"Green Bleaching, not only answering to today's requirement but also prepares the mills for the future

Xylem (former ITT Water and Wastewater), Germany promoting the best ecological practice for the benefit to paper industry. In an exclusive interview with INPAPER International, Dr. Jean-Christophe Hostachy, Managing Director, of the Pulp & Paper Key Account unveils benefits of "Green Bleaching" in terms of investment and pulp quality.

Dr. Jean-Christophe Hostachy

Can you please tell us about the activities of your Company and your role?

Xylem (former ITT Water and Wastewater) is a worldwide leading company for water and wastewater treatment technology. Through our organisation, WEDECO Ozone Systems are produced in Germany (Herford) and we are supplying P&P customers with solutions, products and services on a worldwide basis. As responsible for the Pulp and Paper department, my role is to define and implement our development strategy in that market, coordinating our effort and resource in terms of R&D, Marketing, Intellectual Property and Sales. I'm really proud and motivated promoting ecological practices that could benefit to the Indian Pulp and Paper market.

How the concept of pulp bleaching with ozone started?

The technical background of the application is coming from intensive R&D activities performed in the 80's where both ozone generation technology and application (pulp mixing technology) progressed in parallel. The first industrial implementations started at the beginning of the 90's where the wave of TCF "Total Chlorine Free" pulp bleaching was a real stimulus for the rise of new technology.

How are you defferent from other ozone bleaching system suppliers?

Many suppliers in the world are supplying ozone generation systems for a very large range of applications. However, very few are able to answer to the specific requirement of the pulp and paper applications i.e.:

- Very large ozone production systems (from 3 to 24 tons ozone per day).
- Economical & reliable ozone production.
- Ability to supply compact systems and to design "tailor made" solution including auxiliaries (Liquid Ring Compressors, Chillers, ...)
- Sustainable operation and maintenance of the whole installation

For instance, in chemical pulp bleaching, ozone is used in the heart of the pulp production process and the number of suppliers able to fulfil such constraints is very limited. Selling ozone systems in Pulp and Paper is not the same business than for wastewater treatment or swimming pools!

How do you find acceptance of the paper mills for the TCF bleaching with ozone?

TCF or "Total Chlorine Free" is coming from the 90's, and that decade really boosted the arrival of new bleaching practices based on the use of oxygen, ozone and peroxide. In 1996, when the TCF "wave" stopped and ECF bleaching mainly based on chlorine dioxide became the Best Available Technology, new option such as Light-ECF emerged to significantly reduce operating cost of the bleaching sequence.

Over the last three years, significant progress has been carried out to promote the emergence of Green bleaching, which is not similar to TCF, since the objective is not only to analyze pulp bleaching from a chemistry point of view. Green bleaching reprocesses and widens the bleaching concept as a whole integrating on-site chemicals production, complete reuse of by-products, minimizing the ecological footprint and reducing operating costs. Finally, Green Bleaching benefits from the 15 years progress made in last in pulp mixing technology and chemical generation. The goal implementing such new practice is not to sacrifice pulp quality but, on the other hand, to open opportunities developing new paper grades in a changing environment.