

# Redevelopment of a boiler room

Watts products for optimising the efficiency and safety of a boiler room

## Case Study





## AIM

Upgrading an existing heating plant by moving all components to a new purpose-built room in combination with power integration to the existing system.

## WHO

Studio tecnico Per. Ind. Scola Enrico, a firm with over 40 years of experience in the field of thermo-technical and electrotechnician.

## WHAT

Upgrading of an existing boiler room plant.

## HOW

VST Series, 296 Series, TRI, TS TU, PRM, PRMIN, TB-80VE, M1-ABS63/R, 403/RF, 407/D SRN, GDA, 70600F, FSDR, VIC/A Series, 70351 Series, M10M15 and 464 Series

## WHERE

Near Como, Italy,

## WHEN

2023

Since the 1980s, an important family-run company has been operating near Como, dealing with galvanic treatments and metal coatings.

After so many years in business, it became necessary to renew all facilities and upgrade to state-of-the-art technology to continue improving the quality of the products and increasing the company's success.

One of the latest assignments involved the redevelopment of an existing boiler room plant in the company. Not only did all components have to be moved together to a new purpose-built room, but the existing system also had to be upgraded with power integration due to the extension of the building to be air-conditioned and the additional demands of production processes.



*An overview of the plant*

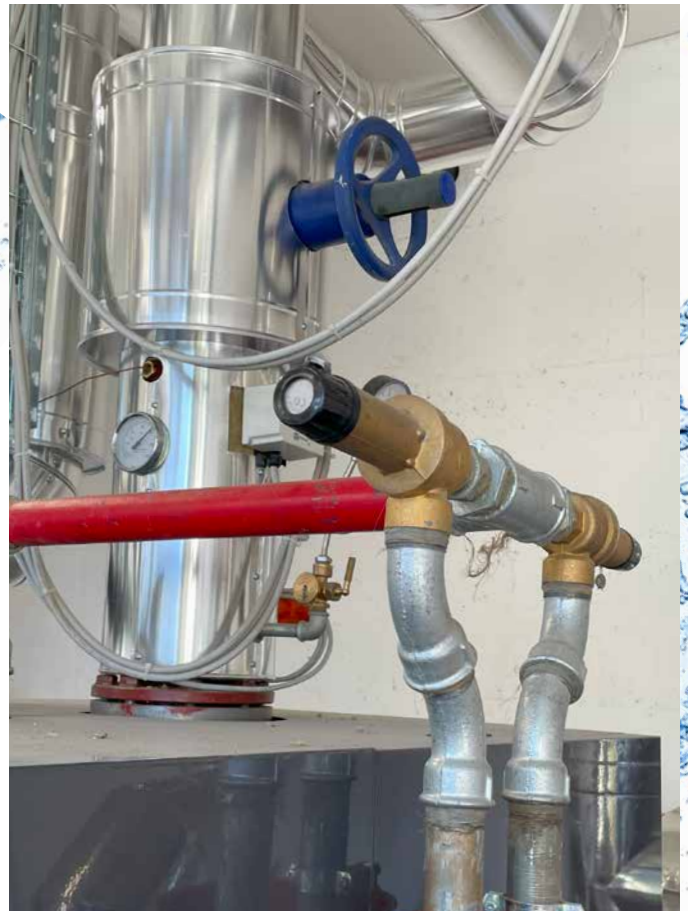
The project saw several stages of realisation. In particular, one of the existing oil-fired boilers with a useful output of 620kW was entirely dismantled and reassembled in the new technical room and integrated with a new steel generator with a useful output of 812kW with high efficiency and three smoke passes with low Nox emissions.

Since this is a system with a power output of more than 35kW, the provisions of the 2009 edition of the Collection R have been complied with, which stipulate the obligation to install INAIL - approved and/or INAIL - compliant products in a special room dedicated to the heating plant.

Highly appreciated in the plant engineering sector, Watts offers a complete range of components for the correct and safe realisation of every configuration of a boiler room plant. These components fulfil all functional requirements for the different power sizes of gaseous or liquid fuel plants, ensuring their safety, protection, and efficiency.



*“Watts products offer high reliability and consistent performance, ensuring optimal, risk-free operation. This reliability is essential to ensure continuity of operations and plant safety, aspects of vital importance in complex operating environments subject to high safety standards.”*



In this project, in particular, INAIL qualified safety valves of the VST Series, a three-way valve for fuel shut-off and thermal discharge of the generator and expansion vessel of the **296 Series**, regulation and protection devices such as the **TRI manifold** and INAIL accessories prescribed by the R Collection for the safety and control of the thermal power plant were installed, the immersion and manual reset lockout thermostat (**TS TU**), the manual reset pressure switch (**PRM**) and the minimum lockout pressure switch with manual reset button (**PRMIN**) and, finally, the control devices such as thermometers (**TB-80VE**), pressure gauges (**M1-ABS63/R**) and pressure gauge holder taps with flange (**403/RF**) and copper alloy insulation curl (**407/D SRN**).

