



*Air Treatment System srl*



# POLLUTION CONTROL PLANTS

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# THE SITUATION TODAY

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It's already some decades that we're discussing about the compatibility of the economic development and the ability of the environment to sustain to increasing consumption of natural resources that results.

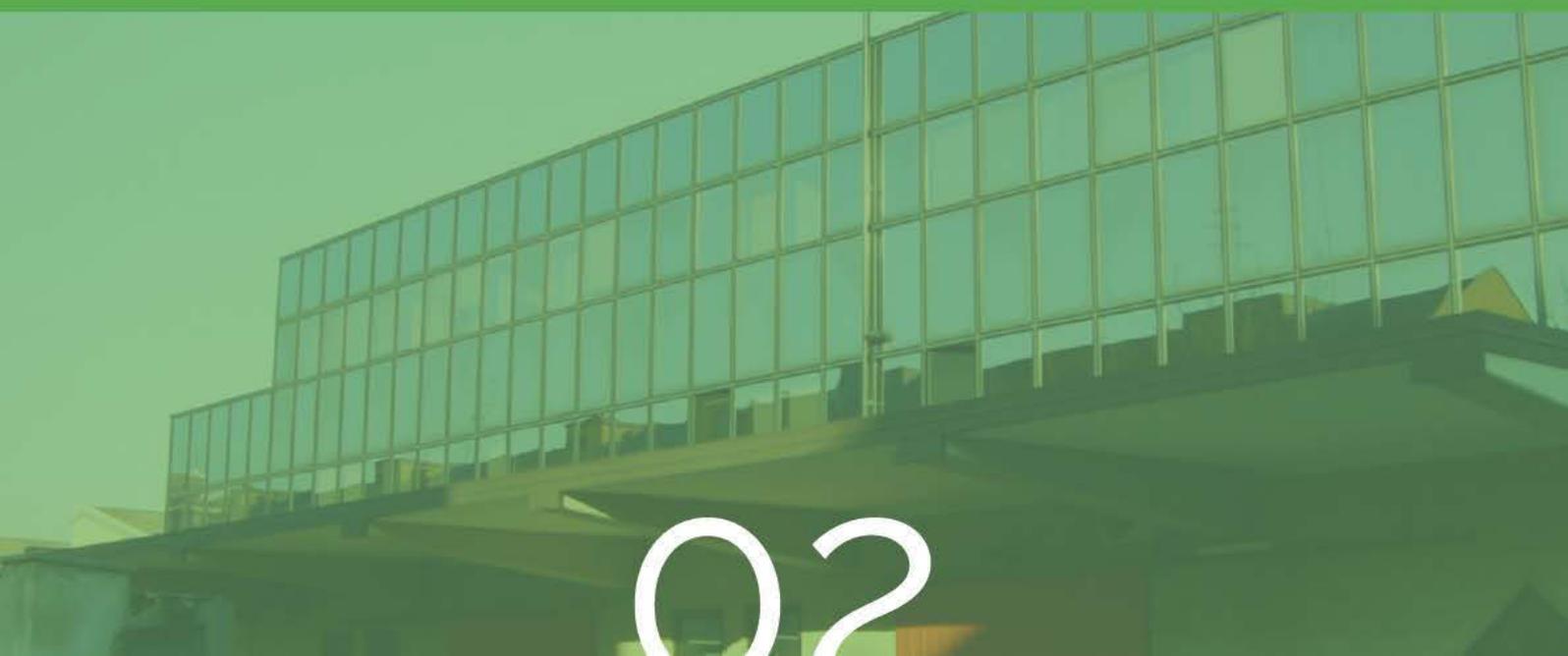
With a world population that reached 6 billions 700 millions people and a growing rate of about 90 millions / year, it's natural that the concern related to the depletion of natural resources and accentuation of environmental problems becomes increasingly high.

In particular, such concern is related to the possibility that the continuation of economic growth is threatened in three different ways: by the risk of depletion of raw materials represented by nonrenewable ones, by the risk of reduced quality of life because of pollution progress and ecosystems degradation, and, finally, by the rising cost of remedying of environmental damage.



WHO WE ARE

02





# OUR COMPANY

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ATS was born in 1990 by the union of five members coming from the plant development and responsive to emerging environmental issues; since then ATS has developed extensive experience in the design, construction, commissioning and start-up of flue gas treatment plants, in order to create a highly trained and skilled team in solving issues of flue gas emissions in different industrial fields.

