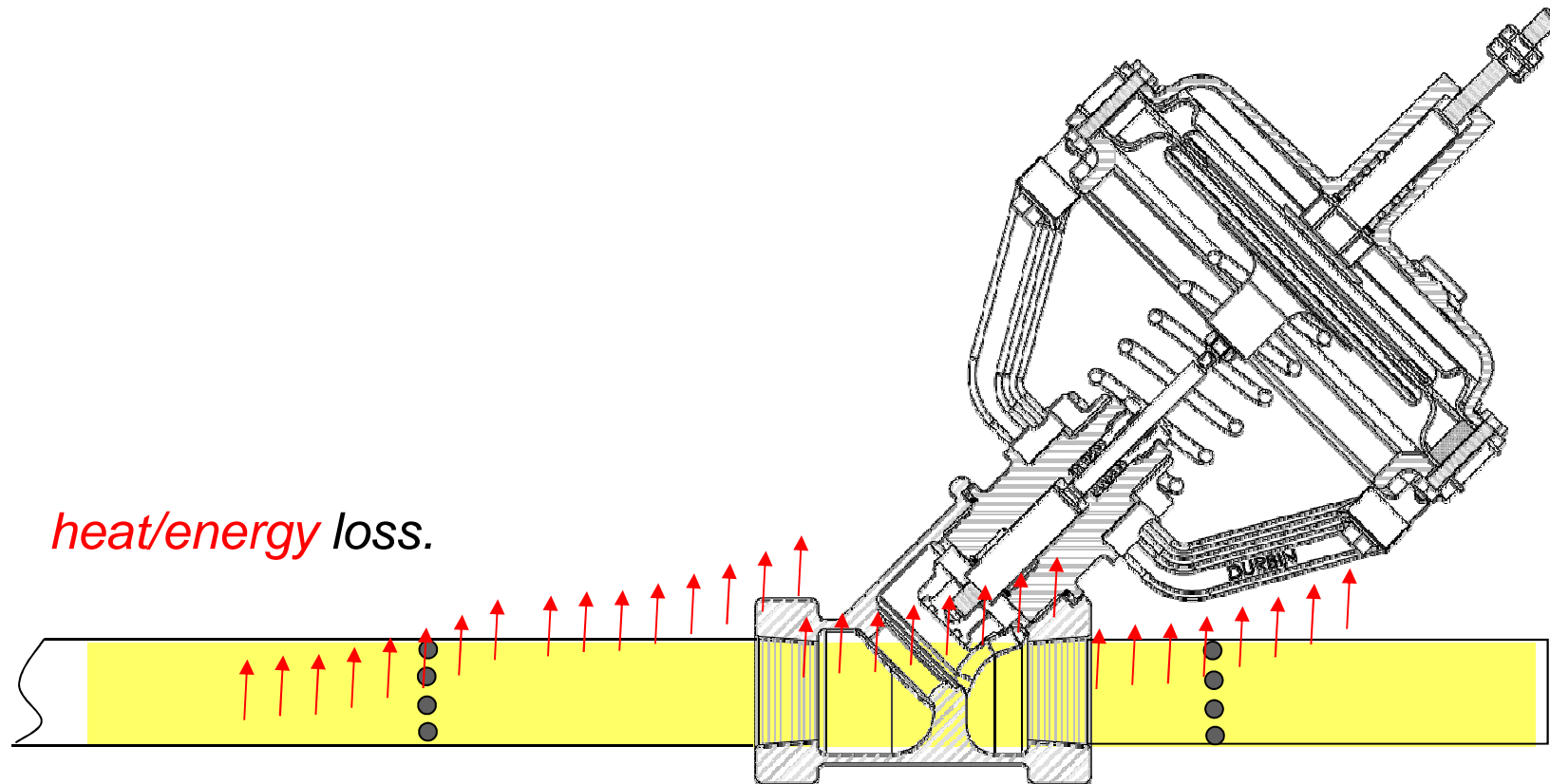


**Thermatron** offers several standard designs used to cover pipes that are part of an insulation system that include: straight pipes, 90° elbows, T's, valves, and flanges. These covers can be used with temperatures up to 300°C.

