

Solving Industrial Energy Waste

Cold Pipe Insulation
Steam Pipe and Boiler Insulation
Piping Works
Plant Maintenance





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A woman wearing a red hard hat and a high-visibility yellow vest stands in front of an industrial facility. The background shows various pipes, tanks, and structures of a plant, with a large insulated pipe in the foreground on the right.

Solving Industrial Energy Waste Through Expert Thermal Insulation

Industrial plants across South Africa face a critical challenge: massive energy losses through uninsulated or poorly insulated systems. This inefficiency doesn't just drain operational budgets—it contributes significantly to carbon emissions and environmental degradation. Steam escaping from pipes, heat bleeding from boilers, and cold systems losing temperature control all represent wasted energy that plants pay for twice: once in excessive fuel consumption and again in reduced operational efficiency.

Tswaraganang Insulation provides the solution. Since 2004, we've helped industrial facilities dramatically reduce energy waste through comprehensive thermal insulation services. Our expertise in both hot and cold insulation systems enables plants to capture and retain energy where it belongs, transforming operational efficiency while protecting the environment.



Mission & Vision

Our Mission

To provide comprehensive thermal insulation solutions that empower industrial plants to reduce carbon emissions, lower energy costs, and protect the environment. We are committed to delivering excellence in every project, combining technical expertise with unwavering dedication to our clients' operational success and environmental responsibility.

Our Vision

To be South Africa's most trusted thermal insulation partner, recognized for transforming industrial efficiency and leading the way in sustainable energy practices. We envision a future where every industrial facility operates at peak thermal efficiency, contributing to a cleaner, more sustainable South Africa.

Tswaraganang Core Values.



Excellence in Execution

We hold ourselves to the highest standards in every project. From assessment to installation, we deliver technical precision and quality craftsmanship while staying at the forefront of insulation technology and best practices.



Environmental Stewardship

Business success and environmental protection go hand in hand. Every insulation system we install reduces South Africa's carbon footprint and contributes to a sustainable future.



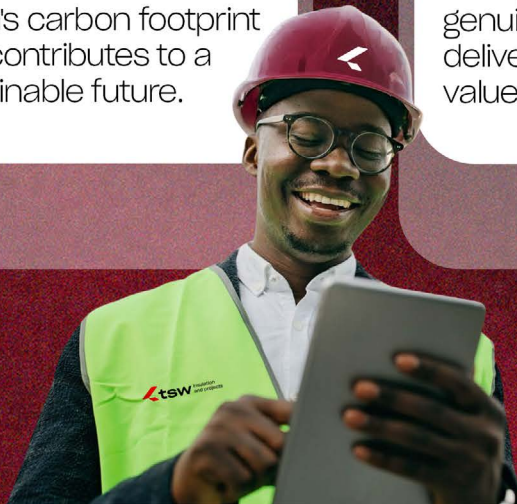
Client Partnership

Our clients' challenges are our challenges. We build lasting relationships founded on trust, transparency, and a genuine commitment to delivering measurable value.



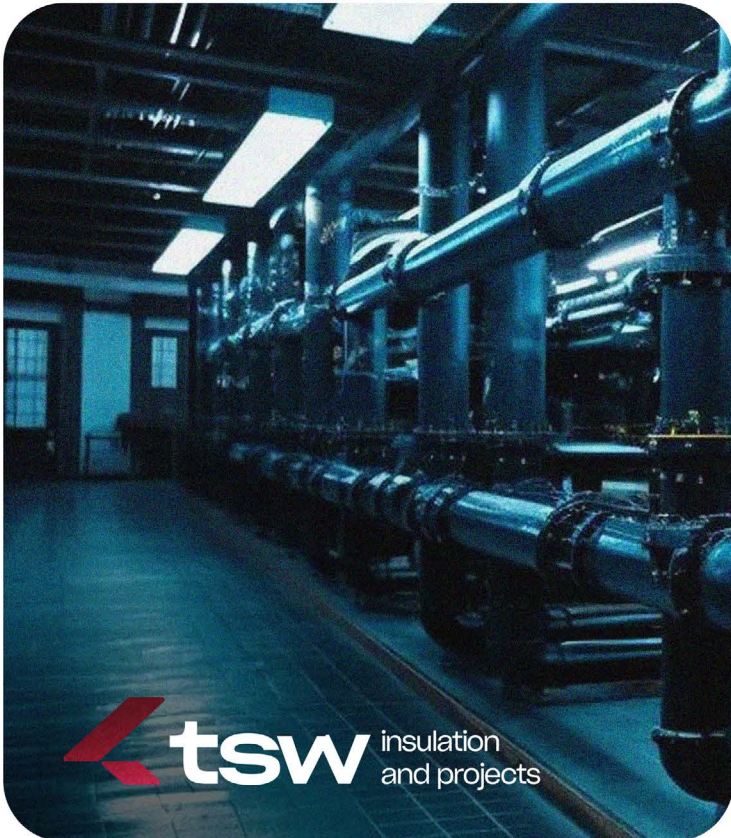
Integrity & Accountability

We do what we say we'll do. We take full responsibility for our commitments, timelines, and the performance of our work, ensuring every project meets our exacting standards.



Cold Pipe Insulation

Request Quote



The Challenge

Industrial refrigeration systems, chilled water lines, and cold process piping face constant threats from condensation, moisture infiltration, and heat gain. Without proper insulation, cold systems work harder to maintain temperature, consuming excessive energy while risking corrosion, mold growth, and structural damage from persistent moisture.

Our Solution

We create effective thermal barriers that maintain system temperatures, prevent condensation, and protect your infrastructure.

