

# OUR COMMITMENT WITH THE ENVIRONMENT



[www.grespania.com](http://www.grespania.com)

## GENERAL IPPC CERTIFICATION (Integrated Pollution Prevention and Control)

Grespania's factories have obtained from the Spanish government the IPPC Environmental Integrated Permit (Integrated Pollution Prevention and Control) in accordance with the E.U. directive n. 96/61. The IPPC certifies that Grespania's factories apply the Best Environmental Techniques as well as it provides an absolutely transparent information regarding pollution control.



## Water purification

All the water coming from the industrial process at Grespania's factories is purified by way of physical-chemical procedures that separate and concentrate polluting elements. This polluting elements once they have been valued and inerted are recycled and integrated once again in the production process.

Grespania is a pioneer in Spain regarding the treatment of industrial liquid residues, in 1976 it installed the first physical-chemical purifier; then in 1986 invented the "zero waste process", recycling all the ceramic residues together with the dirty waters in its atomizing installation. In 1996 it was the first Spanish wall and tile manufacturer to have a system to purify water using the reverse osmosis procedure.

The water coming from the polishing and rectifying processes flows through a closed circuit that decants the inert materials in suspension, then concentrates them in filter presses so as to later recycle them.

The water used in the glazing lines is also treated, its pollutants precipitated and later on incorporated into the body of the tiles as an inert material.

All the water purifying installations' entrances and exits are frequently analyzed in order to determine the concentration of polluting elements and the purity of the treated effluent.

No industrial waste comes out of any of Grespania's factories.



### Emissions to the atmosphere

All gas emissions coming from the chimneys used for the treatment of solid and liquid materials are filtered through bag filters so as to avoid the emission of solid particles or aerosols to the atmosphere.



### Non hazardous residues

All non hazardous residues from the industrial process are treated and reintegrated in our products manufacturing process, among the reintegrated residues we can point out:

- ▶ Tiles damaged during the production process.
- ▶ Defective finished tiles.
- ▶ Slime from the water purifying process.

All these residues are checked up, grinded and added in the adequate proportion to the production of ceramic body in Grespania's atomizers, this installation is legally acknowledged as Official Agents for the Treatment of Residues.

Other non hazardous residues such as scrap metal, plastics and cellulose are handed to Authorized Agents for Residues.

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### Hazardous residues and their packages

Hazardous residues and their corresponding packages are adequately stored, separated from the other raw materials and products used in the production of tiles and later given to an Authorized Agent. The packages for hazardous products are recovered by its suppliers and then reused.

### Containers and packaging.

All containers used in our factories respond to the national DDR plan (deposit and return).

Grespania has signed agreements with ECOEMBES ( the Spanish agency for the ecological treatment of packagings) and with INTERSEROH (the German agency for the clearance and treatment of packagings).



As a result of these agreements both agencies take care of the picking in the German and Spanish market of all kind of packagings that go with our product (pallets, plastic strips and cardboard), this means an important decrease in the residues generated by our packaging.



### Cogeneration, energy saving

Grespania uses in its combustion process for the drying of clay the cogeneration procedure with a 5 MW power that allows us to use the natural gas heat both in the drying process as well as in the production of electric power with an important saving in primary energy, this means Grespania produces more electric energy than it consumes.

### Kyoto Protocol

Grespania is committed to the Kyoto protocol and in that sense Grespania has been officially assigned in accordance with this international treaty rights to CO2 emissions, which are reduced year after year with the improvement in its energetic processes.

### Environmental Management System

Grespania in permanent commitment to improve his environmental policy has decided to implement an Environmental Management System (EMS) according to ISO 14001. In December 2009 Grespania has been certified as meeting the requirements of ISO 14001:2004. Simultaneously Grespania has obtained the certification of his Quality Management System (QMS) according to ISO 9001:2008.