# • Expansion Joints

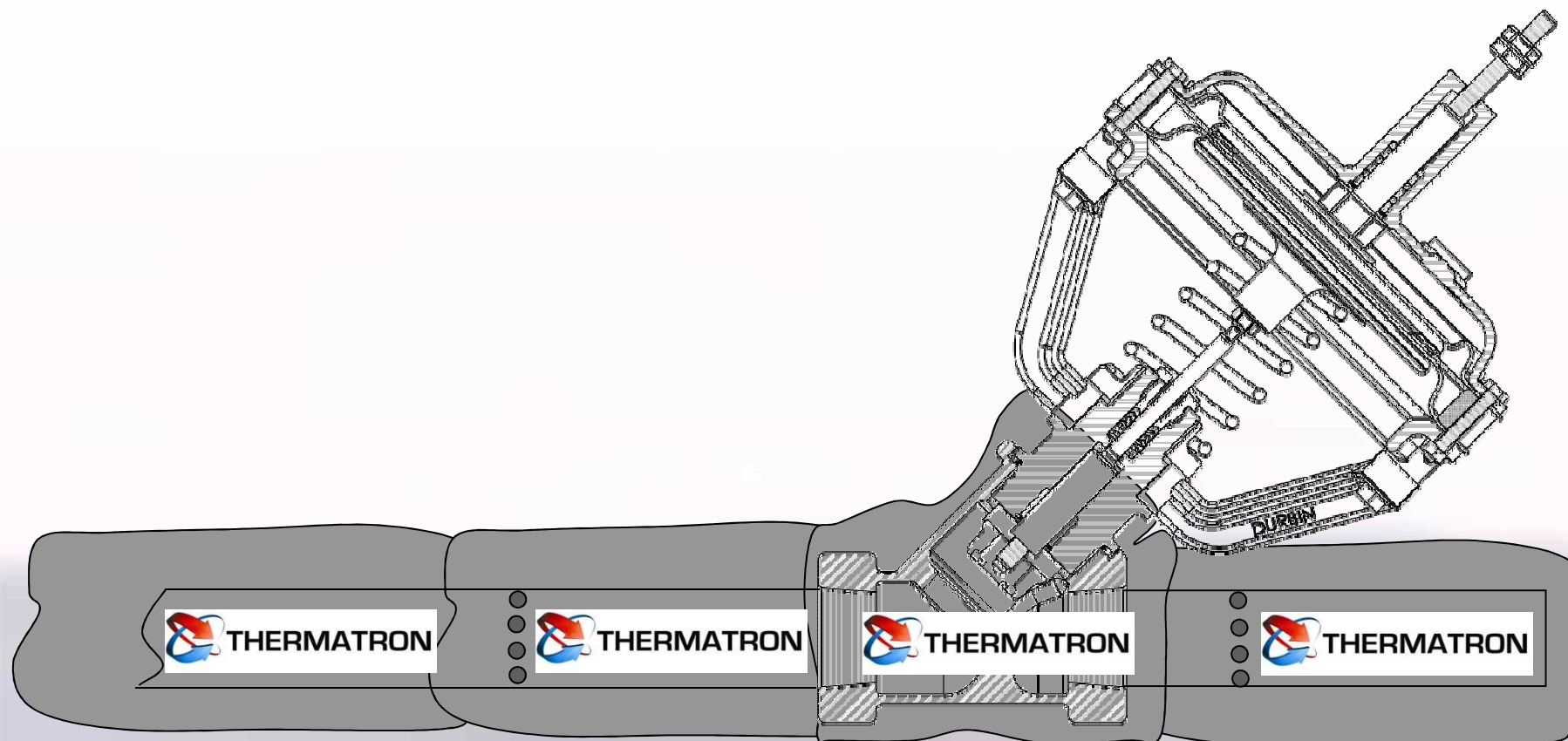


Thermatron *Valve Insulation System* was engineered for the reduction of heat/energy loss.