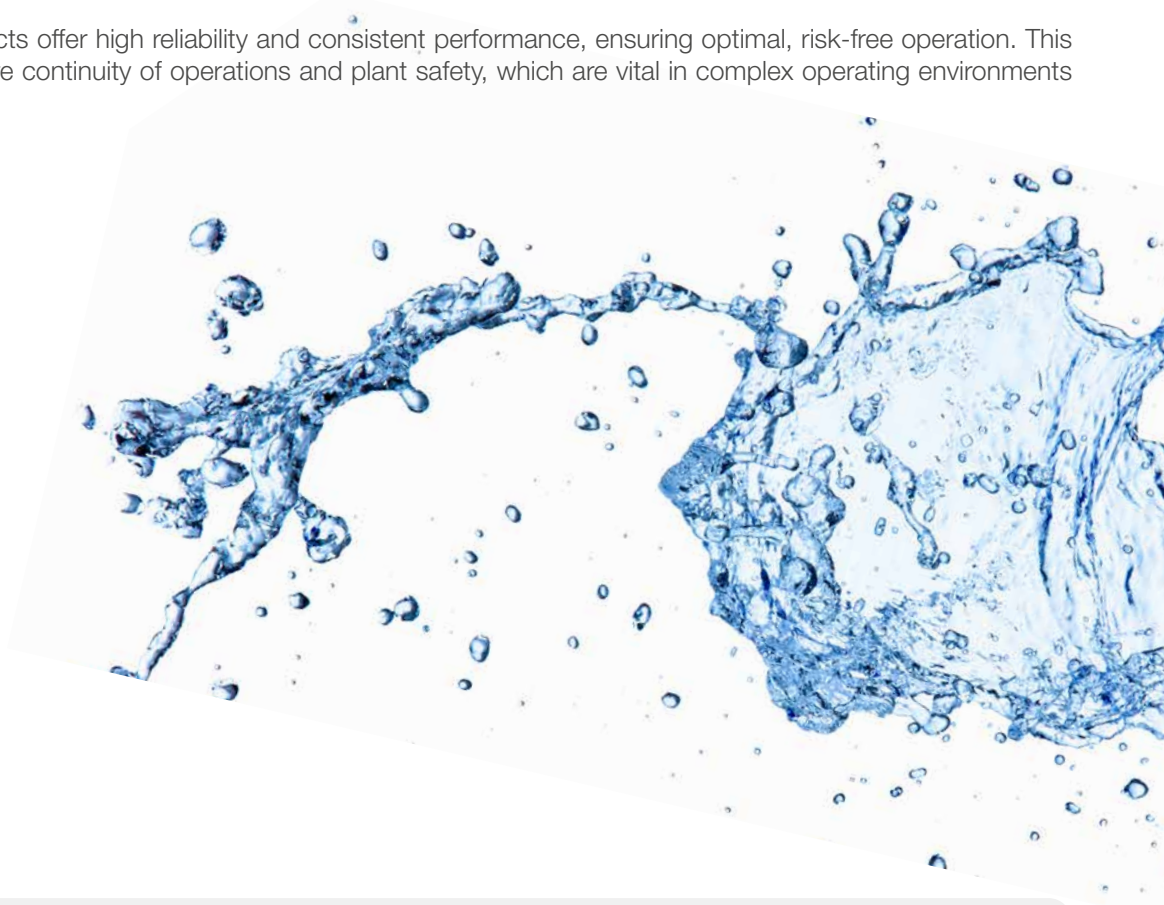
Some components for the new generator such as the anti-vibration expansion joint (**GDA**), the aluminium filter (**70600F**), the flanged pressure regulator (**FSDR**) and the **VIC/A Series** fuel shut-off valve were installed in the gas ramp.

Finally, the oil ramp was fitted with the **Series 70351** two-way oil line filter, the normally closed (NC) **M10M15** solenoid valve for the automatic shut-off of oil in the burner supply pipes, and the fuel shut-off valve (**Series 464**).

# What the customer says

“With a broad portfolio of products and services,” emphasises Enrico Scola, the industrial expert who was personally involved in the project, “Watts is the best partner I could have had. From a project point of view, it is crucial to consider both price competitiveness and product availability, as both play a crucial role in ensuring efficiency and on-time completion of a project, and over the years, the quality and reliability of Watts’ products have never failed to meet my expectations.”

He continues: “Watts’ products offer high reliability and consistent performance, ensuring optimal, risk-free operation. This reliability is essential to ensure continuity of operations and plant safety, which are vital in complex operating environments with high safety standards.



## About us

Watts is an American multinational and one of the world’s biggest manufacturers of plumbing and heating products and components. Established in 1874, the business is based in North Andover (USA) and listed on the New York Stock Exchange. Watts has an administrative headquarters in Italy, along with two production sites and two research centres, and owns various market-leading brands. Thanks to its know-how, reliability, professional ethics and attention to health, safety and the environment, Watts contributes to technological research in the sector with a constant focus on energy saving, safety, and the quality of life.

For further information, visit [www.watts.eu](http://www.watts.eu)

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