In recent years, the inclusion of new generations has allowed us to combine this wide and deep experience with openness to new technologies, new processes into new parts of the world and new fields of application.

## KNOW HOW

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ATS has developed a deep knowledge in the creation of high-tech flue gas treatment systems that can meet the dictates of national and international regulations regarding gaseous emissions.

The staff has developed skills to meet the needs of each individual customer by designing systems “tailored” to meet environmental standards, safety standards and, if possible, lowering operating costs; the possibility of the process can vary from simple ESP processing to more complex double filtration solutions with dry or wet technologies.

The image shows a multi-level industrial facility, possibly a factory or refinery, with a strong green color cast. The structure is composed of numerous metal walkways, railings, and pipes. In the foreground, there are large white bags on a wooden pallet. Two yellow rectangular boxes are overlaid on the image: one highlights a section of the upper walkway system, and the other highlights a lower-level area with various pipes and equipment. The overall atmosphere is industrial and technical.

# OUR EXPERIENCE

04



# TECHNOLOGY

ATS with its know-how is able to supply a wide range of equipment in order to accomplish all the needs of their customer, in particular we could realize:

Fabric Filters

Electrostatic Precipitators (ESP)

Wet Electrostatic Precipitators (wet ESP)

Cyclones and Multicyclones

Cooling Towers

Scrubbers

Dry, semi-dry or wet flue gas desulphurisation systems

CatOx units

SCR DeNOx units (honeycomb or pellets)

"High Dust" SCR DeNOx units

SNCR DeNOx system

Ammonia storage and dosage systems

Urea to Ammonia unit

Energy recovery systems

Cogeneration plants

# ESP

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The dry electrostatic precipitators are considered the standard in dust removal in many industries as, for example, the glass industry.

This is to some peculiar characteristics of this equipment: which allows high operating temperatures, up to 470 °C, and at the same time are able to give good efficiency, about 90 - 99%, in order to allow the reach of emissions values as low as 20 mg/Nm<sup>3</sup>.

These devices utilize electric fields to move the particulate present in the gaseous stream on the collecting plates. Once on the plates such powder is removed by means of a rapping system, realized by the use of rotating hammers which allow the vibration of these elements and the separation of the particulates by the same. The dust will be collected within particular hoppers and through the same evacuated with a system of screws.

Their structure allows a wide modularity of the ESPs that, regarding the process conditions, could be realized in one or more electric fields in series, and with different dimensions both in height and width in order to satisfy the customers requests and for the environmental limits and regarding the available place to realize such installation.





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# FABRIC FILTERS

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The fabric filters are among the equipment that can provide the best results in performance level with regard to the dust removal.

The working principle is very simple: in a pulse jet fabric filter, a wire cage in each bag keeps it from collapsing during normal filtration. As the flue gas passes from the outside of the bag through the filtering media, the particulate forms a cake on the surface of the bag. Cleaning the filter bags is accomplished by introducing controlled pulses of compressed air into each filter bag through a blowpipe and orifice assembly mounted just above the filter bag. These short-duration pulses of air exit the blowpipe orifices and travel down the filter bags. The accumulated dust cake is dislodged by the resulting shock wave and falls into the hoppers.

The dust is conveyed from the hoppers away from the fabric filter by an ash transport system for beneficial re-use or disposal.

ATS control system provides plant operators with the flexibility to select the best combination of operating modes and cleaning logic to maximize availability and minimize maintenance costs. The different modes can include on-line, off-line and manual cleaning.



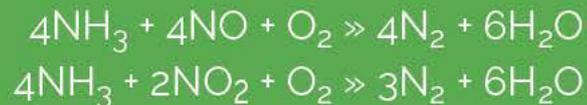
# SCR DENOX SYSTEMS

NO<sub>x</sub> emissions are generated in the furnaces by the homogeneous gas-phase reaction of oxygen and nitrogen present in the combustion gas, at the high temperatures inherent to this process. Such "thermal NO<sub>x</sub>" is essentially all in the form of NO with very little NO<sub>2</sub>. A secondary contribution to the overall NO<sub>x</sub> value is given by the presence of nitrates or other compound that contains nitrogen between the product treated or burned at high temperature.

