KNITSTORE K52 ATC

Storage feeder:
with integrated high dynamic
active tension control system

KNITSORE K52 ATC combines all the advantages of the basic storage feeder KNITSTORE K52 such as functional design, easy maintenance and operation with the high dynamic active tension control system (ATC).

ATC is a very high dynamic system which measures the yarn tension permanently by a yarn sensor. It ensures that the output tension of KNITSTORE K52 ATC remains constant at the preset value. Therefore external factors like size of the bobbin or quality of the yarn are eliminated.

The microprocessor supported controller in connection with the electronical adjustable brake ensures, that deviations in yarn tension will be corrected in between milliseconds. Yarn tension peaks are compensated with the help of the ATC system. There is no need of checking the yarn tension during the knitting process or when changing the bobbins.

The setting of the yarn tension and other parameters is done via the control unit GTN. This control unit further contains the measurement of the yarn consumption, the set-up of the "fast stop function" in case of yarn breakage, the simple update function for KNITSTORE K52 ATC and it indicates the cause of machine shut down by KNITSTORE K52 ATC.

ADVANTAGES

- High fabric quality, yarn tension differences between the yarn bobbins are eliminated
- Compensation of yarn tension peaks
- Reduction of needle breakages
- No checking of yarn tension during the knitting process
- Increasing of machine efficiency and reduction of production cost
- Low energy consumption results in saving of energy costs
- Set up of yarn tension for each feeder or in groups centrally via GTN
- Display of cause of machine shutdown in the GTN
- Integrated yarn consumption measurement with GTN
- Automatic determination of the quickest possible stopping time (Fast stop function)), integrated in GTN

Animation K52

VANDEWIELE

Components K52 ATC

EASY REPLACEMENT OF THE TENSIONER

The yarn output area can be swivelled for easy replacement of the membrane.

SPOOL BODY

Stationary spool body with yarn separation, adjustment of the direction of rotation in S and Z possible.
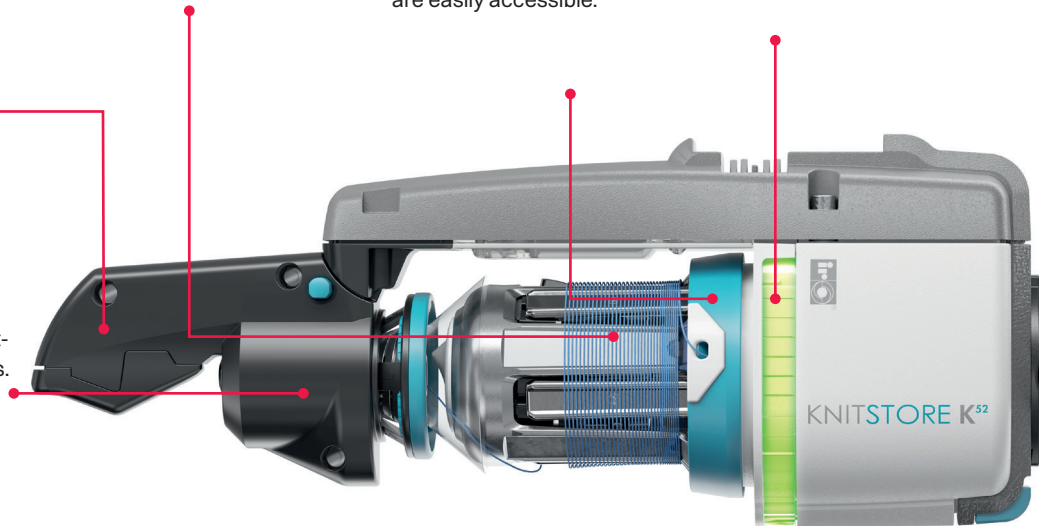
CLEANING FUNCTION

A special mechanism allows the winding disc to be positioned to remove lint or dirt, so that the areas to be cleaned are easily accessible.
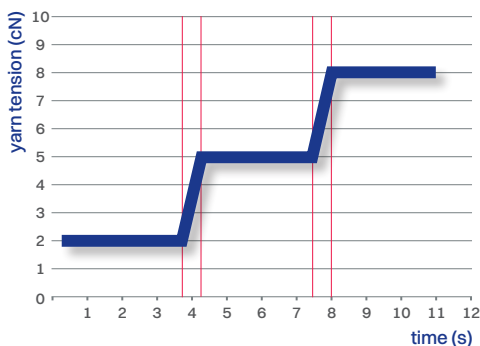
CIRCUMFERENTIAL LIGHT STRIP

Clearly visible circumferential light strip to indicate the operating status of the unit.

ACTIVE TENSION CONTROL (ATC)

The high dynamic tension regulating system reacts in milliseconds on operator settings and external influences. Adjustments can be made for all feeders in once, single feeders or grouped feeders


DYNAMIC OF ATC

CONTROL TERMINAL GTN

Includes the following functions:

- Yarn consumption measurement LMS
- Grouping of feeders
- Display of the cause of the feeder shutdown
- "Fast stop" function
- Software update function

TECHNICAL DATA

Power supply:	**57 V DC**
Current:	**0.55 A**
Average power:	**30 VA**
Yarn tension:	**1.0 cN – 10 cN, depending on the processed yarn**
Yarn separation:	**0.9 mm**
Yarn gauge range:	**17 - 500 dtex**
Max. yarn feed rate:	**700 m/min.**
Weight:	**1.2 kg**

ENERGY CONSUMPTION K52 ATC
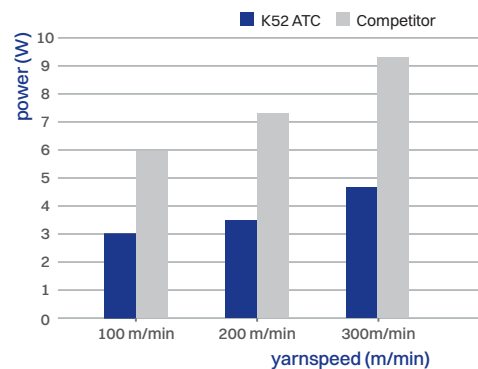
ADVANCED KNITTING TECHNOLOGY

MEMMINGER-IRO