

OPTERM



What is OPTERM?

We know very well that amidst the intense production pace in industrial facilities, insulation repairs following maintenance and revisions often fall into the background. Exposed valves, damaged sheet metal cladding, the constant search for subcontractors, and repairs that never get prioritized create an invisible yet serious cost for businesses.

Opterm is a solution-oriented insulation partner established to stop this energy loss in facilities. Our goal is not to take up your time with cumbersome and exhausting processes; it is to produce transparent and measurable solutions that directly deliver results in removable valve jackets and sheet metal cladding field applications.

Fast Action, Clear Solution: Regardless of the volume of the work, we are on-site the moment you need us and intervene directly without prolonging the process.

Measurable Savings: For us, insulation is not an expense, it is an investment. We clearly calculate how much energy and budget savings our application will provide you.

End-to-End Operation: You just focus on your production; we undertake all field and project management, from measurement to installation, from sheet metal cladding to valve jackets.



What does OPTERM do?

Free Thermal Inspection and Payback Report

First, we visit your facility and identify exposed points one by one using thermal cameras and laser devices. Then, with our own software, Optimizi, we provide you with a clear report showing how much each piece of equipment is costing you in losses and in how many months the applied insulation will pay for itself.

Removable Insulation Jacket Manufacturing and Installation

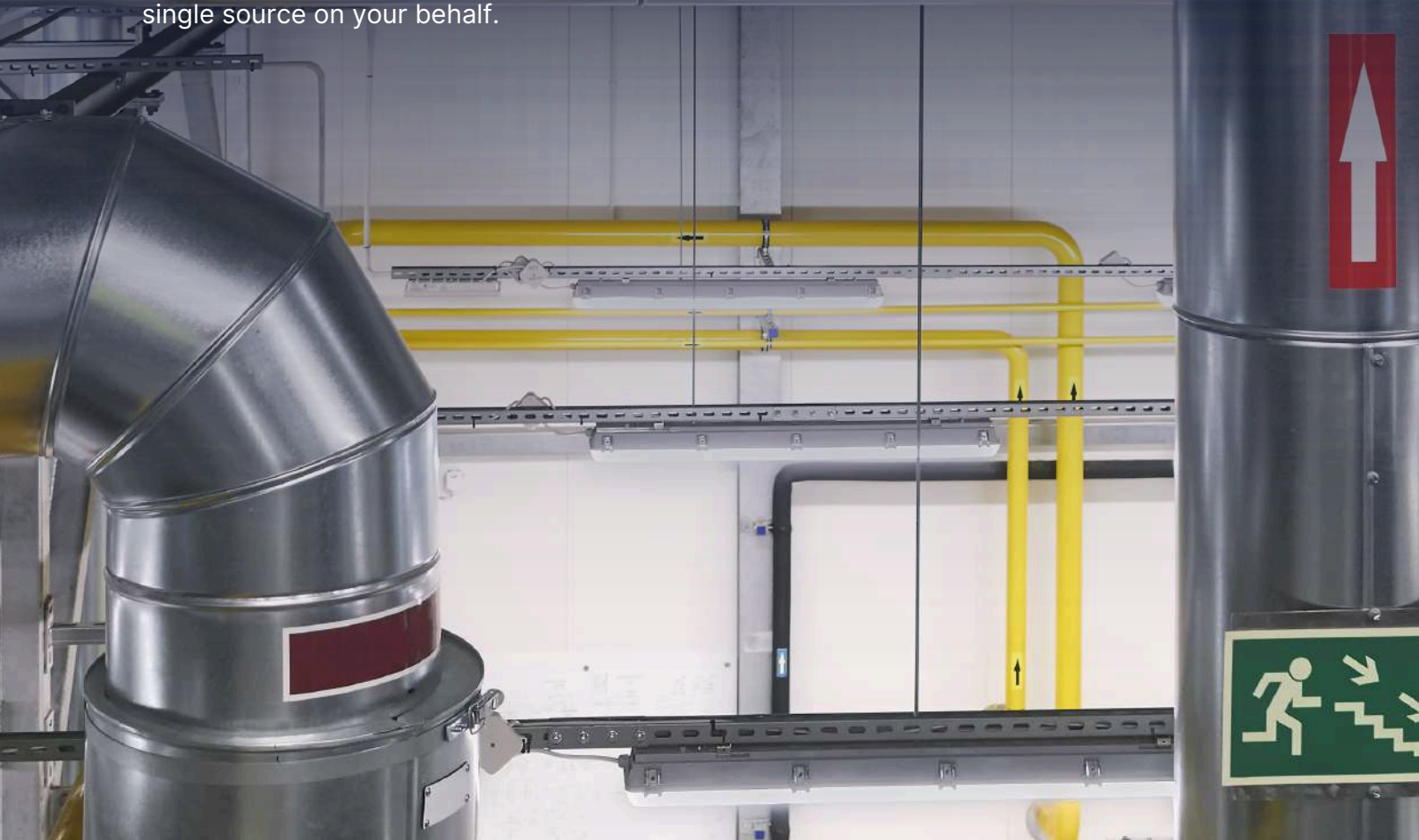
We produce system-specific insulation jackets for moving parts such as valves, strainers, and heat exchangers, which lose the most heat in the facility but require constant intervention. In the event of a malfunction, your maintenance team can remove these jackets in minutes and reinstall them when their work is done. Thus, both your energy is conserved and your maintenance processes are accelerated.