Uncontrolled NO<sub>x</sub> emissions depend primarily on various process parameters including fuel firing rate, furnace geometry, fuels used, and raw materials. NO<sub>x</sub> emissions can vary significantly from site-to site and from furnace to furnace.

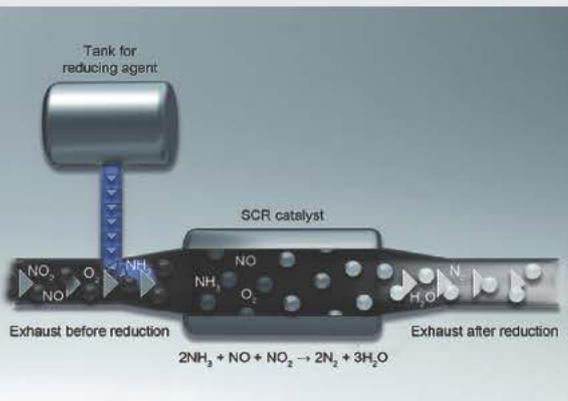
The SCR catalytic system is certainly the most common technique, as well as the most effective, for the reduction of these pollutants. Such process foresees the reaction of ammonia (NH<sub>3</sub>) with NO<sub>x</sub> to produce nitrogen (N<sub>2</sub>) and water vapour (H<sub>2</sub>O).

Two principal reactions are:



These reactions occur in the reactive sites of the catalyst placed inside a reactor DeNO<sub>x</sub>, it is important therefore that the flow arrives as homogeneous as possible to this element, for this reason it is necessary to carry out fluid-dynamic studies for each individual reactor, that will be designed in function of the process conditions provided.

The selection of the performance requirements for the SCR system controls the general SCR design.



Required NO<sub>x</sub> reduction is typically the first parameter set when considering an SCR system, since this is the driving force in the decision to install the technology. Theoretical NO<sub>x</sub> removal rates of nearly 100 percent are possible, but in the practical application of the technology, removal rates greater than roughly 90 percent become difficult. Both technical and economic limitations control the practical maximum NO<sub>x</sub> reduction that can be achieved for a particular facility.

Along with the DeNO<sub>x</sub> efficiency, the maximum ammonia slip that is specified for a system will govern to a great degree the general catalyst/reactor design for an installation. Catalyst volume is very sensitive to the specified maximum ammonia slip.

# OUR WORLD

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# PROJECTS

2014  
2014  
2014  
2014



## Waste to Energy

*A2A Ambiente S.p.A. Milano (Italy)*

Revamping of the existing FGT (3 lines) with modification of the FDG (flue gas desulphurisation) / acid neutralization with sodium bicarbonate, of the fabric filter and the SCR DeNOx unit by using ammonia solution.



## District Heating

*C.C.I.A.G. Grenoble (France)*

Supplying of complete FGT composed by scrubber, fabric filter, FGD (flue gas desulphurisation) with lime, dust handling.



## Waste to Energy

*Aster S.p.A. Bydgoszcz (Poland)*

Supplying of complete FGT (2 lines) composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling, energy recovery system, wet scrubber.



## Biomass power plant

*BWSC A/S Brigg (UK)*

Supplying of complete FGT composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, SCR DeNOx unit, ammonia storage and dosage systems, dust handling.

## IN THE SPOTLIGHT

2014



## Waste to Energy

*HEPT Sunzhou (China)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling, wet scrubber.

# PROJECTS

## Waste to Energy

*Falck Renewables S.p.A. Trezzo sull'Adda (Italy)*

Supplying of complete FGT (2 lines) composed by SCR DeNOx unit, urea storage and dosage systems.



## Glass industry

*Vetrobalsamo S.p.A. Sesto San Giovanni (Italy)*

Supplying of WHRS composed by a waste heat recovery boiler, cleaning system, heat exchanger for cogeneration, steam turbine for the electrical production.



## Steel industry

*Pontenossa S.p.A. Ponte Nossa (Italy)*

Supplying of complete FGT composed by SCR DeNOx unit, ammonia storage and dosage systems, RTO (Regenerative Thermal Oxidizer).



## Power plant

*Iren S.p.A. Moncalieri (Italy)*

Supplying of complete FGT composed by CatOx unit, SCR DeNOx unit, ammonia storage and dosage systems.



## Waste to Energy

*ACCAM S.p.A. Busto Arsizio (Italy)*

Supplying of WHRS composed by a titanium heat exchanger



## Oil industry

*Termini Imerese Energia e Ambiente S.p.A. Termini Imerese (Italy)*

Supplying of complete FGT composed by cyclones, wet ESP.



