

Pre-insulated pipes for dairies



[We document the difference]



What is a pre-insulated pipe?

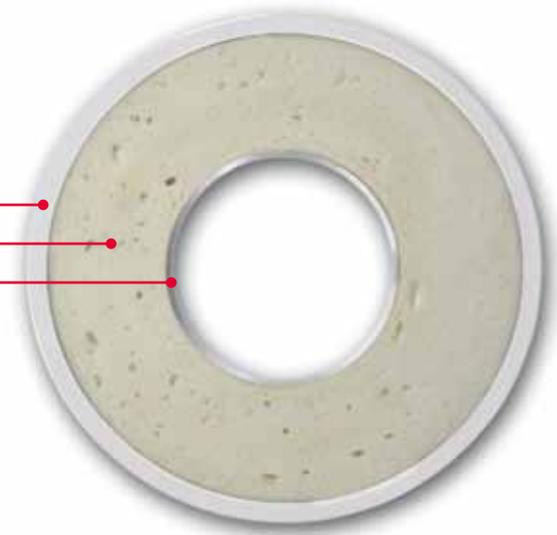
A pre-insulated pipe is – as the name suggests – a pipe supplied ready-insulated from the factory.

We produce five complete standard systems covering a temperature range from -200°C to $+250^{\circ}\text{C}$. All systems are characterised by a waterproof plastic jacket surrounding an insulated carrier pipe – a design which guarantees a high hygienic standard with minimal risk of the formation of bacterial colonies.

Dansk Teknologisk Institut (Danish Institute of Technology) has drawn up a report on the cleaning characteristics of the surface of the LOGSTOR pipes and joints. The report states that the smooth surfaces are as easy to clean as a rust-proof steel surface, and so is the inside of the bends and T-joints.

The pre-insulated pipe consists of three parts:

- Jacket
- Insulation (polyurethane foam)
- Carrier pipe



As standard, the pipes are supplied with an HDPE (polyethylene) jacket in black or white. The jackets provide many advantages as they are impact-proof, waterproof, resistant to salt and chemicals, hygienic and corrosion proof. Black jacket pipes can be used both outdoors and indoors, whereas the white jackets can only be used for indoor installations.

The carrier pipe material is chosen to suit the medium to be carried.

The pipes are fitted and joined easily and efficiently to a well-functioning system by means of Logstor's comprehensive sleeve programme comprising straight sleeves and bend sleeves, T-joints, end fittings, etc. The joints are, of course, just as well-insulated and watertight as the rest of the system.

Applications of carrier pipes:

	Steam	Potable water	Salt water/ brine	Ammonia	Processed products	Ice water	Glycol
Steel pipes	●		●	●			●
Stainless steel pipes	●	●	●		●	●	

Why pre-insulated pipes in dairies?

Logstor's pre-insulated pipe systems offer a wide variety of advantages when compared to traditionally insulated pipes. Here are 10 of them:

1. A pre-insulated pipe system has high insulation properties. The thermal loss from a pre-insulated pipe from Logstor is actually about 40% lower than a similar system with conventional insulation (mineral wool and metal jacket).
Logstor's StaTech®-programme calculates the savings accurately based on the customer's specifications. Read more about this calculation programme at our "Customer Centre" at www.logstor.com, from where you can also download the programme free of charge.
2. The pipe supports are mounted directly on the jacket surface. In this way the thermal loss is avoided which arises in conventional pipes fixed with a clamp in direct contact with the carrier pipe. This also eliminates the risk of bacterial deposits.
3. The jacket is either of black or white polyethylene produced in conformity with EN 253 and DIN 8075. Black HDPE jacket pipes are UV resistant and can therefore be used both outdoors and indoors. HDPE jacket pipes are also salt and chemical resistant.
4. The insulation and jacket combined have a high mechanical strength making the pre-insulated pipe systems impact-resistant minimizing the risk of mechanical damages.
5. Cleaning of the pipe jacket is very easy as both pipes and joints are 100% waterproof, they can be hosed and washed.
6. No condensation occurs, and therefore the risk of bacteria growth is minimal.
7. Low installation costs.
8. Quick and easy installation in one process with minimal downtime.
9. Minimal maintenance.
10. Efficient jacket integrity prevents corrosion.

Carrier pipes are supplied in all qualities such as:

Stainless AISI 304/316L, DIN 2463

Stainless AISI 304/316L, DIN 11850

Dairy pipes AISI 304/316L, SS 3008

P235 TR1, EN 10217 welded steel pipes (St. 37.0 BW, Din 2458)

P235 GH, EN 10216 seamless steel pipes (St. 35.8I, Din 2448)

Extracts from the reference list:

Arla Foods in Denmark, Poland, Sweden, England and Saudi Arabia

TINE Norske Meierier, Norway

FAN MILK, Nigeria

Nestlé, Sweden

Sachsenmilch, Germany





A pipe is not simply a pipe

When selecting pipe systems for the demanding production environment of a dairy, you are confronted with a challenge. Should you choose conventionally insulated pipes requiring costly re-insulation at regular intervals, or should you take new avenues and choose an ultra-modern, ready-insulated pipe system installed once and for all? Logstor's pipe systems come pre-insulated from the factory – systems ready for installation and assembly requiring no further maintenance. The pre-insulated pipes are very easy to clean and withstand aggressive cleaning agents. The wide range of pipes combine in countless ways with flexible sleeves which eliminate the need for costly fittings.

Our experienced engineers are specialists in designing pipe systems to suit your exact needs. Our design service also includes stress calculations. We can offer courses which will increase our client's knowledge of Logstor's pipe systems.