# Defining network efficiency







### A lifetime of value

LOGSTOR DELIVERS VALUE BY DEFINING NETWORK EFFI-CIENCY THROUGH SOLUTIONS THAT LOWER THE TOTAL COST OF OWNERSHIP OVER THE ENTIRE LIFETIME OF YOUR PIPE SYSTEM.

District Heating and Cooling systems have become a vital part of a modern city infrastructure. By improving comfort, reducing energy consumption and lowering  $CO_2$ , not only do they help to maintain the quality of life for the people who live there, but they serve to protect the wider environment for us all.

The initial investment in a District Energy system is significant. However,

70%
Operating



30%
Investment costs

it counts for the minor part of the total cost of ownership; as much as 70% is taken up by ongoing operational expenses, such as heat loss, pumping and maintenance. As a result, operators are looking for more efficient solutions that will deliver the best return on their investment.

### Lowest total cost of ownership

At LOGSTOR, we help you to lower the total cost of ownership across your network through innovative solutions that deliver effective system designs, a simpler and more sustainable installation process and market-leading technologies that provide minimal heat loss and a lifetime of reliability and performance.



Our focus is to reduce complexity and cost at every stage by driving value and efficiency throughout the lifecycle of your pipe system, with the highest and most consistent insulation values over a 30+ year lifespan.





### An investment in quality

Over 50 years, LOGSTOR has grown to become the world's leading provider of complete pre-insulated pipe solutions. Today we offer the industry's most extensive range of



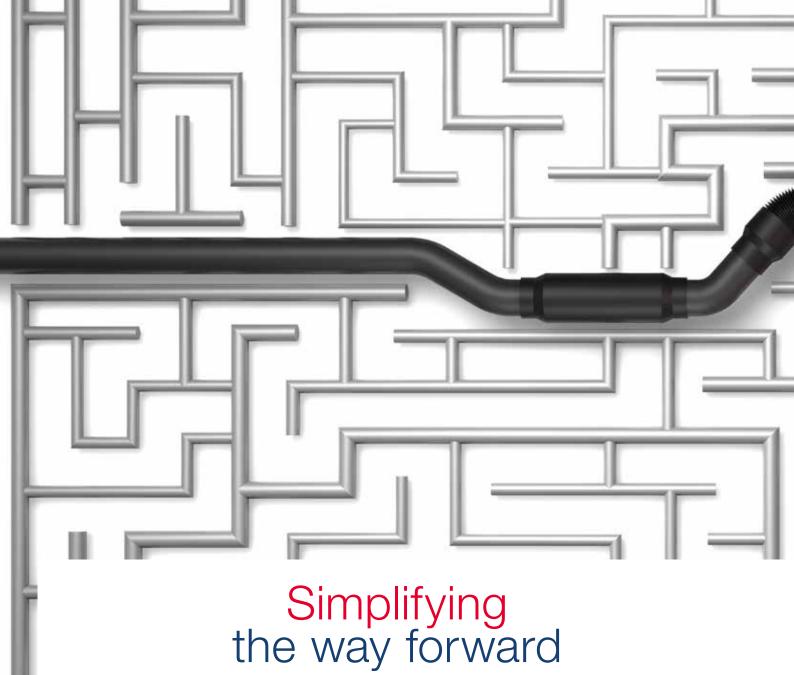


products and support services with a solution tailored for every need.

By optimizing every aspect of your system from design to delivery and beyond, we help you to make the right investment decisions today that will secure the quality and health of your network – and your bottom line – far into the future.



Our solutions deliver the highest and most consistent insulation across the lifetime of your District Energy pipe network.



IMPLEMENTING YOUR PIPE
SYSTEM DOESN'T HAVE TO BE
COMPLICATED. BY OPTIMIZING
DESIGN AND INSTALLATION,
LOGSTOR PROVIDES A SAFE,
SIMPLE SOLUTION FOR DECADES
OF END-TO-END PERFORMANCE
AND QUALITY.

### **Effective installation**

LOGSTOR solutions deliver the most effective installation process for any situation, including new networks, reconstructions or maintenance and urban or greenfield environments. Whether it is finding the best layout, ensuring the highest functionality or reducing environmental impact, we help you to create and manage



the simplest, safest and most sustainable pipe system.