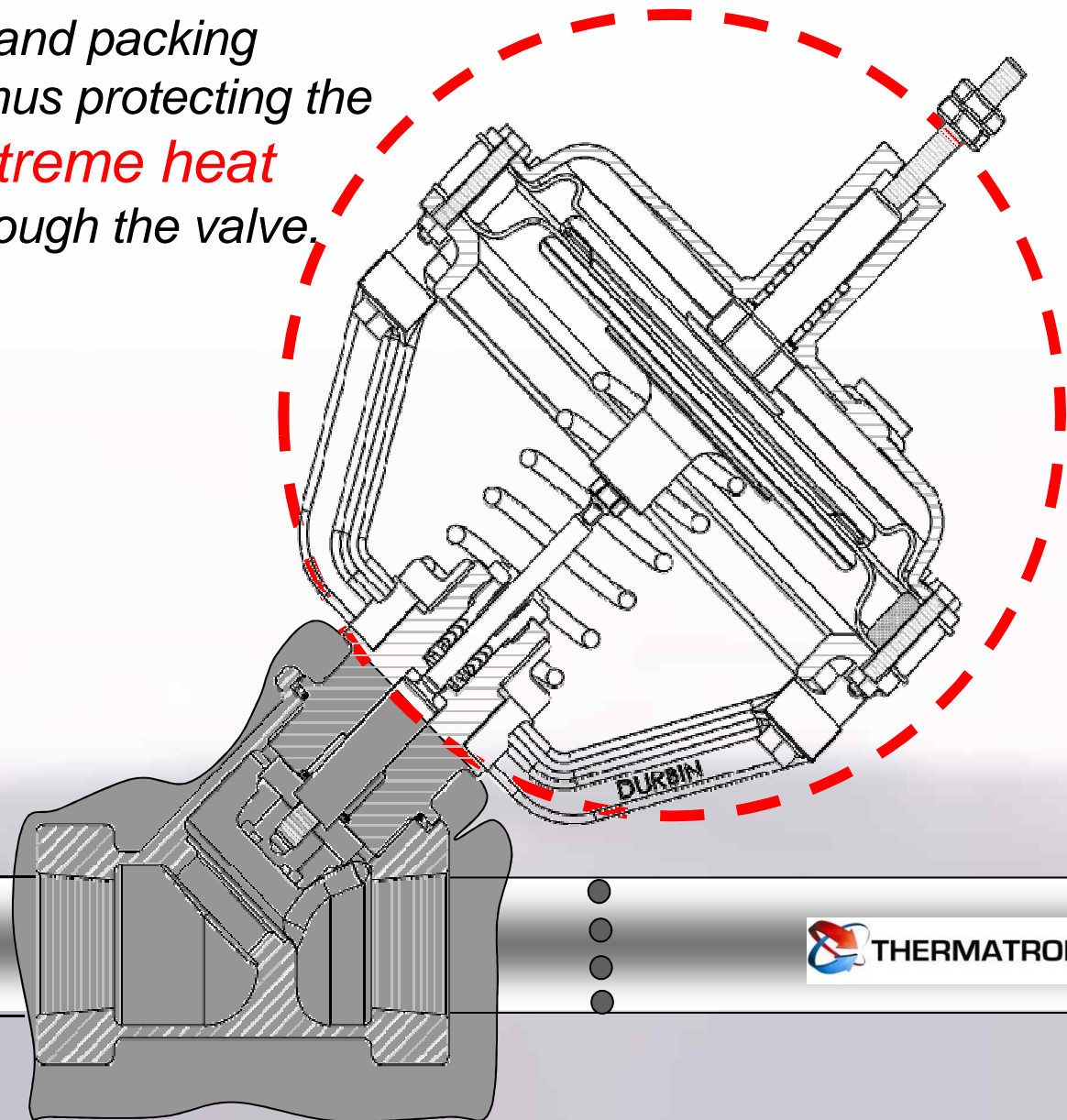


Thermatron Valve Insulation System covers not only the piping on the line but also all of the valves. Each valve will have an Independent Insulation Cover.



