

N PLS-D

Gilbos

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ASSEMBLY WINDER



FOR 10" TRAVERSE PACKAGES

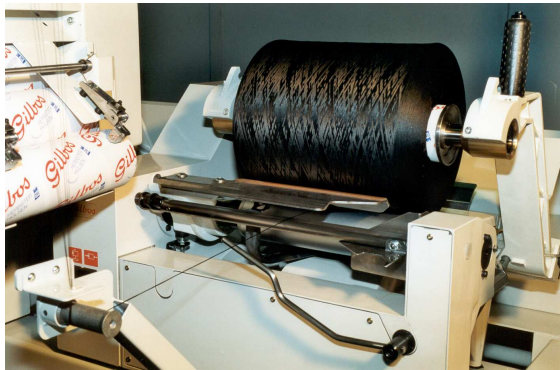
For the production of packages with Parallel Assembly wound yarns for the two-for-one twisting

Modular Construction of the machine:

The N PLS-D is available in sections of 3 spindles, 800 mm spindle gauge, with minimum 6 and maximum 12 spindles per machine. Each spindle has full independent working. The machine is standard equipped with automatic doffing per spindle.



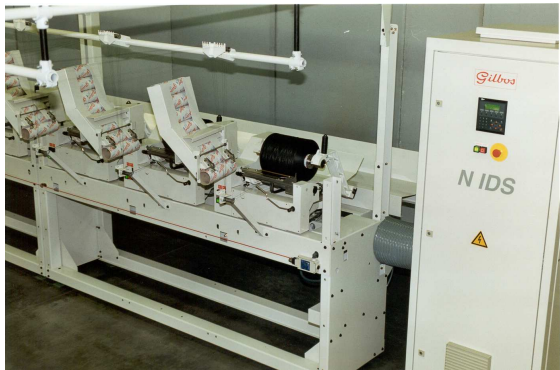
Individual spindles



Creel up to 20 ends



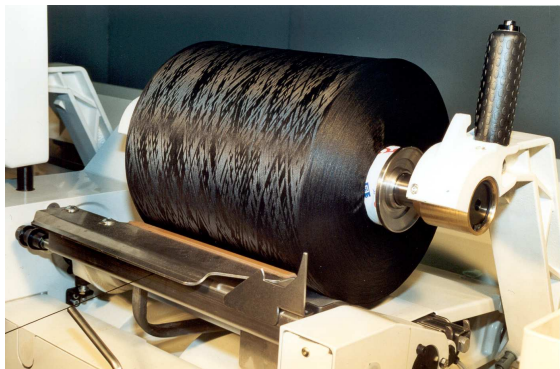
3 spindles per section



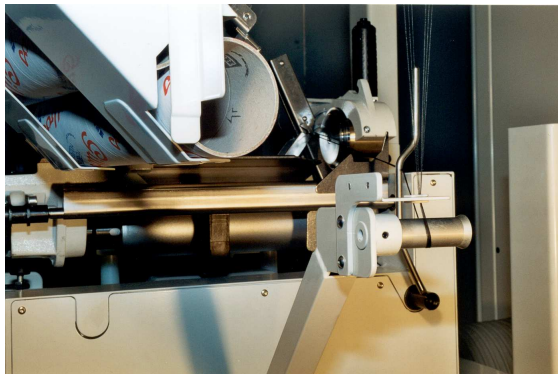
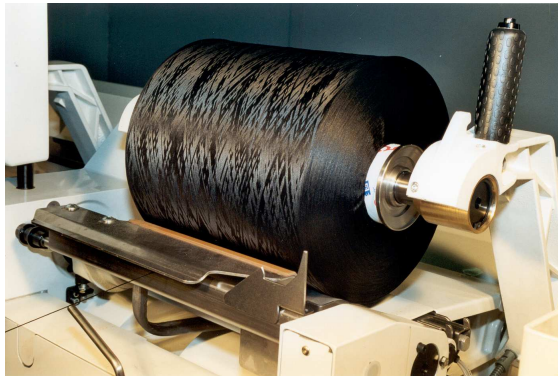
Extended tube magazines up to 8 tubes



Brake plate



Autodoffing



Automatic replacement of packages at length or diameter is standard on N PLS-D. Each spindle is foreseen with a fully independently working doffing device, with control through the PLC system. The magazine is located square to the spindle.

Capacity of the magazine: tubes dia. 73 mm 5/8 pcs.

During a doffing cycle the magazine swings 90° to present an empty cone or tube to the winding head.

Control box

The Control Box is only connected to the machine by wires and flexibles, in order to prevent damage to the electronic systems by machine vibrations.

It houses all the electronic elements on the machine. All machine functions are controlled by PLC, located in the control box, with operator friendly communication screen for parameter settings and read-out of production data. Almost all electric and electronic components are off-the-shelf available parts in most countries.



