

## Valve and Steam Trap Jackets





Don't you wish your valve and steam traps

## **TO GENERATE MONEY**

#### for you from your installations?



#### If your answer is "yes" Please, allow us to introduce you our superior products.





# We can count Ye two different ways ∠ of earning more

st

#### Raising the sales

We regret, not being able to help on this.

st

Reducing the costs

That is something we could provide you unique solutions.

## By using valve and steam trap jackets that save on the energy

and administration costs, you can earn too...





## Why Should I Use a Jacket?

If, armatures like valves and steam jackets are not insulated, THEY CAUSE HUGE ENERGY LOSES!

Minimising the energy loses through proper insulation **REDUCES THE ENERGY COST OF YOUR BUSINESS!** 

Easily removable and re-attachable valve and steam trap jackets **PROVIDE EASY MAINTENANCE!** 



## What mark would you rate your business in terms of energy efficiency? Whatever your answer is, you can still level up your business by using Ayvaz's valve and steam trap jackets. As the competition is getting harder, the importance of "energy save" is increasing every passing day. Don't you wish to maintain a constant saving and make profit with a smart investment that pays for itself shortly?

By the way, if you mark your business with **A**, we can increase it up to **A+** :)

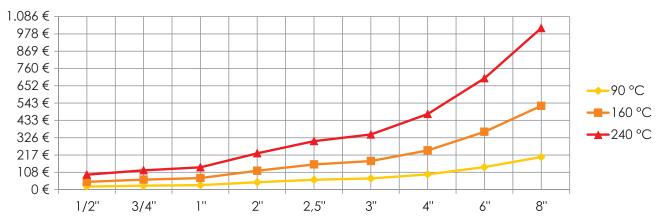


## What is the cost of each un-insulated value to you?

Each value or steam trap with no insulation in your business, causes thermal loss as much **AS ITS SURFACE AREA.** But, what does that really mean? Let's explain it by an example.



In case that an un-insulated globe valve (4", DN 100) is used in an fluid system at 160 °C; it causes 1.199 watt energy loss hourly, this is equal to 629 m<sup>3</sup> natural gas consumption and loss of 245 Euro annularly.

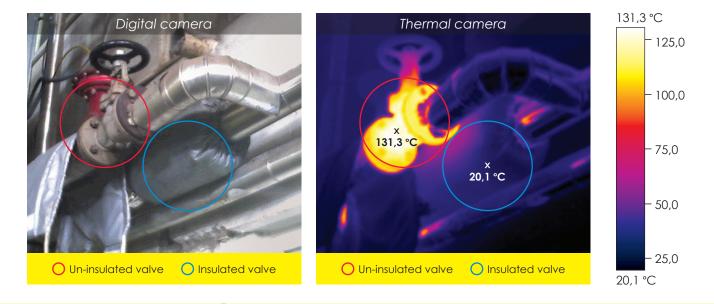


ANNULAR COST OF THE ENERGY LOSS OF A GLOBE VALVE

Calculations are based on ASTM C 1129-12 standard. Assumptions: Wind velocity (2 m/s), ambient temperature (25 °C), emissivity (0,95). 8 Annular operation time is assumed 5000 hours and the price of natural gas is 0,4 Euro. Calculations are done for globe valve with flanges.

## Thermal camera images proove the difference!

The best way of discovering the thermal losses in your business is to use a thermal camera. We are aware of the **superior performance** of Ayvaz's valve and steam trap jackets and would like to share it with you.



You can save up to 90%\* thanks to the insulation performance of Ayvaz's valve and steam trap jackets. Your investment pays for itself very quickly and you'd start making profit!

\* Calculations are done for globe valve (DN 150), fluid at 160 °C and Ayvaz's valve jacket with Cryogel insulation with 20 mm thickness.

save 90%



## Would you like to take a look at the features

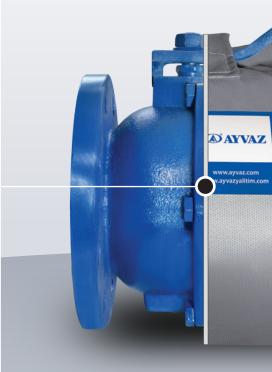




Ayvaz's valve and steam trap jackets are designed to minimise the energy losses.

Aspen aerogels hydrophobic insulation materials with low thermal conductivity are used in our jacket designs.

Cryogel X201 is used for the applications between 0 °C and 200 °C and Pyrogel XT is used between, 200 °C - 650 °C.



## of our valve and steam trap jackets?



Our jackets are available for all valve and steam trap types from DN25 up to DN300. Please contact our sales team for other sizes of steam trap and valve jackets.

#### Ropes and Fabric



Fabric selection for Ayvaz's valve and steam trap jackets is done according to the system temperature. Fibre glass fabric with silicon cover (80gr-100gr) is commonly used.

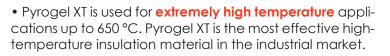
Sewing of the fabrics is completed by Kevlar and stainless steel wires. Braided fibre glass ropes with high temperature resistance are preferred around the tying points.

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## **Pyrogel XT** (200 °C - 650 °C)

#### Specially formulated for high-temperature applications





• Pyrogel XT is especially preferred for the valve and steam trap jackets that are used for the systems where the temperature is above 200 °C.

