

Termomeccanica Industrial Process

Termomeccanica Group



COMPANY PROFILE



Termomeccanica Group
Tradition, technology & innovation



Termomeccanica Group was established in 1912 Termomeccanica Industrial Process - TM.I.P is part of the Termomeccanica Group. It is responsible for the design and construction of gas and liquid treatment plants from industrial processes.

TM.I.P was founded towards the end of 2011 to incorporate the plant engineering and construction technology and know-how of the company C.M.G. Impianti founded in 1977.

TM.I.P operates in the environmental protection and production sectors making use of C.M.G credentials, patents and technical expertise in synergy with the know-how and industrial experience of the Termomeccanica Group.

The company is organized into two sections: "Environmental Protection" and "Production".

- *The "Environmental Protection" section designs and supplies plants for the treatment and recovery of industrial effluent liquids and gases generated by industrial processes to comply with emission limits.*
- *The "Production" section designs and builds plants for the production of chemical products using the most advanced process technology.*

The development of new products and the continuous updating of engineering methods is assured by Research and Development activities. Thanks to an ongoing relationship with institutions of research and technologies carrying out laboratory tests and setting up pilot plants having continual access to the latest technical innovations.

This aspect is fundamental to meet market demands.

It is this specialized know-how, the capacity to manage large-scale projects and an adequate financial profile supported by a significant bank presence among the group's shareholders that make T.M.I.P. the ideal partner in both private and public environmental project business ventures.



Thermal oxidizer with flue gas treatment



Regenerative Thermal Oxidizer (RTO) /off gas treatment



Acid gas incinerator

ENVIRONMENTAL PROTECTION

The "Environmental Protection" section operates on the design and construction of plants for the recovery of chemicals (solvents, light and heavy hydrocarbons, etc.) and for the treatment of liquid and gaseous effluents coming from industries such as petrochemical, textile, resin manufacture, pharmaceuticals, coatings, oil & gas, adhesive tapemanufacture, etc.

The compound chemicals are recovered by distillation, adsorption and absorption.

The recovered product can be reused directly in production therefore the pay-back on these plants is very fast therefore their installation is highly profitable. Where selective recovery systems are not possible due to economical or feasibility reasons, a thermal oxidation plant can be installed (regenerative, recuperative and catalytic).

The choice between these types of system is dictated both by the types of organic solvent to be eliminated and by the energy potential of the user. Since the thermal oxidation works at a higher temperature, it may be convenient to equip the plant with a heat recovery system for the production of steam, thermal oil or hot water.

The company has complete know-how in waste gas treatment system, like wet and dry abatement for pollution and catalytic systems for NO_x reduction



*Regenerative thermal oxidizer (RTO) Scanisters
50.000 Nmc/h
Solvent stream treatment*