Local Sheet Metal Cladding and Revision Applications

With our mobile insulation vehicle, we arrive at your site quickly without wasting time and without you having to wait days for subcontractor quotes. We carry out immediate sheet metal cladding interventions for damaged or unfinished fixed pipelines and tanks.

Periodic Insulation Maintenance Partnership

As Opterm, our aim is to establish a long-term and reliable partnership. We are just a phone call away so that you do not waste time during your facility's periodic shutdowns or in moments requiring urgent intervention; we manage all your insulation processes from a single source on your behalf.

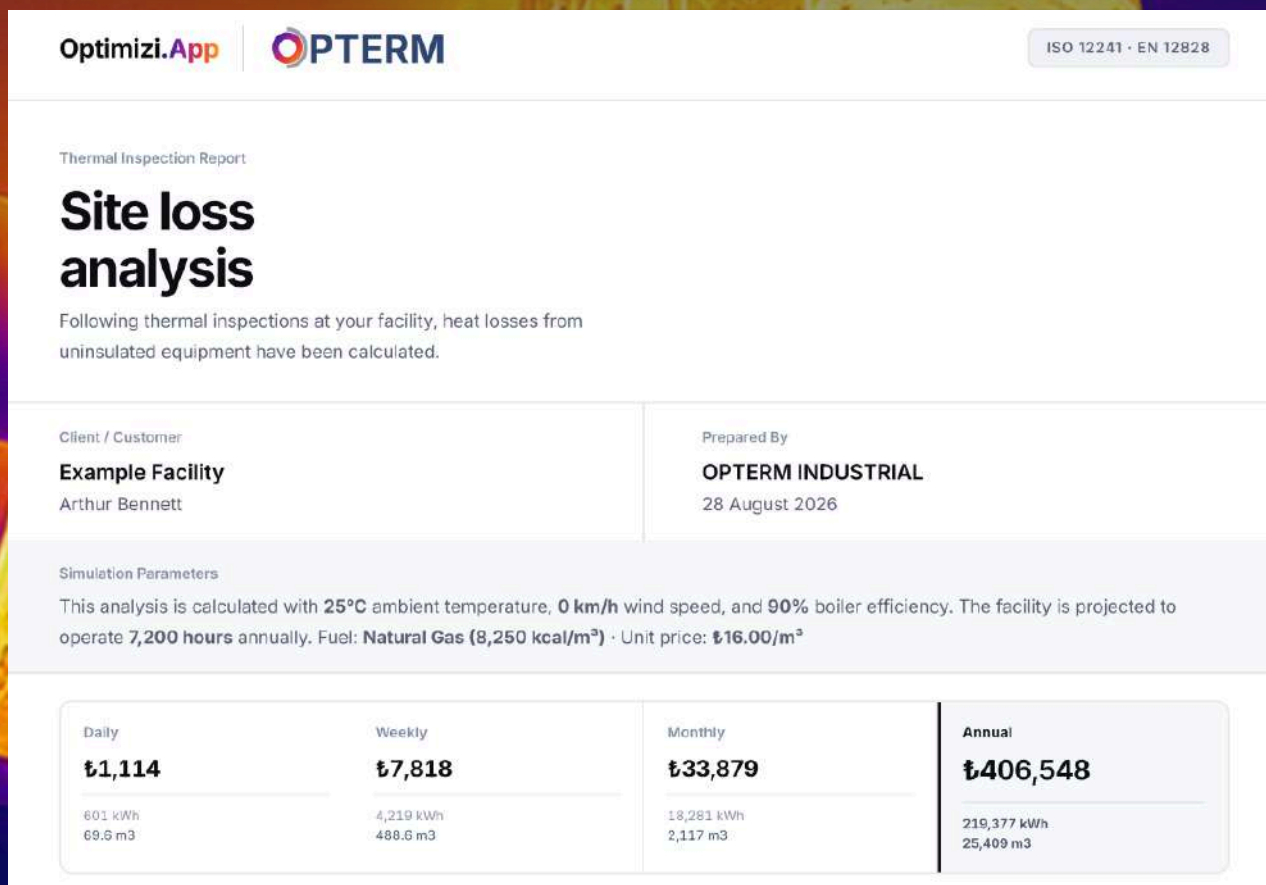


We Report Invisible Losses: Thermal Loss Analysis

We visit your facility and identify all exposed points with thermal cameras and laser measurement devices. Thanks to our proprietary infrastructure, Optimizi, we present you with a transparent report showing how much loss each piece of equipment is causing you and in how many months the applied insulation will pay for itself.

So, What is Optimizi.App?

It is a custom-developed, web-based engineering and analysis software that converts thermal data collected from the field into financial tables in seconds. This infrastructure, which operates based on international ISO 12241 calculation standards, instantly analyzes the temperature values and system parameters measured in the field. In this way, we offer you not just a standard price quote; we present a clear, transparent, and measurable investment potential calculated entirely with the actual data of your facility.



A Single Bare DN100 Valve Wastes 7,628 kWh of Energy into the Air Per Year.