Our proven approach, developed over countless new installations and retrofits, helps you to keep costs low and to meet your desired network specifications with traceable results.







- Before installation to help you make better investment decisions, we provide the optimal choice of system design, including all technical requirements and simulated operational costs based on key factors such as heat loss, energy costs and CO<sub>2</sub> emissions.
- During installation for total assurance, we provide on-site and on-line technical support, full documentation as well as certified training for engineers, fitters and supervisors.

Customer Value Lifecycle

Contractual specification

3. After installation – to ensure longterm system reliability and efficiency, we provide dedicated ongoing support with 24/7 monitoring of your pipe system through our automated surveillance solutions.

### **Outstanding quality**

At every stage of the process, our focus on quality control provides enormous benefit to our customers. Furthermore, our innovative technologies, such as our anti-aging diffusion barrier and sustainable

Efficient installation

joint systems, enable us to maximize network reliability with full technical documentation and precalculated lifetime costs.

### **Continuous development**

Our development teams are constantly finding more innovative ways to improve the reliability and costefficiency of your District Energy network. All our products are certified to meet all European regulations, including EN253, and EUROHEAT & POWER, and we work closely with the external institutes to test and ensure optimal functionality of your pipe system over decades of use. Our quality- and environmental management systems are certified in accordance with ISO 9001 and ISO 14001 and our occupational health and safety management system meets OHSAS 18001 requirements.



## Monitoring network performance

OUR NETWORK SOLUTIONS
ARE DESIGNED TO LAST A
LIFETIME. HOWEVER, FOR A
TRULY EFFICIENT PIPE SYSTEM
IT IS CRITICAL TO HAVE 24/7
SURVEILLANCE TO MONITOR
ITS CONDITION AND TO MAXIMIZE ITS SERVICE LIFE.

### **Protect your investment**

We offer a range of surveillance solutions for real-time monitoring of your network with accurate detection and location of faults. Not only does this help you to improve supply assurance and minimize unplanned downtime, but it can significantly extend your network's lifetime and safeguard your investment.

Embedded wires enable 24/7 surveillance across your entire pipe system.





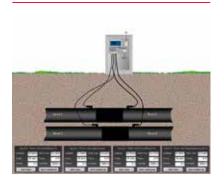
### A smarter network

Our surveillance solutions give you a complete digital overview of the health and condition of your entire pipe system. This is both invaluable to verify the integrity of your network when it is first commissioned as well as to provide round-the-clock surveillance throughout its entire operational lifetime.

If a problem is detected, the software instantly locates and analyses the fault and sends a detailed alert as email or SMS. This dynamic reporting feature enables you to react quickly to maintain operational continuity and to prevent more serious – and potentially more costly – damage from occurring.







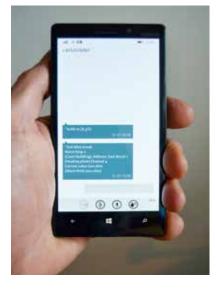
Our surveillance solutions can be integrated with your own in-house monitoring system or offered as a fully hosted Cloud-based solution. Here, our technical service teams provide regular reports on the condition of your pipe system, with recommended actions and even improvement options.

### Solution benefits:

- Accurate network surveillance 24/7
- Minimize downtime and repair costs
- Increase network service life
- Dynamic reporting
- Notification of alerts by email or SMS



Instant fault detection and alerts via SMS or email.



### A promise of quality

LOGSTOR IS KNOWN WORLDWIDE FOR CUSTOMER EXCELLENCE DEFINED BY OUR COMMITMENT TO RESPONSIVENESS, ACCURACY AND THE HIGHEST STANDARDS OF QUALITY.

At LOGSTOR, we take great pride in delivering on our promise of quality and value. It is what we are known for and we believe it is what our customers deserve.

The true value of our service offering lies in the accuracy and responsiveness of our technical consultants and customer support teams. By expertly guiding you through every step of your network's design, installation and operation, we help you to make the best decisions regarding its long-term success.



Our goal is to help you create the right solution that delivers the most positive impact on your network's performance and on your total cost of ownership. And by streamlining your project with professional project management, we are able to meet your needs with a flexible service plan built around your specific business goals, timeframes and budget.



LOGSTOR defines network efficiency by delivering value. Not only do our solutions provide the results and returns you expect today, but we remain committed to supporting your ambitions far into the future.

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