2014  
2013  
2013  
2013  
2013  
2013





### Waste to Energy

*Brianza Energia e Ambiente S.p.A. Desio (Italy)*

Revamping of the existing FGT composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime.



### Glass industry

*O-I Manufacturing S.p.A. Bari (Italy)*

Revamping of the existing FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.



### Glass industry

*O-I Manufacturing S.p.A. Mezzocorona (Italy)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.



### Glass industry

*JSC "GomelGlass" Gomel (Belarus)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, SCR DeNOx unit, ammonia storage and dosage systems, dust handling.



### Biomass power plant

*Euroenergy S.p.A. Cutro (Italy)*

Supplying of complete FGT composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling, SCR DeNOx unit, ammonia storage and dosage systems.



### Waste to energy

*Ruths S.r.l. Kosice (Slovakia)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling.

## OLDER PROJECTS

2012

### Biomass gasifier

*Pyrox Italia S.p.A. Lasa (Italy)*

Supplying of complete FGT for tar removal composed by oil-ESP.

### Biomass gasifier

*Pyrox Italia S.p.A. Borgosesia (Italy)*

Supplying of complete FGT for tar removal composed by oil-ESP.

### Biomass power plant

*LGH Rinnovabili S.p.A. Cremona (Italy)*

Supplying of complete FGT composed by cyclones, scrubber, fabric filter, FGD (flue gas desulphurisation) with bicarbonate, SCR DeNOx unit, urea storage and dosage systems, dust handling.

## OLDER PROJECTS

2011

### District heating

*Enertherm S.A. Courbevoie (France)*

Supplying of complete FGT composed by 4 scrubbers, fabric filter, FGD (flue gas desulphurisation) with bicarbonate, dust handling, energy recovery system.

### Glass industry

*Duralex Internation SA (France)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

### Oil industry

*SAIO S.p.A. Ostuni (Italy)*

Supplying of complete FGT composed by wet ESP.

## OLDER PROJECTS

2010

### Biomass power plant

*Euroenergy S.p.A. Manfredonia (Italy)*

Supplying of complete FGT composed by SCR DeNOx unit, ammonia storage and dosage systems, energy recovery system.

### Glass industry

*Vetrobalsamo S.p.A. Cinisello Balsamo (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) with bicarbonate, dust handling.

### Glass industry

*Pilkington S.p.A. Cowley Hill Works (UK)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, SCR DeNOx unit, ammonia storage and dosage systems, dust handling.

## OLDER PROJECTS

2009

### Waste to energy

*Paderno Energia s.r.l. Paderno Dugnano (Italy)*

Supplying of complete FGT composed by SCR DeNOx unit, ammonia storage and dosage systems.

### Waste to energy

*Termomeccanica S.p.A. Valmadrera (Italy)*

Supplying of complete FGT (3 lines) composed by SCR DeNOx unit, ammonia storage and dosage systems.

**Distillery industry**

*Oleificio Tampieri S.p.A. Faenza (Italy)*

Revamping of the existing wet ESP

**Glass industry**

*Pilkington S.p.A. Greengate Works (UK)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, SCR DeNOx unit, ammonia storage and dosage systems, dust handling.

**Waste to energy**

*Termomeccanica S.p.A. San Vittore del Lazio (Italy)*

Supplying of complete FGT (3 lines) in double filtration composed by ESP, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, SCR DeNOx unit, ammonia storage and dosage systems, dust handling.

**Glass industry**

*Ardagh Glass S.p.A. Montorio al Vomano (Italy)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

**Chemical industry**

*Laterlite S.p.A. Lentella (Italy)*

Supplying of complete FGT composed by a fabric filter.

**Oil & gas**

*Syndial S.p.A. Assemini (Italy)*

Supplying of complete FGT composed by an ESP.

**Waste to energy**

*Termomeccanica S.p.A. Valmadrera (Italy)*

Supplying of complete FGT composed by energy recovery system, wet scrubber with soda injection.

**Industrial boiler**

*Marangoni S.p.A. Rovereto (Italy)*

Supplying of complete FGT (2 lines) composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling.

**Biomass power plant**

*Caviro Distillerie S.p.A. Faenza (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling, wet ESP, SCR DeNOx unit, ammonia storage and dosage system.