Based on 90% boiler efficiency, 25°C indoor conditions, and a gas cost of 16 TL/m³; this energy waste of 7,628 kWh reflects on your business as exactly 884 m³ of extra natural gas consumption and a net loss of 14,137 TL.

We can summarize the extent of this waste much more clearly with an example from our daily lives: According to Gazmer data, the average annual natural gas consumption of a standard family of 4 in Turkey is in the range of 900 - 1000 m³.

Uninsulated fittings in most industrial facilities are generally ignored because they do not directly hinder the operation of the process. However, when you multiply the loss leaking from that single valve by hundreds of bare points in your facility; these energy leaks that you think are invisible tear huge holes in your business's budget at the end of the year.

Identified Leak Points								Page 2 / 5
Example Facility - 28 August 2026								
#	Image	Leak Source	Temp (Bare → Ins.)	Qty	Bare kWh	Insulated kWh	Saving kWh	Annual Loss TL
01		Globe Valve (DN100) Kazan Dairesi Kolektör	150.0°C → 33.6°C OSHA ✓	4 Adet	27.462	2.132	+25.329	₺50,892
02		Globe Valve (DN50) Kazan Dairesi	150.0°C → 32.4°C OSHA ✓	12 Adet	47.460	4.145	+43.316	₺87,954
03		Globe Valve (DN32) Kazan Dairesi	150.0°C → 31.7°C OSHA ✓	6 Adet	17.561	1.680	+15.882	₺32,545
04		Strainer (DN100) Kazan Dairesi	150.0°C → 33.6°C OSHA ✓	2 Adet	14.712	1.142	+13.569	₺27,263
05		Float Trap (DN100) Kazan Dairesi	150.0°C → 33.6°C OSHA ✓	6 Adet	47.077	3.655	+43.422	₺87,243
06		Flange Pair (Set) (DN100) Kazan Dairesi	150.0°C → 33.6°C OSHA ✓	18 Adet	30.894	2.399	+28.495	₺57,253
07		Ball Valve (DN100) Kazan Dairesi	150.0°C → 33.6°C OSHA ✓	4 Adet	19.615	1.523	+18.092	₺36,351
08		Flat Surface Kazan Kapagi	150.0°C → 35.8°C OSHA ✓	1.12 m ²	14.595	841	+13.754	₺27,047



What is a Removable Insulation Jacket, Where is it Used, What are its Advantages?