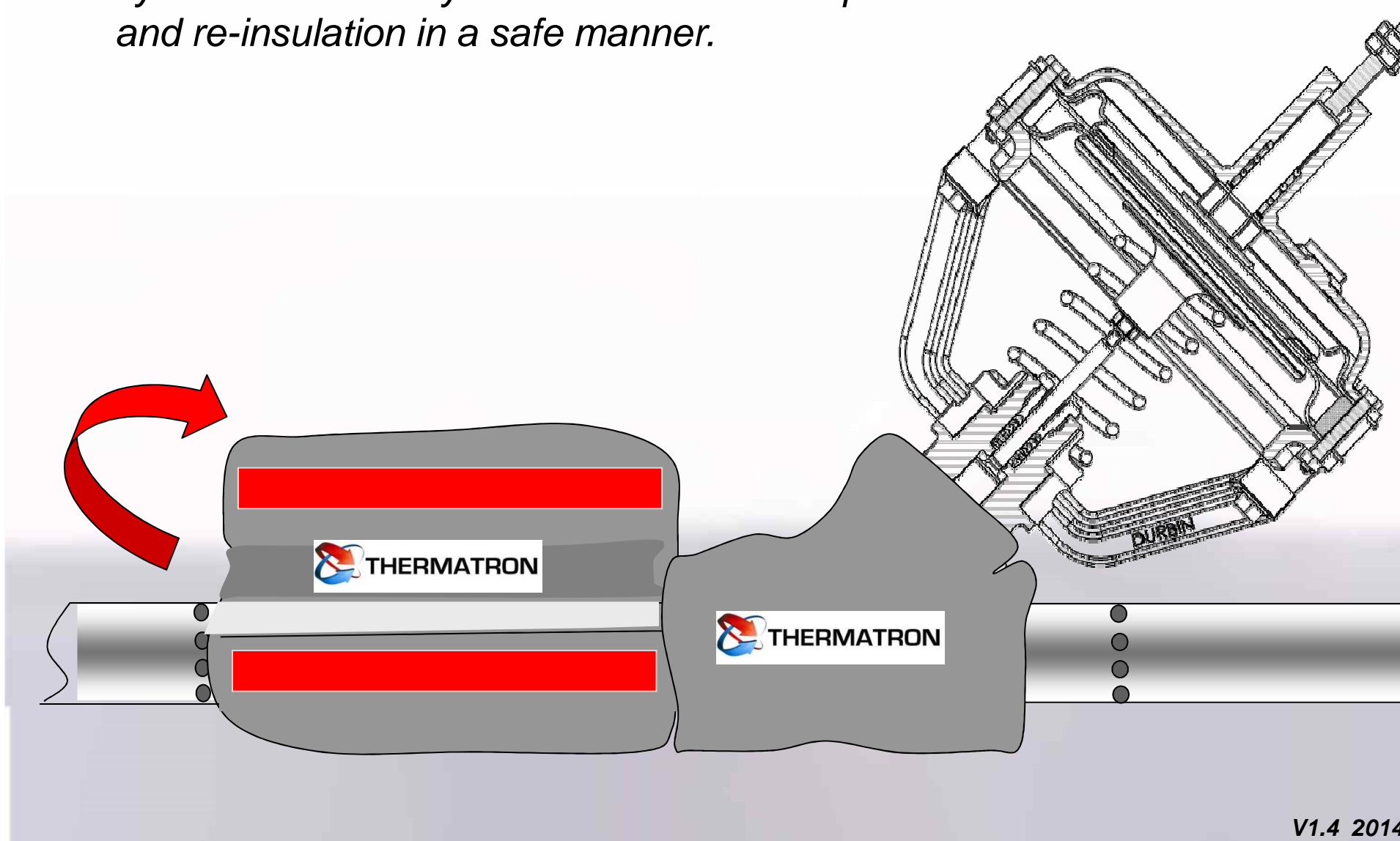


*Only the valve body and packing areas are covered, thus protecting the actuator from the **extreme heat** being transferred through the valve.*



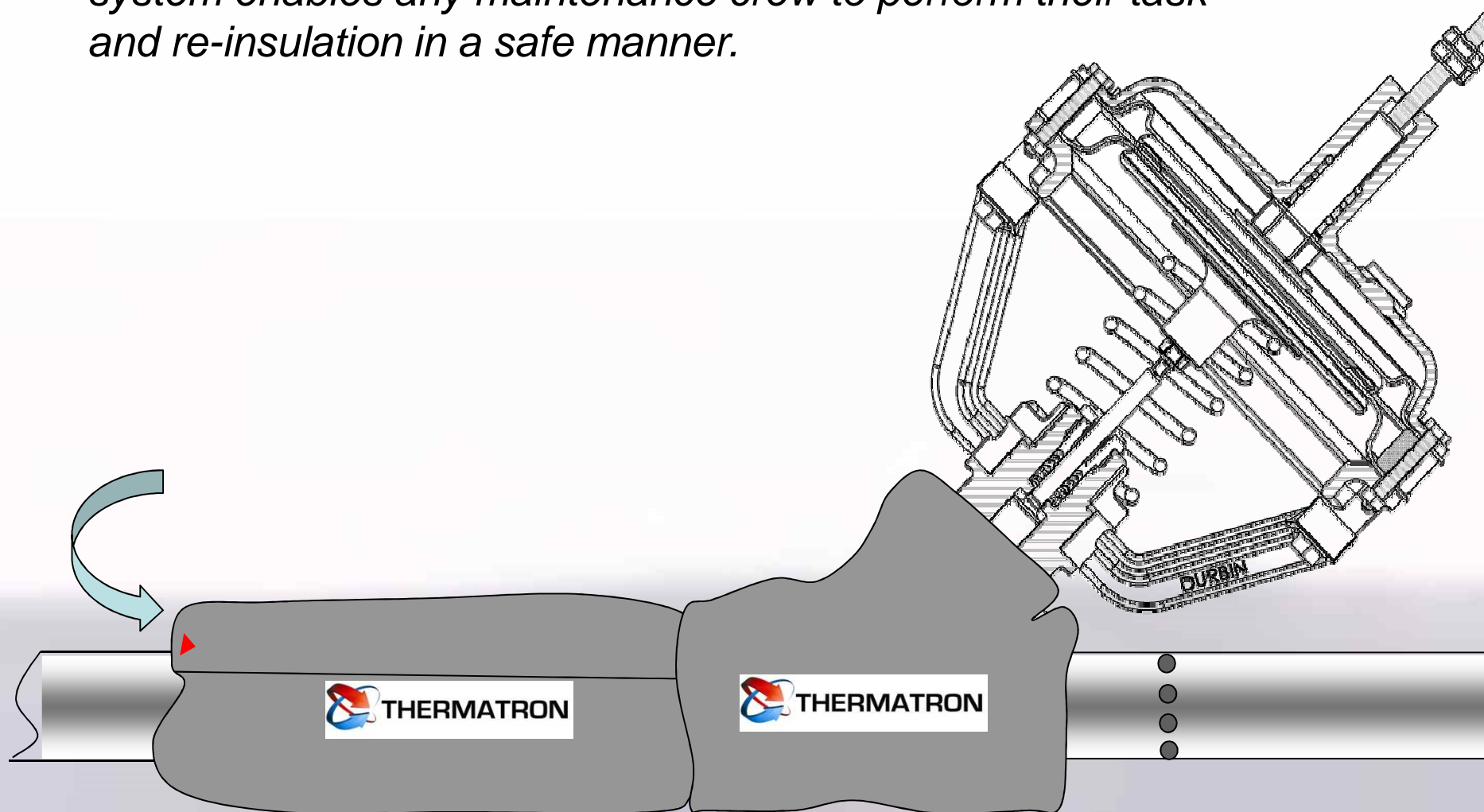


*The easy to remove and re-install hook & loop (Velcro) system enables any maintenance crew to perform their task and re-insulation in a safe manner.*