**Biomass power plant**

*Distillerie Bonollo S.p.A. Anagni (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling, wet ESP, energy recovery system.

**Glass industry**

*Vetreria Etrusca s.r.l. Altare (Italy)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

**Glass industry**

*O-I Manufacturing S.p.A. Vayres (France)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

**Glass industry**

*O-I Manufacturing S.p.A. Reims Food (France)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

**Glass industry**

*O-I Manufacturing S.p.A. Béziers (France)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

**Glass industry**

*O-I Manufacturing S.p.A. Labégude (France)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

**Biomass power plant**

*Distercoop S.p.A. Faenza (Italy)*

Supplying of complete FGT composed by cyclones, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling, energy recovery system.

**Waste to energy**

*Hera Ambiente S.p.A. Modena (Italy)*

Supplying of complete FGT composed by SCR DeNOx unit, ammonia storage and dosage systems, energy recovery system.

**Food industry**

*Parboriz S.p.A. Mortara (Italy)*

Supplying of complete FGT composed by cyclones, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

**Waste to energy**

*HIOLE Industries S.A. Poitiers (France)*

Supplying of complete FGT (2 lines) composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

**Glass industry**

*Vetriere Riunite S.p.A. (Italy)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

**Glass industry**

*O-I Manufacturing S.p.A. Marsala (Italy)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

**Waste to energy**

*ITEA S.p.A. Singapore (Singapore)*

Supplying of complete FGT in double filtration composed by 2 scrubbers, 2 fabric filters, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling, energy recovery system.

**Glass industry**

*Bormioli Rocco & Figlio S.p.A. Trezzano s/N (Italy)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

## Glass industry

*Bormioli Rocco & Figlio S.p.A. Altare (Italy)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

## Waste to energy

*A.E.R "i cipressi" S.p.A. Rufina (Italy)*

Supplying of complete FGT composed by SNCR DeNOx unit, urea storage and dosage systems, PAC storage and dosage systems.

## Waste to energy

*Fisia italmipianti S.p.A. Acerra (Italy)*

Supplying of complete FGT (3 lines) composed by SCR DeNOx unit, ammonia storage and dosage systems, energy recovery system.

## Biomass power plant

*Villa Pana S.p.A. Faenza (Italy)*

Supplying of complete FGT composed by wet ESP.

## Waste to energy

*TIRU Engineering S.A. Vesoul (France)*

Supplying of complete FGT composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling, energy recovery system.

## Waste to energy

*Consorzio CETMA Srl (Italy)*

Supplying of pilot FGT composed by energy recovery system, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, SCR DeNOx unit, ammonia storage and dosage systems, dust handling..

## Glass industry

*Bormioli Rocco & Figlio S.p.A. Masnières (France)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

## Oil industry

*SAIO S.p.A. Ostuni (Italy)*

Supplying of complete FGT composed by wet ESP.

## Waste to energy

*Hera Ambiente S.p.A. Modena (Italy)*

Supplying of complete FGT (3 lines) in double filtration composed by ESP, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling.

## Distillery industry

*Distillerie Bonollo S.p.A. Torrita di Siena (Italy)*

Supplying of complete FGT composed by cyclones, wet ESP.

## Distillery industry

*Distillerie Bonollo S.p.A. Conselve (Italy)*

Supplying of complete FGT composed by cyclones, wet ESP.

## OLDER PROJECTS

2003

### Distillery industry

*Distillerie De Luca S.p.A. Novoli (Italy)*

Supplying of complete FGT composed by cyclones, wet ESP.

### Biomass power plant

*Tampieri Energie S.p.A. Faenza (Italy)*

Supplying of complete FGT composed by cyclones, cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling, wet ESP.

### Distillery industry

*Italiana Costruzioni 2000 S.p.A.*

*Monopoli (Italy)*

Supplying of complete FGT composed by a wet ESP.

### Distillery industry

*Trapas S.p.A. Petrosino (Italy)*

Supplying of complete FGT composed by a wet ESP.

## OLDER PROJECTS

2002

### Glass industry

*O-I Manufacturing S.p.A. Asti (Italy)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

### Industrial boiler

*Industrie Valentini S.p.A. Rimini*

*(Italy)*

Supplying of complete FGT composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling.

