Luck Design's Jacket Form: Energy-efficient up to 25%

Introducing our Luck Design Jacket Form, that is energy efficient, environmental sustainable and economical.

If you are seeking to reduce energy consumption and are committed to the principles of environmental sustainability, we encourage you to reach out to us. Our team is ready to provide you with further information and discuss how our SDG-compatible heater can meet your specific needs while driving positive change for a sustainable future.



Luck Design Company, Limited Email: <u>info@luckdesign.jp</u> Website: <u>https://jp.luckdesign.jp/</u>



With our innovative jacket form, surface insulation results in an impressive **25% energy savings**.

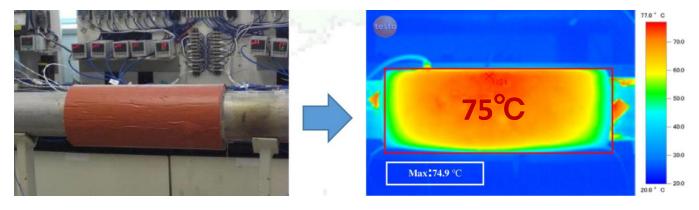
By applying a jacket form to pipes with a *surface temperature* of 70° C, the temperature can be effectively *reduced to below* **50**° **C**. This approach directly reduces energy consumption by 25% in terms of heater electricity usage. While the impact on other environmental factors such as air conditioning energy consumption is currently unknown, it remains an effective solution for cases where the heater surface temperature exceeds 60° C.

Lowering energy consumption not only leads to cost reduction but also aligns with the imperative of promoting a *sustainable global environment* (SDG compatibility).





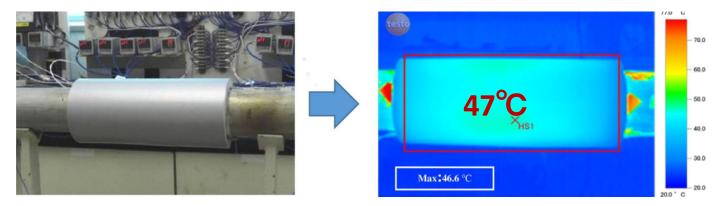
Silicone rubber sponge



Pipe surface temperature is here 150°C.



Luck Design's Jacket form



Using our Jacket Form not only brings down the surface temperature, but also will save you 30% energy cost. In addition our price is only the half in comparison with other companies.



Melamine sponge V.S. Silicone rubber sponge

When comparing the thermal conductivity and density of silicone rubber sponge and melamine sponge, we can observe the following:

- 1. Thermal Conductivity:
 - Silicone rubber sponge: 5×10^{-2} W/(m·K)
 - Melamine sponge: 3.74×10^{-2} W/(m·K)

The thermal conductivity of melamine sponge is slightly lower than that of silicone rubber sponge, indicating that melamine sponge has a better insulation property.

- 2. Density:
 - Silicone rubber sponge: 0.54 g/cm³
 - Melamine sponge: 0.0092 g/cm³

Melamine sponge has a significantly lower density compared to silicone rubber sponge. In fact, it is approximately 1.7% of the weight of silicone rubber sponge. This makes melamine sponge much lighter and more suitable for applications where weight reduction is desired.

In summary, when comparing the two materials, melamine sponge offers a slightly lower thermal conductivity while being significantly lighter in weight compared to silicone rubber sponge. This makes melamine sponge an attractive choice for insulation applications where thermal efficiency and weight reduction are important factors to consider.

Other benefits when using our Luck Design Jacket Form

- We offer standard materials that facilitate on-site installation for various applications such as ducts and pipes, including straight pipes and elbows.
- We can also accommodate other shapes as needed.
- Our materials are suitable for cleanroom environments.
- For temperatures above 150° C, we provide options such as glass felt and imide-based felt.
- These materials can be easily cut using scissors or a cutter, allowing for effortless on-site installation.
- Our Jacket Form is also effective for duct insulation in cleanroom environments.