They are removable (portable) flexible insulation covers specifically designed for the insulation of fittings such as valves, flanges, strainers, and heat exchangers, which are the points where heat loss is experienced most intensely in industrial facilities.

It significantly reduces the fuel costs of the enterprise by cutting heat leaks in bare fittings by up to 90%. Depending on the operating time of the facility and the line temperature, it pays back the investment cost of the jacket in a very short period of time, on average 3 to 8 months, through the energy savings it provides. By bringing surface temperatures down to standard-compliant levels, it protects personnel from potential burns and keeps the working environment temperature in enclosed spaces at an ideal level.



Industrial Sheet Metal Cladding and Revision

Insulation lines removed after periodic maintenance or unplanned shutdowns in industrial facilities are critical points that reduce the general energy efficiency of the facility and increase the risk of corrosion. For the smooth operation of your facility, these lines must be protected against outdoor conditions, chemical effects, and physical impacts in accordance with standards.

As Opterm, we offer sheet metal cladding and insulation revision services in accordance with international engineering standards for fixed pipelines, tanks, silos, and industrial furnaces in your facility.

Not only in local revisions; we also perform engineering calculations from scratch for newly integrated outdoor or indoor process lines in your facility, determine the optimum insulation thickness and the most appropriate sheet metal type, and commission the project on a turnkey basis in accordance with standards.



Periodic Insulation Maintenance Partnership

Energy efficiency in industrial facilities is not a one-time installation; it is a dynamic engineering process that must be continuously monitored, protected, and managed throughout the life of the system. Insulation lines that are removed during planned maintenance shutdowns, newly added to the system due to capacity increases, or deformed by physical factors require professional tracking.

As Opterm, our goal is to go beyond offering instant solutions to businesses and become a long-term "Insulation Maintenance Partner" that protects your energy goals and lightens your operational load.

