



Thermagy™ heat panels: Converting waste heat into usable energy

Increased energy efficiency and reduced greenhouse gas emissions
for a sustainable steel, non-ferrous and glass industry



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RGS - new solutions for a sustainable industry



“As far as we can see now, RGS is the first company to have actually introduced an affordable and operationally feasible solution for the generation of electricity using high temperature waste heat”

– Tata Steel



Several heat panels make a scalable system above a waste heat area.

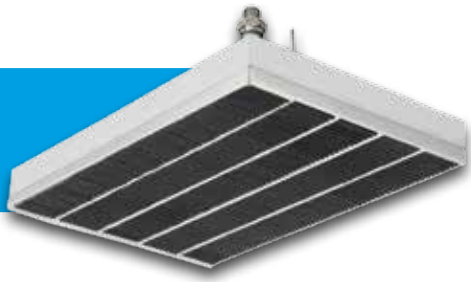
We are happy to discuss your potential savings with the help of our calculation module. Contact RGS Development on sales@rgsdevelopment.nl

Thermagy™ heat panels: New and unique technology

RGS Development introduces its unique Thermagy™ heat panel. Thermoelectric generation (TEG) is a long-known method of recovering electricity from heat using the so-called Seebeck effect. A thermoelectric generator is built from a number of semiconductor components, electrically connected in series. Exposed to a heat source, the generator generates electrical power from heat and steam. Based on the TEG principle, RGS Development introduces its unique Thermagy™ heat panel. Due to their low cost and modular setup, Thermagy™ heat panels are an attractive option for a wide range of manufacturing plants and facilities (production lines and ovens up to 100 m).

Our novel low cost waste heat recovery solution is:

- Viable**
 - Reusing your high temperature waste heat for economic return
 - Designed for today's "untapped" temperature zones of 700°C - 1200 °C
- Effective**
 - 1.5 - >2.5 kW/m² electricity output, depending on your local situation
 - Co-generation of hot water (optional upgrade to process steam)
- Scalable**
 - Modular system set-up
 - Limited infrastructure
 - Flexible configuration
- Easy to implement**
 - Easy to install without interference to the production process
 - No maintenance



TEG pilots available: try the Thermagy™ heat panels

Our solution is made for use in large factories and plants, the scalability and ease of implementation also allows you to carry out a small pilot test in one of your facilities. This will help you to easily determine the huge potential for your waste heat recovery. Show this solution to all of your stakeholders and contribute to corporate social responsibility (CSR).

About RGS Development

We believe that heavy industries are important for our economy and that these industries can operate in harmony with a sustainable world. We're glad to contribute. Founded in 2000, RGS Development employs specialists and application engineers who devise new and sustainable energy solutions for the steel, non-ferrous and glass industries. Supported by recognised research institutions (MESA+, DLR, Fraunhofer and CEA, among others) and industry partners (Tata Steel, Ardagh Group and Airbus Safran Launchers, among others), new products are developed based on the unique RGS silicon semiconductor casting technology for bulk and nanostructured materials. RGS received the FD Materials Champions Award 2015.

Interested in a Thermagy™ pilot?
Contact RGS Development on sales@rgsdevelopment.nl