*Deodorization plant,
Oman refinery*



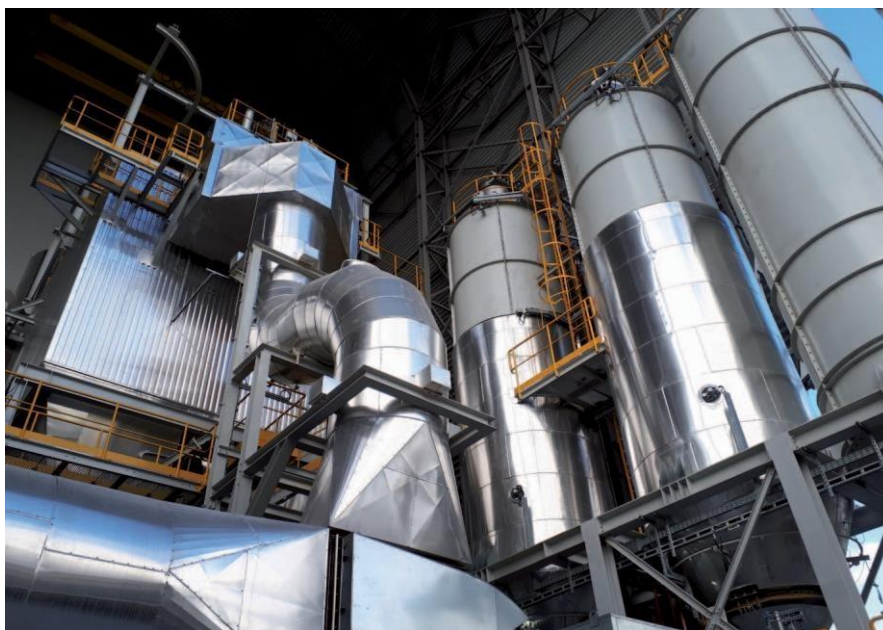
ENVIRONMENTAL PROTECTION

In this field TM.I.P. supplies:

- *Distillation plants (atmospheric, vacuum, multiple effect, azeotropic, extractive, etc.)*
- *Plant adsorption on activated carbon or zeolite with steam regeneration, PSA or inert gas.*
- *Installations of chemical/physical absorption plants for the removal of H_2S , CO_2 , HCl , HF , NH_3 , SO_2 , NO_x , etc.*
- *Air, stream or fuel gas stripping plants for the removal of BTEX, NH_3 , etc.*
- *New recuperative, regenerative and catalytic oxidation plants.*
- *Incinerators for liquid waste and process vents containing halogenated and nitrogen compounds etc.*
- *Incinerators for solids (dried sludge, contaminated soils, etc.)*
- *Dry, semi-dry and wet abatement for flue gases.*
- *Treatment of liquids polluted with hydrocarbons and/or solvents.*
- *Heat recovery systems for the production of steam, thermal oil, hot water etc.*



Distillation plant for solvent base water



Flue gas treatment waste to energy plant

REFERENCES



Incinerators for chlorinated waste liquid and vents for a pharmaceutical factory + heat recovery and fumes treatment

Liquid incinerator

Sludge incinerator



REFERENCES



Plant for concentration of emulsion oil



Plant for concentration of aqueous solution salts

Solvent distillation plants





Molecular filtration / plasticizer recovery



Vertical liquid incinerator



Horizontal liquid incinerator

REFERENCES



scrubbing system



*Solvent recovery plant by activated carbon /
200.000 Nmc/h*



*Activated carbon 2 solvents recovery +
solution distillation*

New Process Technologies



Consorzio Polo Tecnologico Magona

TM.I.P. is also a partner of "Consorzio PoloTecnologico Magona", a consortium which the aim is to promote the technological research and innovation transfer in all the sectors of Chemical Engineering and of Process and Material Industry.

CPTM represents a meeting point between companies searching for new solutions and the applied research, result of the synergetic competencies gained by universities, engineering consulting companies, and manufacturers. Applications include chemical and material engineering, environmental protection, industrial safety, energy industry, renewable energy and green chemistry.

ORGANISATION, QUALITY and ENVIRONMENT

Quality management system

TM.I.P.'s Quality Management System was set up to meet the UNI EN ISO 9001/2008, "Quality Management Systems - Requirements" standards. TM.I.P. S.r.l.-Termomeccanica Industrial Process's Quality Management System was certified according to UNI EN ISO 9001. TM.I.P.'s Quality Management System and was set up to develop systematic, transparent management, with a view to ongoing improvement in the Company's performance, considering the requirements of internal and external customers. From the stage in which tenders are submitted, each project is subjected to checks expected by the Quality System procedures. Every contract is managed according to a specific Quality Plan, implemented as per the company's procedures and per the specific requirements of the contract. The entire process involved in contract management, including inhouse activities (planning, purchasing, etc.) and outside activities (quality control of suppliers, site works, etc.), takes place in compliance with the indications of the Quality System documents (manual, procedures, guidelines, etc.), and are constantly monitored by the dedicated departments.



Environmental management system

TM.I.P.'s Environmental Management System was set up to meet the standards of the UNI EN ISO 14001:2004, "Environmental Management Systems the continuous improvement of the environmental performance of the Group's companies.