

Title (en)
Apparatus for coiling a fibre band

Title (de)
Vorrichtung zum ablegen eines faserbandes

Title (fr)
Appareil pour déposer un ruban de fibres

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Application
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Abstract (en)

Apparatus to lay sliver (1) in a double coil in a stationary sliver can (7) has two belt drives. First belt drive (35) gives a transmission connection between central main drive (34) and rotating laying plate (8), and is stationary in relation to the machine frame (15). Second belt drive (36), mounted on the laying plate, gives a transmission connection between laying plate and rotating plate (5). Belt wheels (10,16) are at the laying plate (8), to be engaged by the belt (9) of the first belt drive (35). At least two double-belt wheels (10) are on the laying plate (8), to work with the two belts (9,11) of the two belt drives (35,36). The belt (11) of the second drive (36) is in contact with the belt wheels (10) during all the rotating positions of the laying plate (8) and lies at least partially on a mantle surface (37) of the rotating plate (5). Each double-belt wheel (10) has two belt wheels, rigidly bonded together, rotating at the same speed on a common axis (40). Preferred Features: At least two further single-belt wheels (16) are mounted additionally on the laying plate (8) as guide wheels for the belt (9) of the first belt drive (35). The rotating plate (8) can carry three double-belt wheels (10), and the belt (11) of the second belt drive (36) lies at the three wheels at all the rotating positions of the plate (8). It also carries four additional single-belt wheels (16) to guide the belt (9) of the first belt drive (35). The belt (9) of the first belt drive (35) works together with a drive wheel of an auxiliary drive, to rotate it. The auxiliary drive is mounted at the machine frame (15), to act on a drive wheel for the laying plate (8). The auxiliary drive has a crank drive system with a crankshaft and at least one crank rod, and a freewheel system with at least one freewheel and a drive shaft. The drive wheel is connected to the crankshaft. The outer end of the crank rod works with the freewheel, and the drive wheel is linked to the drive shaft. The crankshaft can have two cranks, offset from each other by 180 degrees, with two crank rods working with two freewheels at the freewheel system. The rotating plate (5) is fitted with a contact plate (13) for a friction wheel (14) with a drive shaft. The drive shaft operates a pair of calender rollers (3) at the sliver feed (2). The belts (9,11) of the first and/or second belt drives (35,36) have a round cross section. The first belt drive (35) has at least two deflection wheels (19), to deflect the belt (9) from a horizontal into a vertical path. The deflection wheel (19) is on a sliding mounting at the machine frame (15), as a tensioner for the belt (9). A drive wheel (12) of the main drive (34) is at the vertical path of the belt (9).

Abstract (de)

Die Vorrichtung ist an eine Spinnereimaschine, beispielsweise eine Karte, angebaut, welche ein Faserband (1) produziert. Dieses Faserband (1) wird in der Form einer Doppel-Helix (6) in eine stillstehende Kanne (7) abgelegt. Dazu ist in der Vorrichtung eine rotierende Lagerplatte (8) und ein in dieser exzentrisch gelagerter Drehteller (5) mit einer Bandführung (2) angeordnet. Eine Getriebeanordnung zum Antrieb der rotierenden Elemente umfaßt zwei Riemenantriebe (35, 36), welche über Doppelriemenräder (10) zusammenwirken. Dabei sind die Doppelriemenräder (10) an der Lagerplatte (8) gelagert und rotieren mit dieser. Diese Getriebeanordnung ermöglicht hohe Ablegegeschwindigkeiten des Bandes (1) bei gleichzeitig geringer Störungsanfälligkeit und niedrigem Lärmpegel. <IMAGE>

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