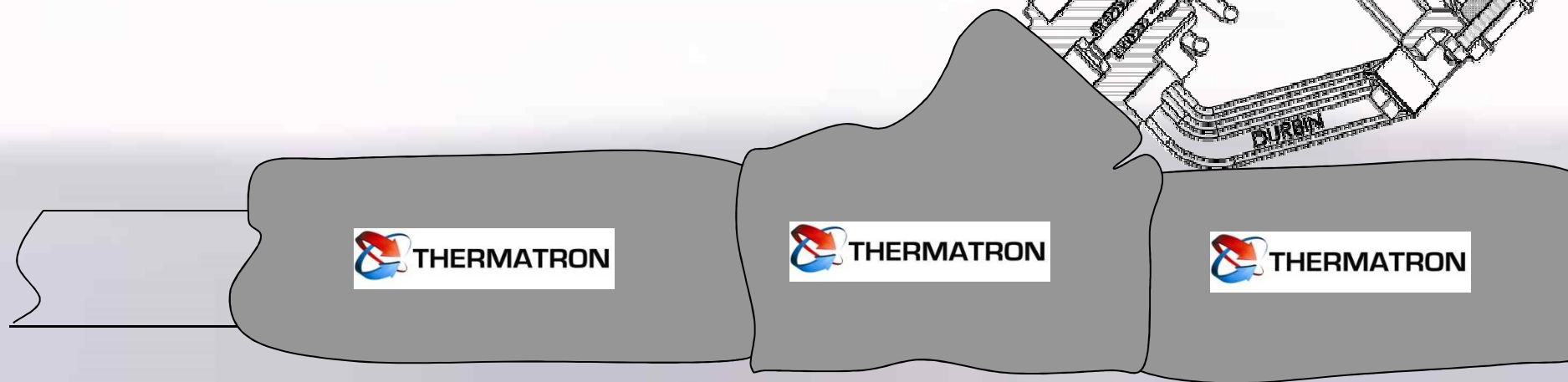
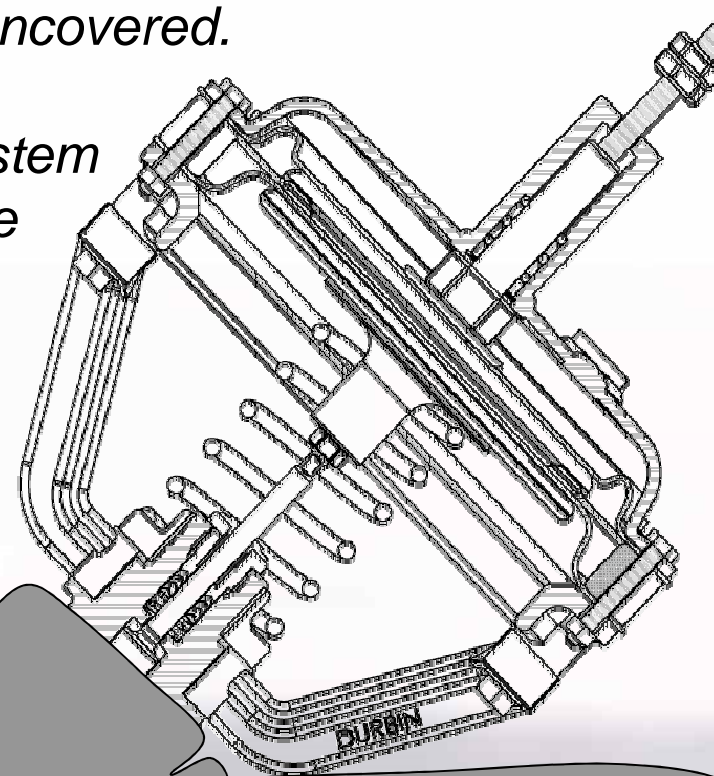
*The easy to remove and re-install hook & loop (Velcro) system enables any maintenance crew to perform their task and re-insulation in a safe manner.*





*This also saves heat/energy loss because only the valve being replaced or worked on is uncovered.*

*All of the other valves and piping in the system remain covered, allowing them to retain the heat/energy.*

