RBNOI

Horizontal machine for the dyeing of packages, tops, bumps

LORIS BELLINI
Dyeing machines

Presented in world premiere during ITMA 1983, its peculiar design was object of an international patent during the month of December the following year, with file number 89.109.914.0. No horizontal machines for the dyeing of packages were seen anywhere on the market before that moment.

RBNOI was born to give a substantial answer to all those customers with challenging needs in terms of logistics for both the infrastructures and the handling of the final product. In fact, horizontal machines can easily be installed in low clearance buildings where the vertical option is otherwise not compatible.

RBNOI takes advantage from the same proven technology of its vertical counterpart: pressurized air-pad system, which allows the flexibility of variable loading (100%-50%) while keeping liquor ratio at a nearly constant level; flexible approach for the dyeing of different fibers due to a very much efficient helico-centrifugal pump that amplifies the spectrum of differential pressure between the inner and outer portion of the material. In addition, as per the vertical machines, the automatic system for the continuous control of the differential pressure ensures a very high repeatability of the dyeing process.

The horizontal machine is based upon the concept of modular dyeing carriers such as they are all interchangeable between them: the minimum working batch defines the size of the single loading carrier and all the machines are based on its multiple (1, 2 or 3 loading carriers).
Each machine can easily work at 50% of its nominal capacity and this is possible by means of a heat exchanger installed outside of the main kier.

RBNOI machine is installed at floor level and does not require environmental structures such as mezzanines or roof cranes. Handling of the loading carriers occurs by means of manual trolleys on wheels or through the use of a shuttle on rails conceived for automation.

This machine brings several advantages. The absence of structures of support (mezzanines and roof cranes) reduces the global investment, while the pressurized air-pad system brings a substantial benefit on containing running costs. All these aspects concur in a faster and more profitable payback over the initial investment.