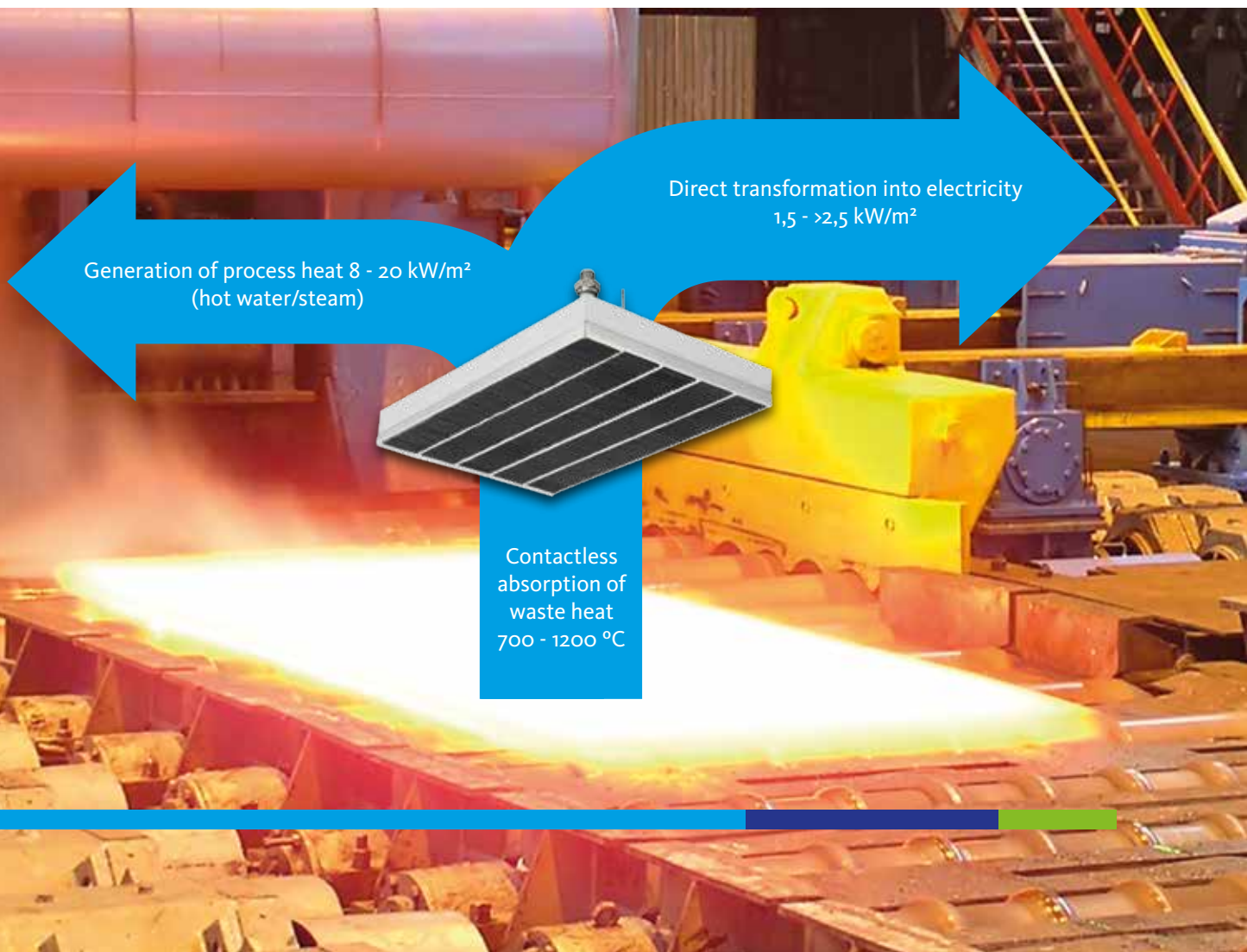
Use your energy to make your facility sustainable

Facilities in the steel, non-ferrous and glass industries use a lot of energy, 50% of which gets lost during the production process. RGS Development supports industry awareness and effort in contributing to a sustainable world and environment. Energy intensive heavy industries are now starting to think about clean energy, energy efficiency and ultimately self-supporting energy generation.

RGS Development is here to promote sustainability in your industry through the conversion of waste heat into usable energy; electricity and process heat (e.g. steam or hot water). With our new and innovative Thermagy™ heat panels you can use your high temperature waste heat, making your plants and facilities more sustainable.

Thermagy™ heat panels will provide

- A profitable business case due to the added value of electricity;
- A visible reduction in greenhouse gas emissions;
- Improvements in your production process along the way;
- A contribution to your sustainability reputation.



RGS - new solutions for a sustainable industry



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