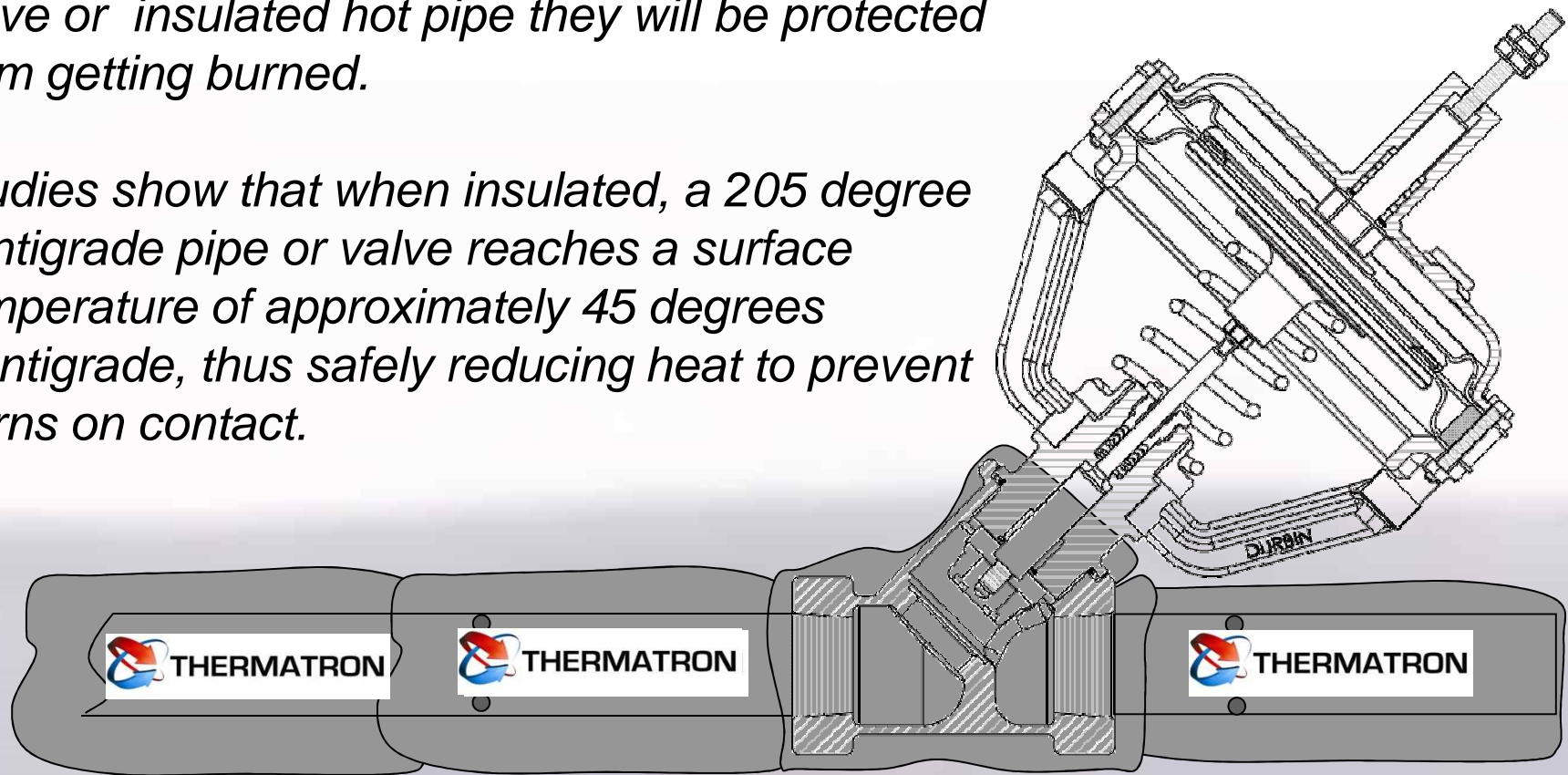




*When it is time to replace a valve only **that valve cover needs** to be removed.*

*If a maintenance person touches another covered valve or insulated hot pipe they will be protected from getting burned.*

*Studies show that when insulated, a 205 degree centigrade pipe or valve reaches a surface temperature of approximately 45 degrees Centigrade, thus safely reducing heat to prevent burns on contact.*







## Conventional pipe insulation.



**New**



**Used**



## **Thermatron Flexible and Reusable Insulation.**



## **McNeil Style Curing Press Piping Fully Insulated.**



## Thermatron Flexible and Reusable Insulation.

### Tyre Curing Press





## **Thermatron Completely Insulation System.**

- Quality - standards for material longevity.
- Low Cost - below competitor's prices.
- Easy Installation - pre-finished designs with hook and loop fasteners.
- Employee Safety - coating over fiberglass; insulates.
- Energy Efficiency - controls heating and cooling temperatures.





## Thermatron Complete Insulation System.

- Environmentally Safe - no harmful chemicals used.
- Cleanable - easily cleaned with degreaser.
- Reusable System - for different pipes or valves.
- Resists Chemicals - special FRC coating.
- Provides Thermal Control pre-molded to equipment.
- Freeze Protection - provides a barrier to inside and outside temperature
- Fire Protection - provides a barrier to outside heat.



*DIRTY VALVE COVER*



*CLEANED VALVE COVER*








## ROI - Thermatron Insulation Calculator:

- Energy Savings MWh.
- Energy Savings €.
- Savings CO2 Emissions.
- ROI Period.