Physical Properties			
Feature	Value		
Thickness	5 mm	10 mm	
Operating Temperature Range	-40 °C / +650 °C		
Thermal Conductivity Value At 37.5 °C / ASTM C 177	0.021 W/mK		
Density	0,18 g/cm <sup>3</sup>		
Hydrophobia	Yes		



#### **Application Areas**

- Hot water and steam lines
- Refineries and gas processing plants
- Petro- chemical plants
- Military establishments
- Food and oil mills
- Textile industry
- Plastic plants
- Oil and gas processing industry
- Pharmaceutical plants





## Cryogel X201 (Up to 200 °C)

#### Ultimate solution for the temperatures, up to 200°C



• Cryogel X201's unique properties; low thermal conductivity, superior flexibility, compression resistance, hydrophobicity, make it essential for those seeking the ultimate in thermal protection the applications up to 200 °C.

 $\bullet$  Cryogel X201 is used at Ayvaz's value and steam trap jackets that are used for the temperature is below 200  $^\circ\mathrm{C}$ 

Physical Properties			
Feature	Value		
Thickness	5 mm	10 mm	
Operating Temperature Range	-270 °C / +200 °C		
Thermal Conductivity Value At 37.5 °C / ASTM C 177	0.015 W/mK		
Density	0,13 g/cm³		
Hydrophobia	Evet		



#### **Application Areas**

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### The advantages of

#### Ayvaz Valve Jackets over Other Valve Jackets made by

#### **Classic Insulation Materials**



#### **High Thermal Benefit**

Ayvaz's valve and steam trap jackets produced with hi-tech insulation materials with **low thermal conductivity** reduce the heat losses and provide high thermal and economic benefits.

#### Easy Installation

Aspen Aerogel's insulation materials (Pyrogel XT, Cryogel X201) are typically **2-4 times thinner** than other widely used insulation products.

That provides more compact designs to our valve jackets and makes the installation easier.



#### **Physically Robust**

Despite of their soft and flexible structures, Ayvaz's valve and steam trap jackets recover their thermal performance even after extremely high compression events with their **excellent spring back features.** High water resistance of the jackets offer a level of protection against damp.

#### Size

**Reduced material volume**, high packing density and low scrap rates can reduce the jacket sizes with a factor of 3 or more compared to the other jackets made by classic insulation materials.

#### Long Life and Respect to the Nature

Aspen Aerogels insulation materials have high tensile and compressive strength.

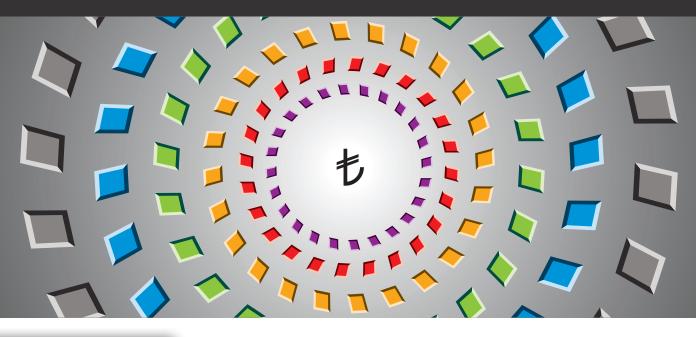
Jackets can be applied and removed over and over again with no deformation for a long time. Landfill disposable, shot free, with no respirable fibre content.



## Why do cheaper solutions cost more?

You use insulation materials in order to reduce energy loses in your business and this is so right. But if you take "the price" as your priority while making your decision among different options, **you are probably wrong**.

#### Focusing the cost while buying valve or steam trap jackets may be tricky!



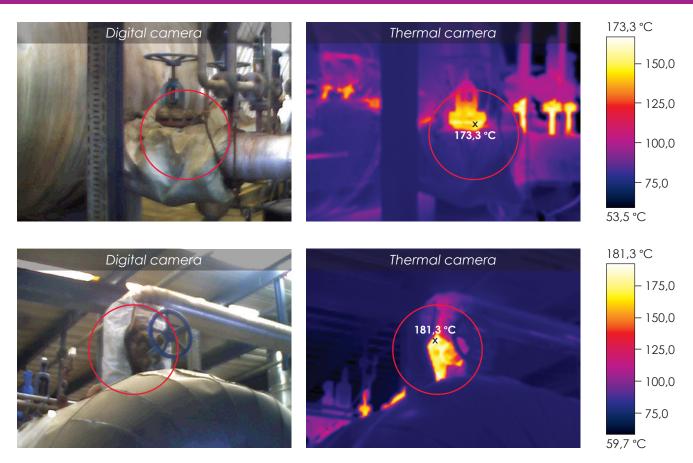
**20 YEARS** OF WARRANTY for insulation materials Rock wool jackets that seem economical in the first glance offer short service life. That is why the insulation performance of those products will reduce within the use of couple of years and **you may have to renew them**.

**You need to pick high performance products** with long service life in order to reduce your energy costs. Ayvaz promises 20 years of warranty for the insulation material and 10 years for overall product. Our products will pay your investment shortly.

## Thermal Camera Images Show The Truth!

Rock wool jackets are easily affected from the moisture and mechanical compulsions that drop their performances down. However, **Ayvaz's Valve and Steam Trap Jackets always keep their high performance!** 

#### You're not saving as much as you think by rock wool jackets. Here is the proof!





## Thinner and stronger than rock wool!

Ayvaz's valve and steam trap jackets offers high performance with an ultra-thin structure. High-tech jackets could be three times thinner especially for the small sized products.

#### SIZE COMPARISON OF VALVE JACKETS FOR 1" BALL VALVE (ACTUAL SCALE)



## We have jackets for all of your products!

We deal with manufacturing insulation jackets for **all types of valves**, **steam traps**, **check valves**, **strainers and expansion joints** at all sizes. Whatever the size and working conditions of your products, we offer you the most appropriate solutions.





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