## OLDER PROJECTS

2001

### Waste to energy

*META S.p.A. Modena (Italy)*

Supplying of complete FGT composed by ESP, scrubber, fabric filter, FGD (flue gas desulphurisation) with lime, dust handling.

### Glass industry

*Pilkington S.p.A. San Salvo (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling, energy recovery system.

### Glass industry

*Pilkington S.p.A. Porto Marghera (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

### Waste to energy

*Termomeccanica Ecologia S.p.A.*

*Cagliari (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling, energy recovery system, wet scrubber.

### Distillery industry

*Ballice Distillati S.p.A. Mottola (Italy)*

Supplying of complete FGT composed by a wet ESP.

## OLDER PROJECTS

2001

### Biomass power plant

*Fortum Energy and Heat Oy Cutro (Italy)*

Supplying of complete FGT composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

## OLDER PROJECTS

2000

### Distillery industry

*Distilleria Agralco S.c.a.p. Estella (Spain)*

Supplying of complete FGT composed by a wet ESP.

### Waste to energy

*Chimet S.p.A. Badia al Pino (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with bicarbonate, dust handling, energy recovery system, wet scrubber.

### Glass industry

*Vebad S.p.A. Gioia del Colle (Italy)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

## OLDER PROJECTS

1999

### Waste to energy

*NoyVallesina S.p.A. Dalmine (Italy)*

Supplying of complete FGT (2 lines) composed by ESP, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

### Waste to energy

*Mengozzi S.p.A. Forlì (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

### Cement industry

*Buzzi Unicem S.p.A. Lentella (Italy)*

Supplying of complete FGT (2 lines) composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

### Biomass power plant

*Legnochimica S.p.A. Rende (Italy)*

Supplying of complete FGT (2 lines) composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

## OLDER PROJECTS

1998

### Waste to energy

*Public Consult S.p.A. Padova (Italy)*

Supplying of complete FGT composed by an ESP.

### Glass industry

*Vetriere Cooperative Piegaresi S.p.A. Piegaro (Italy)*

Supplying of complete FGT composed by scrubber, ESP, FGD (flue gas desulphurisation) with lime, dust handling.

**Distillery industry**

*Distilleria Bonollo S.p.A. Anagni (Italy)*

Supplying of complete FGT composed by a wet ESP.

**Distillery industry**

*Caviro S.p.A. Faenza (Italy)*

Supplying of complete FGT composed by a wet ESP.

**Waste to energy**

*Brianza Energia e Ambiente S.p.A. Desio (Italy)*

Revamping of the existing ESP (2 lines).

**Waste to energy**

*Secit S.p.A. Terni (Italy)*

Supplying of complete FGT composed by spray-dryer absorber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime slurry, dust handling.

**Non-ferrous materials**

*Alcoa S.p.A. Fusina (Italy)*

Supplying of complete FGT composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

**Storage units**

*Techint italmimpianti S.p.A. Genova (Italy)*

Supplying of complete FGT composed by a water spraying system

**Waste to energy**

*Tecnimont S.p.A. Isola d'Elba (Italy)*

Supplying of complete FGT composed by spray-dryer absorber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime slurry, dust handling.

**Waste to energy**

*Fisia italmimpianti S.p.A. Lamezia Terme (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

**Distillery industry**

*Distillerie Deta S.p.A. Poggibonsi (Italy)*

Supplying of complete FGT composed by a wet ESP.

**Oil industry**

*Oleificio Tampieri S.p.A. Faenza (Italy)*

Supplying of complete FGT composed by a wet ESP.

## OLDER PROJECTS

1995

### Non-ferrous materials

*Alumix S.p.A. Fusina (Italy)*

Supplying of complete FGT composed by scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

### Distillery industry

*Italcol S.p.A. Castelfiorentino (Italy)*

Supplying of complete FGT composed by a wet ESP.

## OLDER PROJECTS

1994

### Fertilizers industry

*Enichem Agricoltura S.p.A. Ferrara (Italy)*

Supplying of complete FGT composed by a wet scrubber.

### Waste to energy

*Tecnitalia S.p.A. Badia al Pino (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

### Distillery industry

*Distillerie Da Ponte S.p.A. Conegliano (Italy)*

Supplying of complete FGT composed by an ESP.

### Distillery industry

*Distillerie Nardini S.p.A. Monastier (Italy)*

Supplying of complete FGT composed by an ESP.