Planned Shutdown and Revision Management

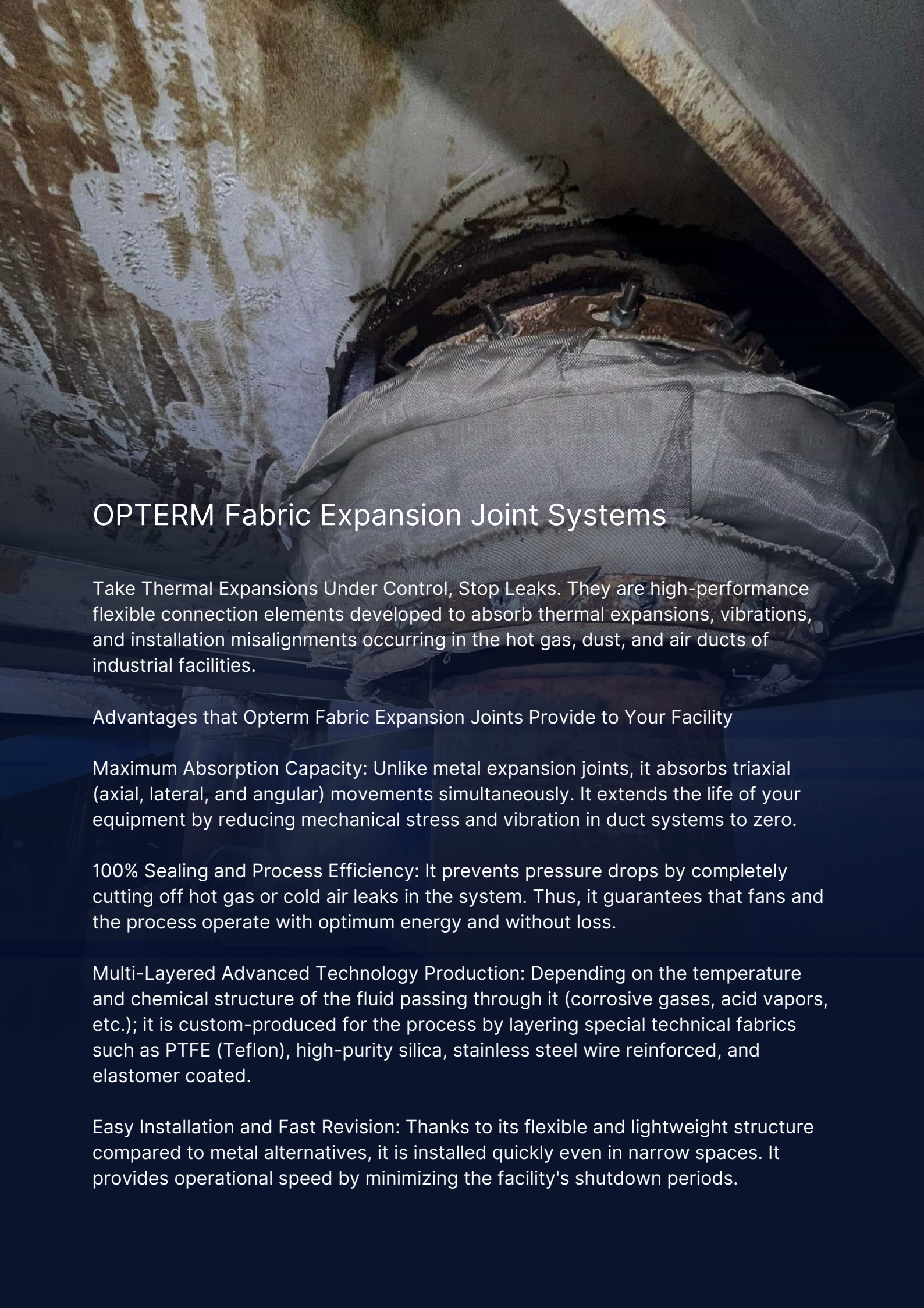
During the periodic maintenance shutdowns of your facility, we work fully integrated with your own engineer and technician teams on-site. We manage end-to-end the proper dismantling of the insulation on the fittings or lines undergoing maintenance, and after the maintenance process is completed, the re-insulation of the system according to current standards and its lossless commissioning.

Periodic Thermal Inspection and Data Tracking

We do not leave your insulation systems unattended; we conduct scans at your facility with thermal cameras and measurement devices at specified periods. Through our own software infrastructure, Optimizi, we detect possible new heat leaks or insulation deformations and report energy losses with engineering data.

Sustainable Efficiency

Thanks to this collaboration model, your business is completely relieved of the operational management burden of insulation processes. By keeping energy leaks in your facility constantly under control, maximum process efficiency and minimum fuel consumption targets are secured.



OPTERM Fabric Expansion Joint Systems

Take Thermal Expansions Under Control, Stop Leaks. They are high-performance flexible connection elements developed to absorb thermal expansions, vibrations, and installation misalignments occurring in the hot gas, dust, and air ducts of industrial facilities.

Advantages that Opterm Fabric Expansion Joints Provide to Your Facility

Maximum Absorption Capacity: Unlike metal expansion joints, it absorbs triaxial (axial, lateral, and angular) movements simultaneously. It extends the life of your equipment by reducing mechanical stress and vibration in duct systems to zero.

100% Sealing and Process Efficiency: It prevents pressure drops by completely cutting off hot gas or cold air leaks in the system. Thus, it guarantees that fans and the process operate with optimum energy and without loss.

Multi-Layered Advanced Technology Production: Depending on the temperature and chemical structure of the fluid passing through it (corrosive gases, acid vapors, etc.); it is custom-produced for the process by layering special technical fabrics such as PTFE (Teflon), high-purity silica, stainless steel wire reinforced, and elastomer coated.

Easy Installation and Fast Revision: Thanks to its flexible and lightweight structure compared to metal alternatives, it is installed quickly even in narrow spaces. It provides operational speed by minimizing the facility's shutdown periods.

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Contact Us.

OPTERM INDUSTRIAL

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