



HYDROLOC

*The only hydroextractor bringing the
bobbin back into it's original shape*



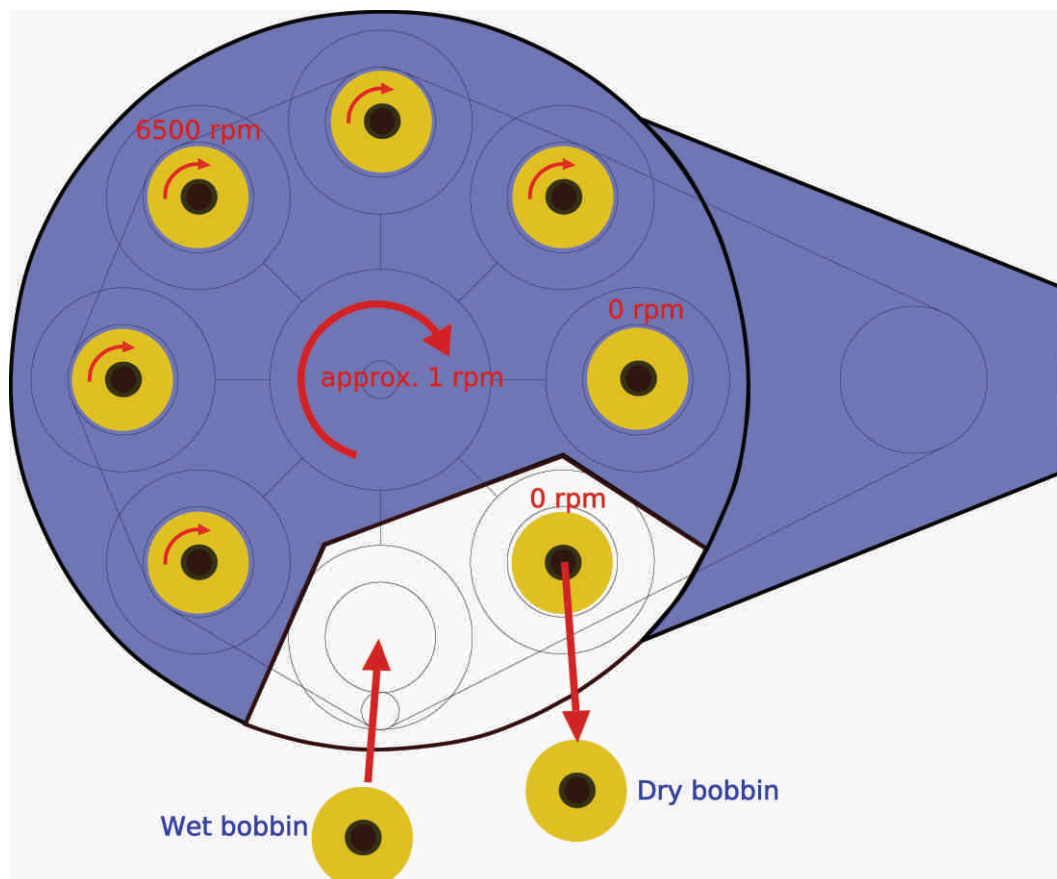
The Process

The yarn package is loaded into a stationary basket at the loading opening of the extractor. On a round turntable, the basket is slowly and continually traveling in a large circle. Once the basket leaves the loading area, it disappears underneath the centrifuge housing where the bobbin is accelerated to 5500 - 6500 RPM.

The acceleration is achieved by a drive belt, which is continually kept in motion by the central drive motor. Deceleration is achieved by an inductive brake. This magnetic braking system has no moving parts and has the great advantage of noise reduction and reduced wear on bearings, supports and sheaves.

The loading and unloading process of one package at a time allows for continuous operation of the hydro-extractor.

