

Title (en)
Yarn support tube

Title (de)
Textilhülse

Title (fr)
Support tubulaire pour fil textile

Publication
EP 0990731 B1 20021002 (DE)

Application
EP 99116464 A 19990821

Priority
DE 19844653 A 19980929

Abstract (en)
[origin: EP0990731A1] To produce a tubular bobbin sleeve (1) of thermoplastic materials, especially for winding textile yarns, during or after the extrusion additional injection molded components are applied at a number of points round the circumference. They have a different stiffness from the body of the sleeve. They are fed through the extruder at the material extrusion speed, to be bonded in place. The interior surface of the extruded sleeve is molded to give a number of reinforcement ribs (8) from the sleeve material, with smaller radial dimensions at the valleys (3) than at the peaks (4). To produce a tubular bobbin sleeve (1) of thermoplastic materials, especially for winding textile yarns, during or after the extrusion additional injection molded components are applied at a number of points round the circumference. They have a different stiffness from the body of the sleeve. They are fed through the extruder at the material extrusion speed, to be bonded in place. The interior surface of the extruded sleeve is molded to give a number of reinforcement ribs (8) from the sleeve material, with smaller radial dimensions at the valleys (3) than at the peaks (4). The additional components are of a material with a higher mol. wt. than the thermoplastic material used for the bobbin sleeve. They are strips of hardened plastics, replasticized while passing through the extruder. The additional components can also be bands of filaments which are grouped and spread flat, or they can be welded together by ultrasonics before entering the extruder. The additional components can also be textile fabrics with continuous or chopped tinsel fibers and/or synthetic mono-or multifilaments with wound metal filaments round them. An Independent claim is included for a tubular bobbin sleeve (1) with a number of axial surface strip zones formed by valleys (3) and peaks (4), of a different stiffness from the material forming the body of the sleeve, giving a corrugated surface profile. The corrugated structure maintains the outer mantle shape mostly or wholly.

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