



## Delivery program



*Quick guide*

July 2009

# PREMATECNICA

Equipos e instalaciones para las industrias de proceso y energía

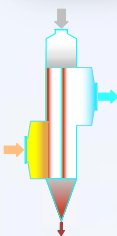


**ecoPREM** seeks to be environmental friendly. Its purpose is to clean flue gas before it is released into the atmosphere. For this purpose PREMATECNICA puts at your disposal “turn-key” products designed by us or under license.



## **DeNO<sub>x</sub>:**

PREMATECNICA can reduce up to 75% of the NO<sub>x</sub> with SNCR technology and 98% with SCR.



## **DeSO<sub>x</sub>:**

Applied to SO<sub>2</sub> removal for coal boiler exhaust gas with efficiency up to 98%. The gas flow pass through a limestone bed close to saturation temperature and is cleaned from SO<sub>2</sub> with high efficiency.



## **Bags filters:**

Plenum filters equipped with the VENTO system and CFD design. For nuisance filters we use a cyclone bag filter improving, this way its efficiency.



## **Scrubbers:**

Multi-stage (ECOVENT), plate (ECOVENT 3000), acid gas (LEC). Sub-micron de-dusting: Wet filters (WE), Multi-stage (ECOVENT).



## **Flares:**

Single, multiple, elevated, ground, pit, special configurations, ancillary equipment, etc.



## **Incinerators:**

We also include turn-key plants for residual gas burning. From basic engineering to commissioning and maintenance, as part of our job.



## **VRU (Vapours Recovery Units):**

For hydrocarbons vapours, recovery units based in Pressure Swing Adsorption (PSA) technology with two activated carbon bed vessels, alternating on a 15 minute time cycle.



## **Spray cooling towers:**

Customized complete gas cooling systems; proprietary twin-fluid nozzles developed to guarantee efficient regulation; low compressed air consumption (30-50% less); sophisticated air/water regulation skid to control downstream temperature according to gas flow rate.

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*We, at PREMATECNICA, are concerned about CO<sub>2</sub> emissions. Therefore we believe that we must **maximize energy efficiency** and, where possible, use alternative energies. This is why we have included these two highly efficient technologies in our program:*

## Waste heat recovery units, HRSG and boilers

Together with our partner, we have developed a wide variety of superefficient Heat Recovery Systems for harnessing all types of waste heat, originating from various fuels and from different industrial sources. Our superefficient Waste Heat Recovery Systems find ideal applications in Cogeneration Systems working on Reciprocating Engines and Gas Turbines:

- Max. 60 t/h
- Exhaust heat recovery from reciprocating engine driven gen-sets
  - Heavy fuel, gas and diesel fired
  - Exhaust heat recovery from gas turbine
  - Hot waste gases from:
    - Scrap melting steel furnaces
    - Cement kilns
    - Industrial furnaces
    - Incinerators

 We can also supply fire-tube and water-tube steam boilers (up to 60 t/h), thermal oil heaters, etc.



## Solar panels

PREMATECNICA offers on-roof technology or on-ground. With our type of business, our client will have to do a ZERO investment. We will rent his warehouse/factory roof and he shall receive an allowance for 25 years. After that our client will become the owner of the installation. Meanwhile we take care of everything: **zero cost/cash income from day one.**

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## Rotary equipment



*Within its original business born almost 50 years ago, PREMATECNICA is offering you an interesting range of products. As always, we can include engineering, erection and supervision (available only in certain countries).*

### Compressors



#### HOWDEN BURTON CORBLIN

Oil-free reciprocant compressors for process gases Burton Corblin®. Diaphragm up to 200 m<sup>3</sup>/h and 3.000 bar (a). Piston up to 10.000 m<sup>3</sup>/h and 250 bar (a). Compression sets.



#### HOWDEN PROCESS COMPRESSORS

Compression system rotary screw with or without lubrication – API 619. For gas licuefaction and compression, CO<sub>2</sub> recovery and hydrocarbon processing.



#### MEHRER

100% oil free gas compression. Special designs, non-leakage design, multiple accessories, control system. "Turn-key" skids or bare shaft machines. CO<sub>2</sub> and biogas specialists. ATEX certified.



#### DRESSER-RAND

Steam, Coppus®, Murray and Nadrowski, single and multi-stage, up to 100MW. API 611 – API 612 for process in industrial applications.

### Turbines



#### DICKOW

Process and magnetic coupling. For all type of fluids, specially hydrocarbons and high temperature thermal oil (up to 400 C). API 610/685.



#### ROTO-JET

High pressure (Pitot tube system) for general services and API 610 applications.



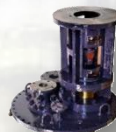
#### WEIR-BEGEMANN

Heavy duty process pumps for petroleum and gas industry services. Designed to comply with API 610-9th Ed. (ISO 13709).



#### TUTHILL

Liquid ring Kinney® and oil-free, dry screw, rotary piston, positive displacement blowers for gases and air, boosters. Complete skid systems. Vacuum to 0.0003 mbar.