HYDROC



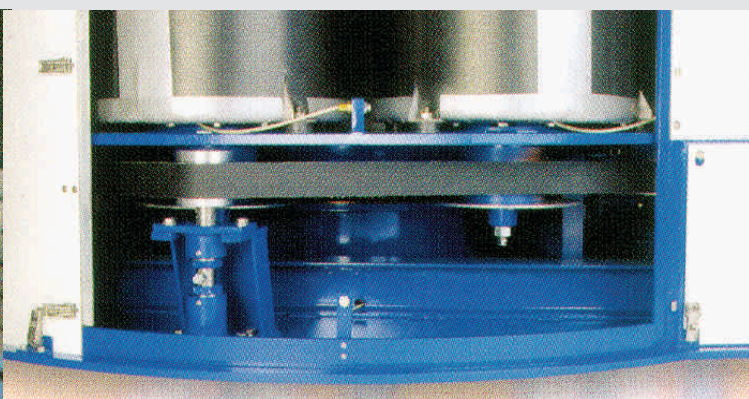
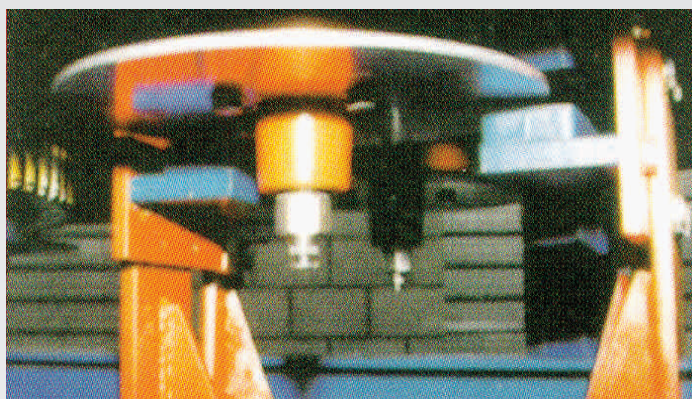
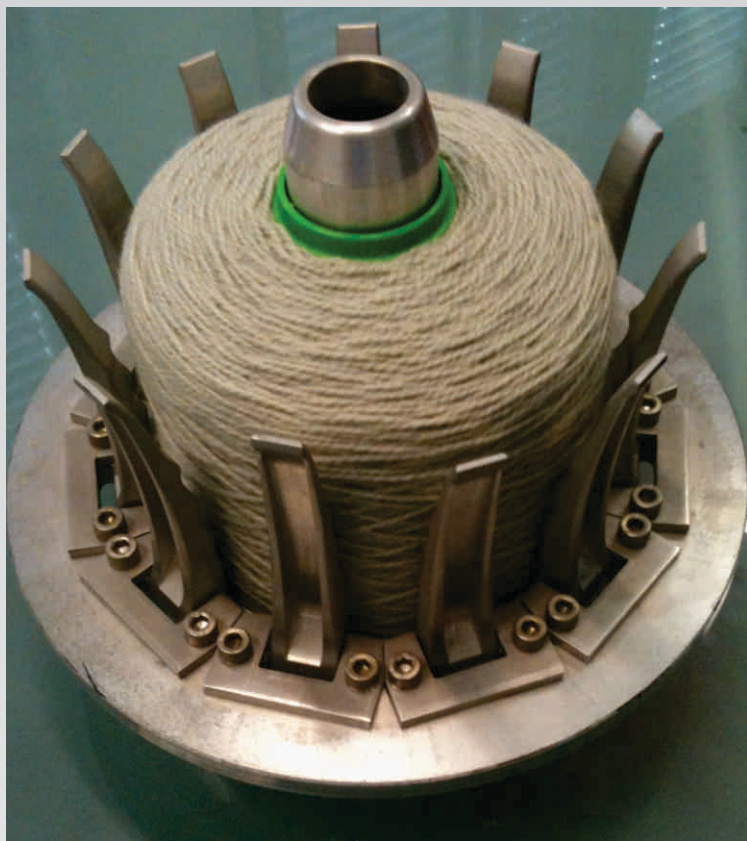
Single heat hydroextracting

The name HYDROC stands for almost 50 years of experience in the field of single head hydro-extraction of yarn packages. The robust design of the machine has proven itself over many years. For loading and unloading the hydro-heads of the Hydroc stand still. The centrifuge heads are made of high-strength aluminium. The high rotational speeds of up to 6500 RPM allow for high dewatering efficiency with low residual humidity in the package.

