

ARSPV-ARSP0

Pressure dryers



ARSPV and **ARSPO** are high-pressure rapid dryers (5 bar) for the drying of yarn on packages conceived for the direct loading of carriers coming from the dyeing machines.

Our high-pressure rapid dryers do not require any preliminary centrifugation and this is crucial to preserve the initial geometry of the packages. These dryers are commonly used to dry any type of yarn, independently from the composition of the fiber or from the type and shape of the packages.

Cotton, acrylic, wool, polyester, viscose or blends either on cylindrical, conical or compressible dye tubes. ARSPV and ARSPO guarantee perfect drying results through three different working phases.

1. **Dynamic hydro-extraction** - Dynamic hydro-extraction completely substitutes the necessity of a preliminary centrifugation and it is performed on the wet material coming from the dyeing machines directly.

2. **Drying** - Drying phase automatically starts right after the dynamic hydro-extraction is concluded. Both heating and cooling batteries are activated. Air temperature is preset in the control panel at the beginning of the cycle and automatically kept constant along the entire process through thermostatic controls and modulating pneumatic valves.

3. **Conditioning** - At the end of the drying phase, heating battery is excluded and the air is circulated through the material in the outside-to-inside direction in order to equalize residual humidity in the yarn packages and reduce the temperature of the material.

Drying times and temperatures are optimized in accordance with the type of fiber and the type of package:

- cotton: 80 minutes
- acrylic: 40 minutes
- polyester: 30 minutes
- wool: 50 minutes.

The operating principle behind these dryers, along with a meticulous engineering development through the years, make it possible to recover up to 90% of the consumed electric energy in the form of clean and warm water that can be reused in the next dyeing processes.

The complete lack of manual handling throughout the whole process (from the preparation of the greige material to the final end product), the chance of using the dried package in production directly without the need of rewinding it and the total integrity of the dye tubes, all concur to drastically reduce running costs in favor of a much faster payback over the initial investment.