#### LEWIS

Sulphuric acid, phosphoric and sulphur process elbow and vertical in proprietary lewmet® alloys.



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### Blowers and ventilators



#### TUTHILL

Low-noise rotary lobe blowers for air and process gas. Specialists in biogas. Wide range covering capacities from 10 m<sup>3</sup>/h up to 16.000 m<sup>3</sup>/h.



#### FIMA

Process blowers up to 200.000 m<sup>3</sup>/h., centrifugal compressors API 617, axial and crossed flow ventilators, Zone 0 ATEX approved blowers.

### Filters



#### FILTREX

Industrial and naval filters for all kind of Liquids (water, oil, fuel-oil, diesel, petrol, plastics, etc...), simplex, duplex, self-cleaning lamellar, wedge wire multi-basket backwashing, self-cleaning micronic filters and complete filtration packages.



#### FORAIN

For high pressure gas lines: cartridge and multicyclone type filters, vane separators, silencers, pig traps and gas conditioning units for turbine feeding.



#### STORK THERMEQ

Specialised in low NO<sub>x</sub> burners for boilers and other applications.

### Burners



#### CAMERON

Measurement and control instrumentation Barton®, Nuflo™, Clif-Mock™, Caldon®, for the process control, oil and gas industries: chart recorders, turbine meters, flow analyzers, positive displacement meters, flow computers, sampling systems, ultrasonics and water cut analysis.

### Instrumentation



#### ROHRBACK COSASCO

Coupons, probes, equipment and integrated control and measurement corrosion and sediment monitoring systems.



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## Special ? equipment



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### ISG

Turn-key equipment for the drying and purification of gases. Fluid treatment and conditioning. Gas production. Absorption, adsorption, condensation & separation, gas purification with membranes, PSA, reforming, etc.



### PROTECTOSEAL

Flame arrestors designed according to 94/9/EC y EN12874 directives with optional temperature probe for system's total protection and control and ATEX emergency and venting pressure relief valves for tanks.



### GRAHAM

Single and multi-stage ejectors, exhaust fans, atemperators, steam surface condensers for turbines and helically coiled exchangers.



### GEURTS

Heat transfer equipment, energy recovery systems, gas/gas heat exchangers, biogas conditioning packages.



### RESCO

Special refractory cements designed for industries like : powergen, refinery, oil & gas, petrochemical, paper, cement, lime, aluminium, copper, nickel, glass, incineration, etc.



### PLIDCO

Safety standard and customized fittings for repairing and maintaining pipelines without shutdown and sealants.



### PREMATECNICA

Tank mixers for hydrocarbons, crude oil, chemicals and specials. Side-entry or vertical, fixed or variable angle, manual or automatic. Special designs for high temperature and high viscosity products. ATEX certified for classified areas.



### Flash dryers

Pond/fly wet ash drying for: cement plant, chemicals inorganic & organic, pesticides, dyestuff and pigments, fertilizers, mineral ore concentrates, ceramics, food Industry, pharmaceuticals and agricultural products.

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*We design, supply, install, commission and maintain anti-fire protection (AFP) systems "turn-key", supervisory control and data acquisition (SCADA) systems for process plants, security against intrusion (SSAI) systems including perimeter protection, closed circuit of television (CCTV) systems and PA systems.*

We have developed our activity in the **anti-fire protection, security and PA systems** area offering specialized solutions like:

- Anti-fire protection
- Fire detection
- Extinction
- Partitions
- PA systems
- Safety systems
- System integration
- Maintenance
- Selfprotection plans
- Hazards identification

And in the **instrumentation** area...

## MONICON-SENSIDYNE

Combustible and toxic fixed gas detection systems.



## VIBRO-METER

Microprocessor controlled UV and UV/IR optical Omniguard® flame detectors with patented Fire Event Analysis (FEA) discrimination technology.



PREMATECNICA was founded in 1961 in Madrid (Spain). We began distributing, in the Spanish market, first-line equipment for the process and energy industries. Our activity has now expanded to engineering based on product, manufacturing, maintenance, after-sales and consulting.

International action to PREMATECNICA experienced strong momentum since 1980 with the creation, that year, the society PREMATECNICA DE MEXICO.

We are fully engaged in a collaborative global business policy and effective responses to the demands of our customers. We have expanded the traditional PREMATECNICA "turn-key" formula (supply, installation and operation), with a subsequent phase of maintenance and with a prior advice on the analysis and selection of alternatives.

To meet this commitment, PREMATECNICA and its professional team of experts have developed a wide variety of equipment for the environmental care (ecoPREM), the energy efficiency (enerPREM) and our safety (securPREM).

With its headquarters and warehouse in Madrid, PREMATECNICA has also a branch in Seville. As part of our policy, we have a growing number of agents spread worldwide, as well as international partners.



*perfect*

***balance***

**"We do our best to offer you great products and services"**

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