

Title (en)
DEVICE FOR WINDING A YARN

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Application
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Abstract (en)
[origin: US4415125A] An apparatus for winding a thread or the like upon a rotatable, conical bobbin tube by means of a rotatable friction drive drum containing a plurality of rotational elements adjacently arranged upon a common drive or driving shaft and contacting the bobbin package along a generatrix. A first one of the rotational elements is rigidly rotatably connected with the drive shaft and at least two further rotational elements are freely rotatably mounted upon a respective rotational or rotary bearing mounted at the drive shaft. In one specific embodiment a respective one of these two further elements is provided at each end of the first element and such further elements are intercoupled by a differential gear arrangement. Due to the differing surface speeds of the bobbin package and the friction drive drum abrasion or scuffing occurs at the site of mutual contact of the bobbin package and the friction drive drum, such abrasion damaging the wound thread material. This abrasion is reduced to a considerable degree with the invention. Also there is afforded a reliable drive of the bobbin package, such that owing to the resultant constancy of the mean thread tension, it is sufficient to provide a non-controlled driven and therefore simpler thread storage. In the special structural embodiment the size of the prevailing friction surface of the friction drive drum is equal to that of a non-subdivided friction drive drum, but the abrasion action is practically avoided.

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