





## COMPANY PROFILE

PNR Italia was grounded in 1968 as a trading Company for the sale of parts and components for fire fighting systems.

In the years we have developed the manufacturing of a spray nozzle range and extended our activity to the general industrial markets.

We own today one of the most modern spray nozzle manufacturing facilities in the world

While there significant are no proprietory technologies or patents in spraying nozzles field, manufacturing Company has developed their own techniques and often built their own machines in order to supply quality products responding to the alwavs more demanding industry requirements.

PNR has available today a very fine, world class machine tool park for spray nozzles manufacturing.

All important machines are CNC, some of them built to our design in order to accomplish special manufacturing jobs. Laboratory and control instruments of excellent quality allow us to certify our product performances.

We also care about prompt and reliable Customer service, and have developed besides our network of Distributors, PNR branch Companies over most of the important world markets.

PNR works on a Quality System approved according to the Vision 2000 norms (August 2002) and employs a total of 137 persons worldwide, about 10% of which are University graduate engineers.

## CTG UG18 BR

## General purpose nozzles Catalog

Hydraulic nozzles, with full-cone, hollow cone, flat and needle jet in a range of dimensions and materials, with capacities from as low as 0.08 to 9.410 litres per minute. Designs for non-clogging operation, high impact jetting or limited dimensions nozzles, developed from our experience on thousands of real application histories.

## In this catalogue



### **FULL CONE NOZZLES**

One of the most complete ranges in the world, offering a wide capacity span, with designs based on slotted-disc, X-style or S-style vanes, round or square spray pattern, non clogging spiral design, threaded and flanged connections.



### **FLAT JET NOZZLES**

All possible designs, for normal applications, high pressure washing, high impact and off line jets, capacities from as low as 0.06 litres per minute. Complemented with the widest possible range of professional assembly fittings.



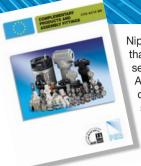
#### **HOLLOW CONE NOZZLES**

From the largest scrubber operation and dust abatement, to the most gentle humidification process our nozzle range has everything for the system designer.

We can provide you with the best choice of materials for each given industrial process.

# CTG AC18 BR

**Accessories Catalog** 



Nipples, clamps, swivel joints, everything that helps you to assemble, align and service your spraying systems.

Air blowers, mixing eductors, filters, cleaning guns and lances, hose reels, steam heaters, pressure tanks and quick couplings to help you in building a professional system.

### In this catalogue



#### PIPE FITTINGS

The widest range in the world of plastic moulded or metal pipe clamps makes it possible to assemble large quantities of nozzles easily and in a short time. Fixed and orientable assemblies are available well as nozzles fixed through locknut or quick bayonet design. Tight quality control and the choice of the best materials will increase your system efficiency and value.



### **AIR BLOWERS**

A line of air blowers with straight, flat or extra wide flat jet to easily obtain a powerful, directional air stream while keeping noise within regulation limits. Eliminate drops from your products, complete drying processes or displace lightweight objects on a conveyor. High quality plastic materials or electroless nickel plated aluminium available.



#### **HOSE REELS**

The latest complement to our line of cleaning guns is a range of hose reels coming in a variety of capacities and specifications. Made totally out of high quality stainless steel, and fitted with food grade high resistance hoses, they ideally suit the strict hygiene requirements of the modern food and beverage industry.

## CTG AZ16 BR

Air assisted atomizers

Ultrasonic, classic and automatic atomizers for the proper atomization in any process, in nickel plated brass, stainless steel, Lucite© or PVC High quality machining, tight quality control and packing designed on purpose assure professional results for your system and...we deliver from stock.



## In this catalogue

### **ULTRASONIC ATOMIZERS**

Fine and very fine atomised jets available for industrial processes, with a full come spray pattern with narrow angle and long ambient penetration. Very wide operation range thanks to air and water being ejected separately. The ideal solution for humidification and disinfection applications.



#### CLASSIC ATOMIZERS

Classic and automatic atomizers with a wide choice of flat jet, full cone and wide full cone spray patterns, both on pressure and siphon feeding. Brass, stainless steel, Lucite and plastic materials supplied as standard. Special types to customer requirements and assembly accessories available.



### ATOMIZING SYSTEMS

Hydro pneumatic operating cabinets include all parts necessary to operate your atomising system, like pressure reducers, electro valves, drain valves and manometers. Spray programmers are electronic devices developed for the purpose, and let your system operate automatically with fixed values set for humidity and/or temperature.



## CTG LS16 BR

## Tank washing systems



Everything from the simple fixed spray balls and pintle nozzles to the two-axis washers.

All possible kind of tankwashers for low, medium and high pressure cleaning processes. The best materials, modern machining and modern surface polishing techniques make up for first class products.

### In this catalogue



#### **FIXED DEVICES**

Fixed spray balls and pintle nozzles are still of use in some simple application or when the geometry of the volume to be cleaned does not allow for any other solution.

Made out of first quality stainless steel and accurately polished to reduce the risk of bacterial growth.



#### ONE AXIS HEADS

The widest range of one-axis tankwashers, with different designs responding to different requirements in terms of throw and impact.

A perfect quality is assured by our long experience, the choice of the highest grade materials and very accurate surface polishing.



