

Title (en)
THREAD FEED DEVICE FOR ELASTIC YARN

Title (de)
FADENLIEFERGERÄT FÜR ELASTISCHE GARNE

Title (fr)
DISTRIBUTEUR DE FIL ELASTIQUE

Publication
EP 0853696 A1 19980722 (DE)

Application
EP 96938936 A 19960917

Priority
• DE 9601749 W 19960917
• DE 19537215 A 19951006

Abstract (en)
[origin: DE19537215A1] The proposed thread feed device (1) is intended for elastic yarn (threads) on knitting machines in which the thread consumption fluctuates markedly with time and reaches high levels for certain periods. The device takes the form of a thread regulating wheel. The thread feed device (1) has a thread wheel (11) around which the thread to be delivered (2) is wound several times and which feeds the thread (2) into a thread store (19) situated between the knitting machine and the thread wheel (11). The thread store takes the form of a substantially straight section of the thread path. To monitor the thread tension, a tension sensor (22) is provided; its measurement path is vanishingly small compared to the length of thread to be stored in the thread store (19). The measurement path is defined by a mobile element (25) of the sensor device (22) and is aligned at right angles to the path of the thread. The connection of a low-inertia drive device (9) to a thread store (19) which exploits the characteristic elasticity of the thread and a regulator (24) which monitors the thread tension with the aid of a sensor device (22) permits the use of the thread feed device (1) for feeding elastic yarn and to keep the thread tension more or less constant even where the thread take-up fluctuates markedly with time. Since the thread (2) in the thread store (19) is not deflected and, in particular, is not subjected to a significant friction, and since the thread (2) reaches the thread wheel (11) without the aid of an intermediate thread brake, short returns of thread (2) can be caught by short reverse turns of the thread wheel (11).

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