No deformation - unique gripping system

When the bobbin starts to spin, the grippers hold it by centrifugal force in its position. The result is an absolutely round bobbin without any yarn layer movement and 100% levelness of residual moisture content all over the entire bobbin. In many applications the rewinding of dyed yarn is not needed anymore and therefore saves the cost of rewinding. The automatic grip system allows processing of different package diameters up to a variation of 30 mm.

The new machine is equipped with a contactless and wear-free electro-magnetic brake. The permanent magnets do not need electric power.



This type of brake has the advantage that no indefinable forces affect the pulleys, rubber bearings and ball bearings. Due to the contact-free braking the noise level is reduced remarkably. The brake does not need maintenance. The loading height of one meter above floor level is optimal for ergonomic loading and unloading. The hydro-extractor and RF dryer can be operated by the same person.

Quality increase

- No hairiness compared to pressure dryer method
- No deformation of the packages
- Excellent rewinding properties
- Low residual moisture
- Even humidity distribution through the package

Ecological production

- Closed system for effluent
- Low compressed air consumption
- Significant energy savings
- Low noise level
- Ergonomic design

Production cost reduction

- Reduction of yarn waste due to layer movement
- Rewinding can be eliminated in a lot of cases
- If rewinding is required: Faster rewinding speeds
- Dyeing tubes last longer
- Operator of centrifuge can also load dryer
- Low energy consumption



One-Head Hydro-Extractor

The Hydroc I is the solution for small scale production still having all the advantages of the bigger Hydroc 8 and Hydroc 10. The bobbin is placed inside the Hydroc I, lid closes automatically and reopens after approx. 50 seconds, so that the dry bobbin can be exchanged with a wet bobbin.

Optionally the Hydroc I can be equipped with an injection device to apply lubricants. This has proven to be the best and most efficient method to lubricate textured polyester. Compared with a application of lubricants in the dye machine this has following advantages:

- Eliminates waste water
- Increases capacity of dyeing machine because the total process time is reduced by approx. 30 min.
- Better levelness of lubricants and therefore not stripes after weaving

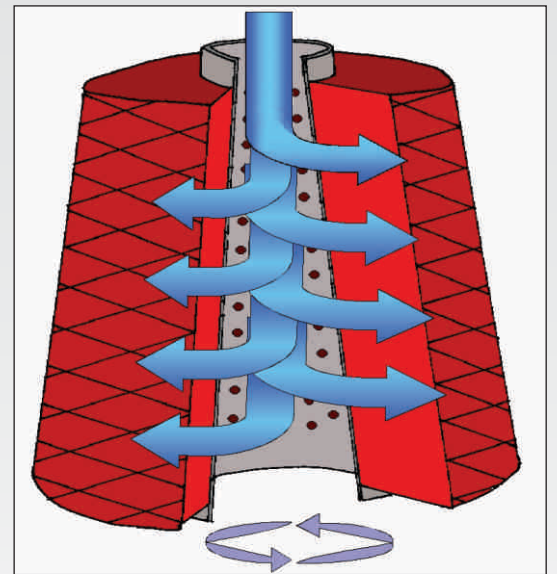
Production capacities

Hydroc I: 40 - 60 bobbins per hour
Hydrox 8: 320 - 400 bobbins per hour
Hydroc 10: 400 - 500 bobbins per hour

Remaining humidity after the extraction process

TEXTURIZED POLYESTER HE	approx. 6 %
TEXTURIZED POLYESTER	approx. 8 %
ACRYLIC HBAND POLYAMIDE	approx. 10 %
ACRYLIC	approx. 15 %
WOOL	approx. 30 %
COTTON	approx. 55 %
JUTE	approx. 50 %
VISCOSE	approx. 70 %
POLYESTER - ENDLESS – SEWING THREAD	approx. 10 %

The remaining humidity after hydro-extraction can vary ± 10 % depending on yarn number / density as well as on the chemicals used during dyeing and the type of after treatment.



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