### TWO AXIS HEADS

A wide choice of heavy tank washers, both low and high pressure, driven by the cleaning solution or through an electric or air motor for heavy duty industrial applications.

All equipment has been tested in numberless applications, is highly reliable and offers perfect performances.

## CTG LN16 BR

**Evaporative cooling** 

Spillback and air assisted lances for gas cooling processes in steelworks, cement plants, glass furnaces and incinerators and any other industrial sector. Call on Pnr for every possible need, from a complete system PLC driven to spare parts, or retrofitting and upgrading of your system.



### In this catalogue

#### SPILLBACK LANCES

Classic spillback nozzles in a range of capacities, materials ranging from stainless steel to hardened stainless steel, titanium and hard metal. The whole range of accessories like line filters, flexible hoses and quick coupling joints. We can also quote for retrofitting new lances to your present system.



# AIR ASSISTED LANCES (Internal mix)

High efficiency air assisted atomising nozzles and lances, with a very wide regulation range in a variety of excellent stainless steels and super alloys, and all assembly accessories. Each single nozzle supplied with material certificate and operation diagram



## AIR ASSISTED LANCES (External mix)

An external mix nozzle offered in a range of capacities is the best solution where it is required to spray slurries, lime calk and any liquid containing suspended solids. Normally supplied in high grade stainless steel, with optional inside lining in hard metal.



## CTG PM09 BR

Papermill nozzles



A sixteen page Catalog showing products specially developed for perfect results on paper making machines, included our patented disc nozzle for self-cleaning showers and all kinds of nozzles and systems for the various steps in paper making process.

### In this catalogue



### NOZZLES FOR SELF-CLEANING SHOWERS

Our disc nozzle has been redesigned with a completely new orifice profile. A better spray pattern and a longer wear life are the advantages from this new design. Matching nipples and locknut are also available, as well as complete showers.



### PAPERMILL NOZZLES

All the classic nozzles type familiar to the paper maker, out of high quality stainless steel, or with ceramic and ruby inserts where rapid wear requires frequent replacement. Available with the most popular European and American threads.



### **ADDITIONAL PRODUCTS**

Numerous other products from the standard Pnr range which can be used in a paper machine, like air atomizers, air blowers, tank washers cleaning guns.

Our aim is to make available to you the most complete range on the market

# CTG SP10 BR

Spraydry nozzles

A complete range of high pressure and air assisted spraydry nozzle range, manufactured from the best available materials and tested with extreme care for optimum results. Nozzles supplied with material and test certificate, plus operation charts for capacity and drop size spectrum at various pressure values.



## In this catalogue

### **HYDRAULIC NOZZLES**

The well known design with stainless steel body and adapter containing orifice, whirl chamber and top plate made out of high quality tungsten carbide.

High quality materials and precision tooling, competitive prices and prompt deliveries.



### AIR ASSISTED NOZZLES

This very special nozzle allows for independent regulation of air and liquid pressure, therefore assuring a very wide regulation range and the most flexible operation conditions. Available in a range of sizes and made out of high grade stainless steel, is also available with inside parts in tungsten carbide.



# CTG SW11 BR

Steelwork nozzles



A complete line of nozzles for steel work applications including continuous casting, high pressure descaling nozzles, roll cooling and coke quenching nozzles. Our steelwork nozzles work with optimum results in many plants around the world, and offer a proven design together with a competitive pricing.

### In this catalogue



### CONTINUOUS CASTINGS

All nozzles normally used, full-cone or flat jet, with internal or external thread or designed for nipple and locknut assembly and including air atomising nozzles. Brass or stainless steel are available.



## HIGH PRESSURE DESCALING

A wide range of long proven nozzles, with dovetail connection or inside orientation profile. Orifices in hardened stainless steel, hard metal or long-life hard metal. New high efficiency models are available in standard or mini size for shorter pitch assembly, both being supplied on request with flow improver and inlet filter.



#### **ADDITIONAL TYPES**

Nozzles for every steelwork requirement, i.e. roller cooling, coke quenching, furnace gas cooling and cold rolling lubrication.

# CTG FF10 BR

Fire fighting products

Everything for fixed and mobile foam systems, bladder tanks, any kind of foam mixer, monitors, foam lances and foam nozzles, mobile trailers, pressure water nozzles and watermist nozzles, all in one catalog.



## In this catalogue

### FOAM MIXING DEVICES

All possible kinds of foam mixers, including bladder tanks, Venturi mixers, automatic proportioners, and a unique model of fixed volume proportioner.



#### FOAM MAKING EQUIPMENT

High efficiency foam lances, foam generators, foam nozzles, foam chambers and pourers for fixed tank protection systems, foam systems test valves.



#### **MONITORS**

High efficiency monitors, in a range of quality materials, with manual or automatic controls, remote control, water and foam lances, adjustable water/foam nozzles.



## CTG TV10 BR

## Our products are distributed through:

PNR America PNR Asia PNR Baltic PNR Benelux PNR Czech Republic PNR Deutschland PNR France PNR Italia PNR Mexico PNR U. Kingdom

## We are moreover represented in:

Argentina
Australia
Austria
Canada
Chile
Denmark
Finland
Greece
India

Iran
Ireland
Japan
Korea
Nepal
Norway
N. Zealand
Pakistan

Poland
Portugal
Singapore
Slovenia
South Africa
Spain
Sweden
Taiwan
Venezuela



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