Technical details

Spindle

- 10" traverse, cylindrical (up to diameter 105mm tubes).
- Yarn guiding by swivelling arm with positive yarn guide.
- Package rotation by driven contact roll, at constant winding speed.
- Precision winding per spindle.
- Production of packages up to diameter 400 mm.
- Winding ratio and angle of Winding, in function of the material to be wound, between 12° and 22°.
- Individual Drive per spindle by motor with frequency inverter, at winding speed up to 1200 m/min., depending on the winding parameters.
- Servo motor on each spindle to drive the swivelling arm.
- Stepless speed regulation per spindle.
- Gradual start up after each winding stop. The ramp of speed increase is programmable.
- Vibration suppressor to avoid cobwebbing at the sides or ovalisation of the package.
- Anti wrap detector on the driving roll.
- Automatic Doffing per spindle.
- Transfer Tail Winding on an empty tube or cone, programmable in length.
- Specially designed yarn cutter to ensure perfect cutting of all yarns, singles or twisted, up to Nm 0,3 (singles).
- Length Measurement by counting the number of revolutions of the driving roll.
- Mechanical Diameter Stop Motion.
- Push Buttons per spindle for manual intervention: start, stop, manual start of doffing cycle, opening of spindle heads.
- All the moving mechanical parts, which are not in contact with the yarn, are built in dust free casted housings.
- Speed Setting per spindle: to allow very flexible speed setting when different qualities are wound simultaneously at the same machine.

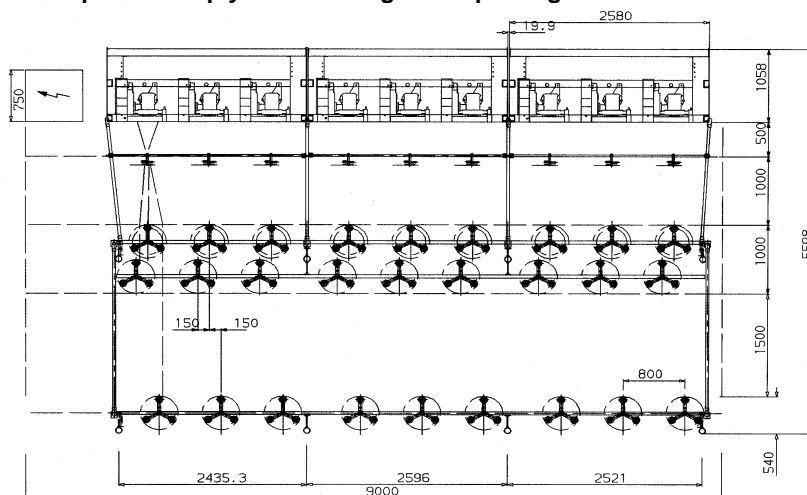
Yarn Supply

The machine can be foreseen with different kinds of creels: for spinbobbins, for packages, for flanges, for containers or other kinds of yarn carriers.

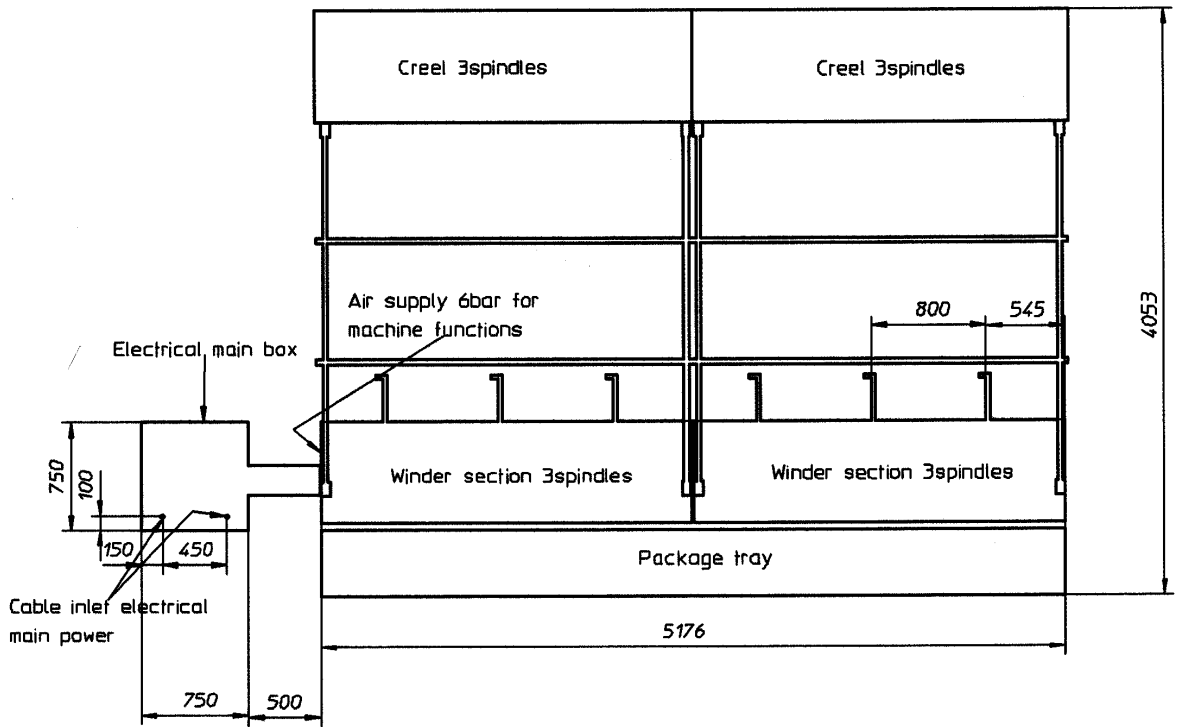
Optional Equipment

- Conveyor Belt: to guide full packages to a side of the machine. The direction of the belt should be chosen at the moment of ordering a machine.

Machine lay-out : 9 spindles - 3 ply - assembling from spinning bobbins



6 spindles - 6 ply - assembling from packages



6 spindles - 9 ply - assembling from packages

