



**ABEP**  
**AUTOMATIC SPRAY HANK**  
**DYEING MACHINE**



## AUTOMATIC SPRAY HANK DYEING MACHINE

ABEP is a new technical evolution which extends the wide range of products that Loris Bellini manufactures for special applications on delicate yarns on hanks:

- Cashmere, alpaca, mohair, wool and blends yarns
- Natural silk yarns and blends with viscose and wool
- Filament viscose yarns
- Mercerized cotton yarns
- Acrylic knitting yarns, very-high bulk type (VHB).

ABEP solves the problems relevant to the common arms dyeing machines:

- Hank loading and unloading operations
- Regulation of the flow rate when working at variable load
- Possibility of VAT dyeing

### TECHNICAL FEATURES AND ADVANTAGES

- **Pressurized operation by air cushion**, up to a maximum temperature of 102°C at sea level, which is independent to atmospheric pressure variations. This allows **VAT Dyeing**
- **Exytractable Arms** to make easy the hanks loading/unloading operations
- **Magnetic flow-meter**, feeding back the **INVERTER**, to work at a constant preset liquor flow-rate value no matter how many arms are in operation
- Structure entirely made of **high thickness plate in stainless steel**

- **Variable loading**. Possibility to exlude arms down to 50% of the nominal installed capacity to reduce the total output per batch
- **Electro-galvanic mirror-polishing spray arms with internal liquor distributor** engineered to guarantee a constant and even liquor flow-rate along the entire length of the arms. Dyeing liquor distributor from circulation pump to sprayer arms designed for a **perfectly even flow-rate on all sprayer arms independently from their central or lateral position**
- **AISI 316 liquor self-lubricating no-maintenance** internal arms rotating mechanism, fault free controlled through **proximity limit switches** by our **Leonardo PC software**
- **Liquor level control** to work at a constant liquor ratio, by setting the liquor volume depending on the number of arms in operation: high level of color repeatability and reduction of color corrections
- Automatic control of **liquor level and static pressure** by continuous electronic probing sensor
- **Hank rotation system by rotating movement of arms**: perfect material conservation for high-speed hank-to-cone winding
- No drippings on the hanks, due to a special design of internal roof