Benefits

Eliminate condensation and moisture-related damage

Reduce cooling energy consumption by up to 30%

Extend equipment lifespan by preventing corrosion

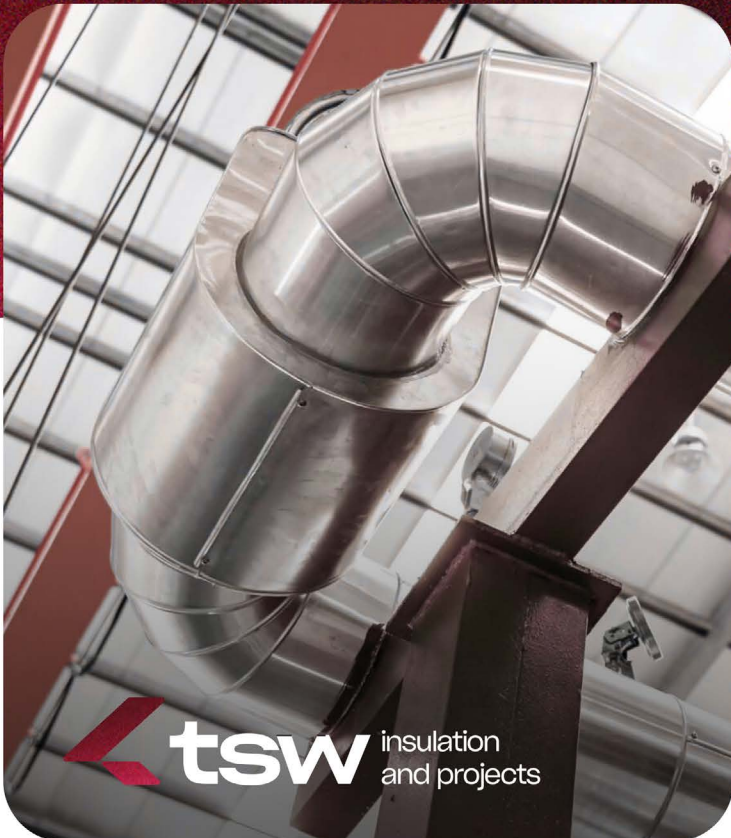
Maintain consistent process temperatures for quality control

Prevent mold and microbial growth in humid environments

Lower operational costs through improved efficiency

Steam Pipe and Boiler Insulation

Request Quote



The Challenge

Uninsulated or inadequately insulated steam systems hemorrhage energy at an alarming rate. A single meter of bare steam pipe can lose enough energy to power multiple homes, translating directly into wasted fuel, inflated operating costs, and unnecessary carbon emissions. Additionally, exposed hot surfaces pose serious safety risks.

Our Solution

We apply high-temperature insulation materials and protective cladding that withstand extreme conditions while maximizing thermal retention.

Benefits

Reduce heat loss by up to 90% on properly insulated steam lines

Lower fuel consumption and operating costs significantly

Protect personnel from burn injuries on hot surfaces

Maintain steam quality by reducing condensate formation

Minimize thermal expansion stress on piping systems

Reduce carbon emissions through improved energy efficiency

Piping Works

Request Quote



The Challenge

Industrial piping systems require expert installation, modification, and integration to function reliably within complex facilities. Poor piping work leads to leaks, inefficiencies, and system failures that disrupt operations and create safety hazards. Coordinating piping installations with insulation requirements demands specialized knowledge and precision.

Our Solution

Our experienced team handles everything from new installations to system modifications, ensuring that piping infrastructure is properly designed, installed, and prepared for optimal insulation performance.

Services Include

New piping system installation for hot and cold applications

Piping system modifications and expansions

Pipe routing and layout optimization

Support and hanger installation for proper load distribution

System testing and commissioning

Integration with existing infrastructure

Plant Maintenance & Repairs

Request Quote



The Challenge

Even the best insulation systems degrade over time. Physical damage, weather exposure, mechanical stress, and normal wear compromise thermal performance, leading to gradually increasing energy losses that often go unnoticed until they become severe. Without regular inspection and maintenance, insulation investments lose

Our Solution

Our plant maintenance services protect your insulation investment through proactive inspection, repair, and optimization

Benefits

Maintain peak thermal efficiency throughout system lifespan

Prevent small problems from becoming costly failures

Maximize return on insulation investment

Ensure regulatory compliance with ongoing monitoring

Reduce unplanned downtime through preventive maintenance

Identify energy-saving opportunities during regular assessments

The Team

Management



Freddy Modikwe
Managing Director
Thermal Engineer



Brian Ntsoko
Engineering Contract
Specialist



Tshepo Modikwe
Project Manager and
Marketing Manager



Clementia Modikwe
Admin, Finance
and Compliance

Technical



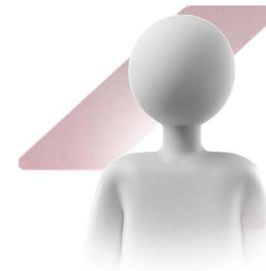
Ephraim Molokomme
Senior Technical
Specialist



Pipefitter/Technical
Specialist



Pipefitter/Technical
Specialist



Pipefitter/Technical
Specialist



Previous Clients

Tswaraganang Insulation has proudly served a diverse range of industrial facilities across Gauteng and South Africa. **Our clients trust us to deliver thermal insulation solutions that reduce energy costs, improve operational efficiency, and meet the highest standards of quality and safety**



Contact Us.



Ready to reduce energy waste and lower your operational costs?

Tswaraganang Insulation is here to help your facility achieve peak thermal efficiency. Whether you need a new insulation system, maintenance on existing infrastructure, or consultation on energy-saving opportunities, our experienced team is ready to deliver solutions.

Our Phone
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Working Hours
7:30am-4:30pm

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 **tsw** insulation
and projects