## OLDER PROJECTS

1993

### Waste to energy

*John Zink S.p.A. Scanzorosciate (Italy)*

Supplying of complete FGT composed by cooling tower, scrubber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime, dust handling.

### Distillery industry

*Distillerie Bertolino S.p.A. Partinico (Italy)*

Supplying of complete FGT composed by an ESP.

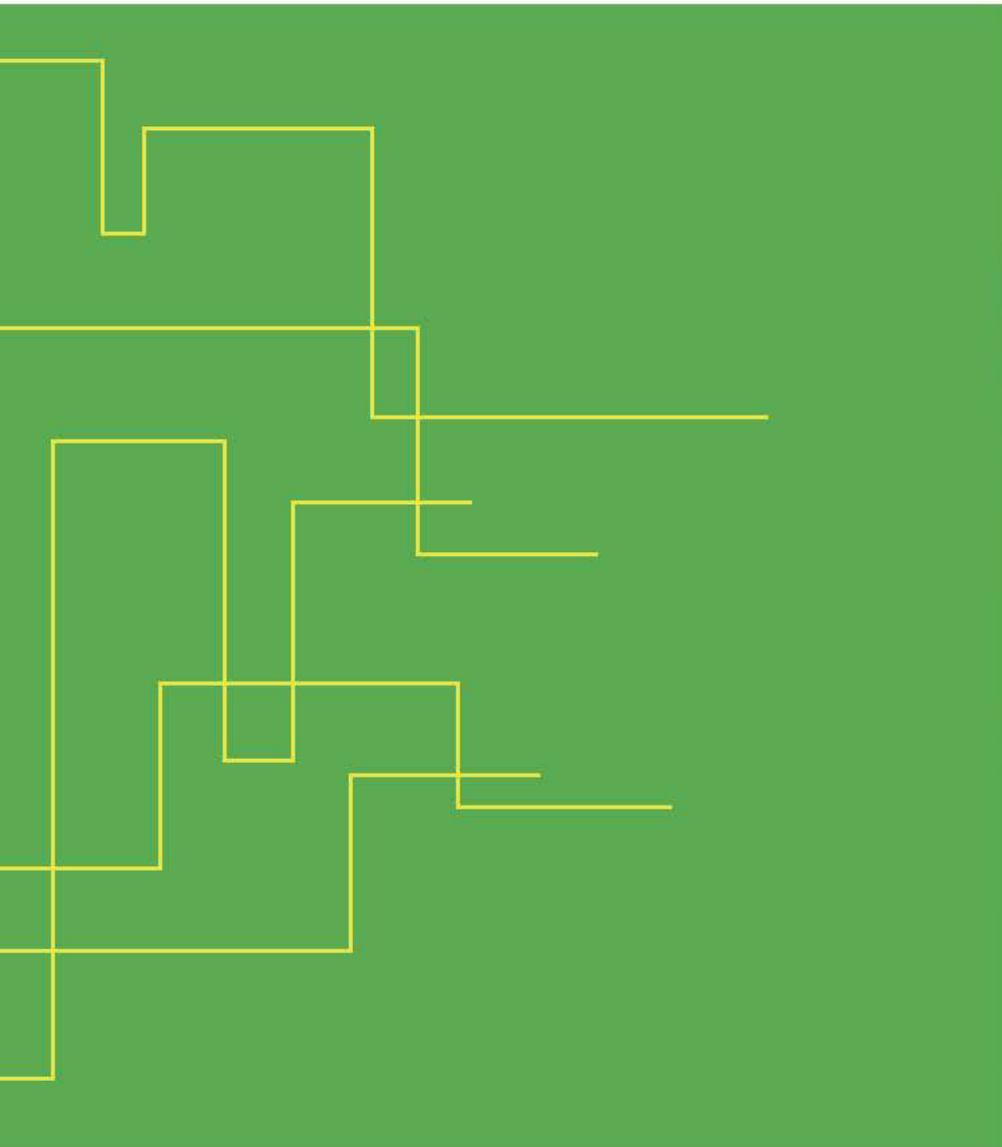
## OLDER PROJECTS

1992

### Waste to energy

*Termomeccanica Ecologia S.p.A. Ferrara (Italy)*

Supplying of complete FGT composed by spray-dryer absorber, fabric filter, FGD (flue gas desulphurisation) / acid neutralization with lime slurry, dust handling.



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