### Steam lines insulation calculator












Line to insulate	Energy source	Savings
Length (m) <input style="width: 80px;" type="text" value="12"/>	Combustible <input style="width: 40px;" type="text" value="Gas"/>	Energy (MWh) <input style="width: 80px;" type="text" value="65"/>
Diameter (inches) <input style="width: 80px;" type="text" value="1 1/2"/>	Efficiency (%) <input style="width: 80px;" type="text" value="90,0 %"/>	Money (€) <input style="width: 80px;" type="text" value="2.600 €"/>
Temperature (°C) <input style="width: 80px;" type="text" value="200"/>	Energy cost (€ per MWh) <input style="width: 80px;" type="text" value="40,00 €"/>	CO2 (tons) <input style="width: 80px;" type="text" value="14"/>
Number of valves <input style="width: 80px;" type="text" value="4"/>		

#### Usage cycle

Hours per day <input style="width: 80px;" type="text" value="24"/>
Days per week <input style="width: 80px;" type="text" value="7"/>
Weeks per year <input style="width: 80px;" type="text" value="52"/>


**THERMATRON**  
 INSULATION DIVISION

This calculation is based on data made publicly available by the United States Department of Energy and is provided for informational purposes only. The efficiency of a particular installation of insulation material will vary depending of various operational parameters. The insulation material manufacturer, its retailers and their agents or representatives don't endorse any liability regarding the figures provided by this calculation tool.

[View DOE data](#)



# PRODUCT IDENTIFICATION.

<b>Product Name:</b>	FRC Fiber Glass Fabric With Polymer Release Coating.
<b>Chemical Family:</b>	Treated Textile Fabric.
<b>CAS Number of Product:</b>	None assigned.
<b>NFPA Rating (Scale 0-4 ):</b>	Health = 0 Fire = 0 Reactivity = 0



# HARDOUZ INGREDIENTS.

Ingredient Name	CAS Number	% Wt.	TLV	STEL
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No Known Hazardous Ingredients.



# PHYSICAL DATA:

**Pure Material or Mixture:**

Mixture.

**Appearance / Physical Form:**

Various patterns fabric with mild odor.

**Odor:**

Characteristic.

**Melting Point:**

>450 F.

**Boiling Point:**

Not determined.

**Specific Gravity:**

>1.2.

**Solubility in Water:**

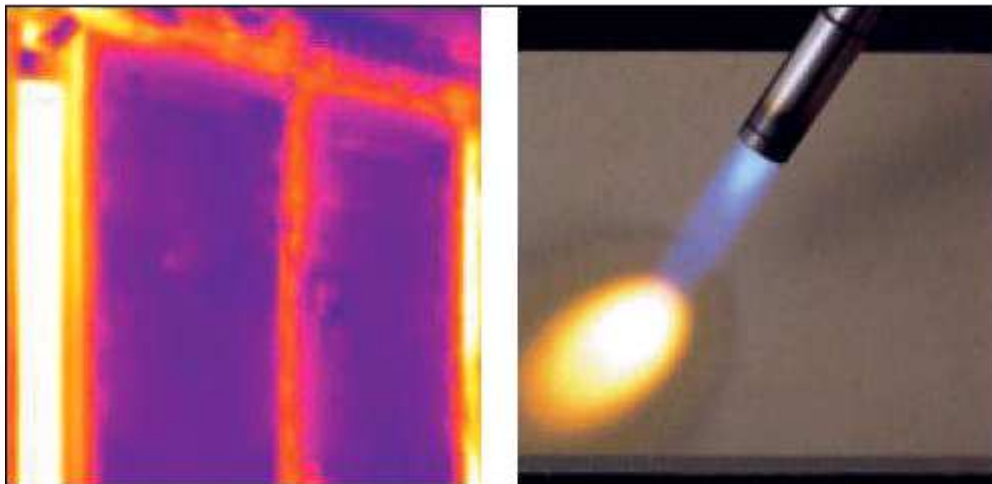
Insoluble.



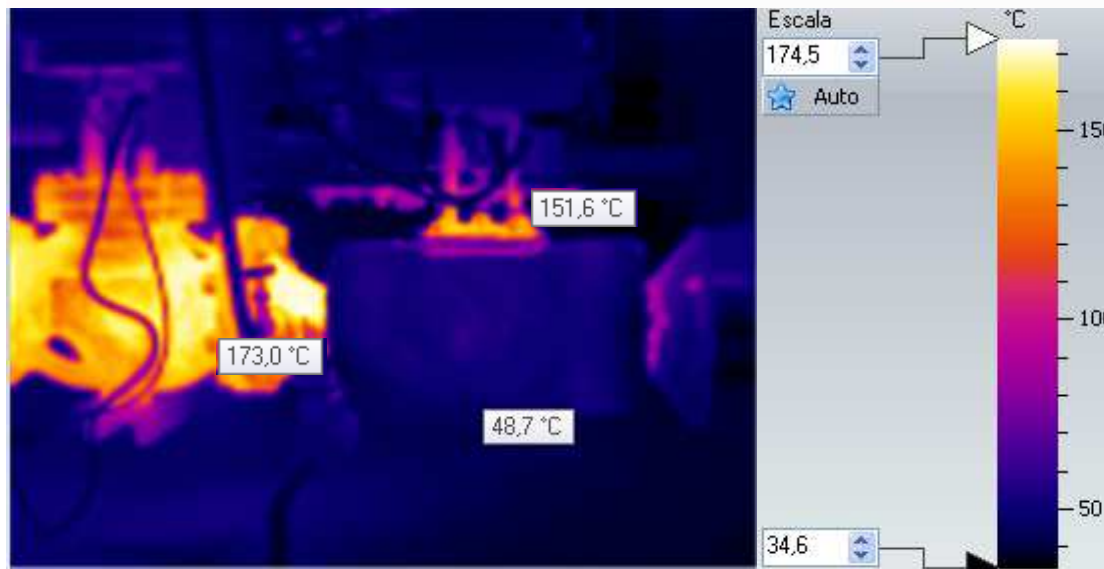
# FIRE AND EXPLOSIVE DATA:

<b>Fire and Explosion Hazard:</b>	None known.
<b>Flash Point:</b>	N/A.
<b>Extinguishing Media:</b>	Carbon dioxide, foam, dry chemical, water spray.
<b>Firefighting Procedures: Clothing</b>	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.





## Thermatron Insulation



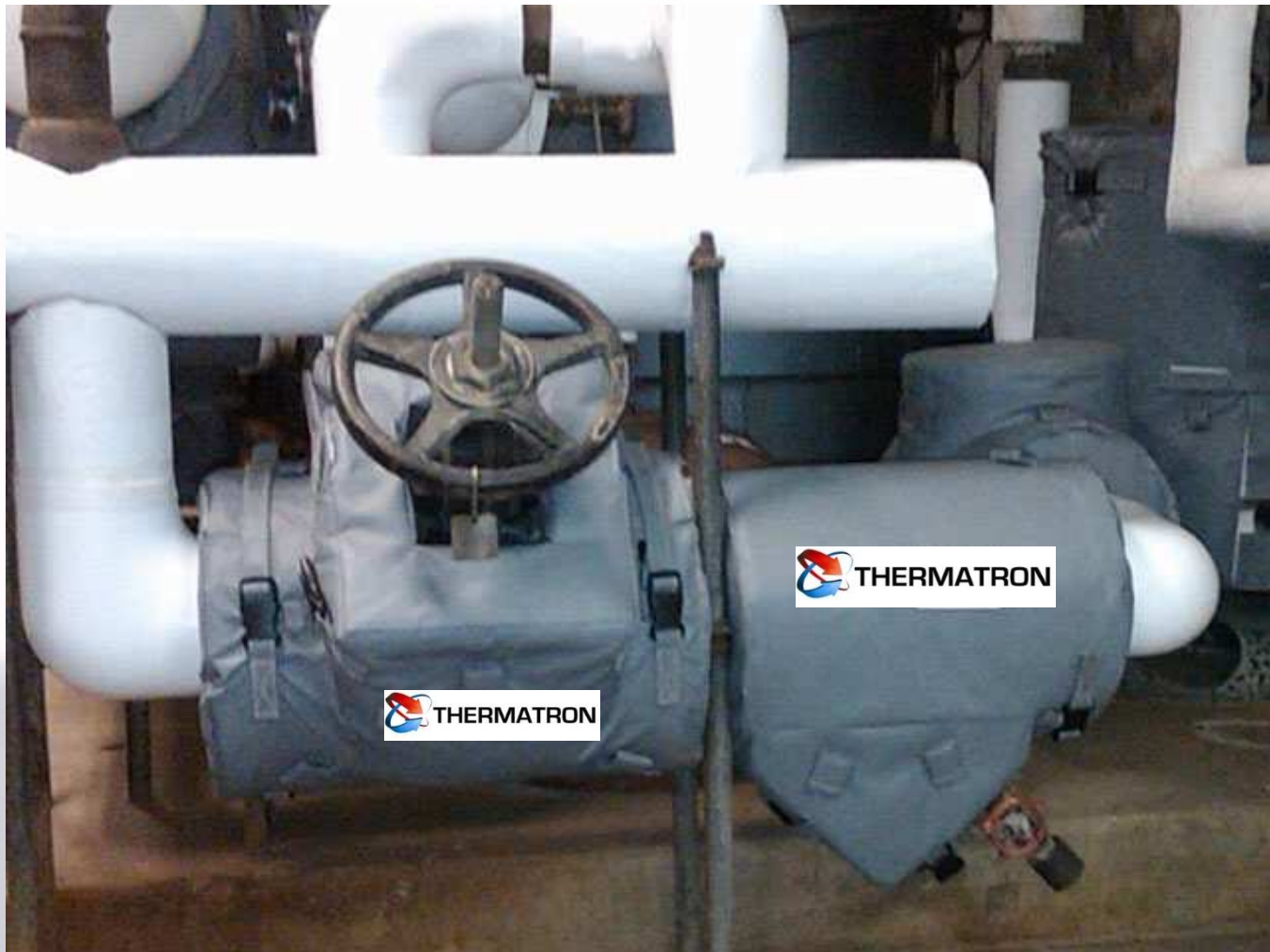


## Completely System Insulation Covers





## Completely System Insulation Covers







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## Completely Range Reusable Insulation Covers

