Claims

[Claim 1] A winding core having an approximately cylindrical shape, winding a strip in such a manner that one side of the strip overlaps the side of the wound strip when the strip is traverse wound on a curved peripheral surface, characterized in that

the curved peripheral surface is inclined radially outwards as the peripheral surface goes from one end to the other, an inclination θ of the peripheral surface is based on $0<\theta\leq 2\arctan$ [thickness of the strip/ traverse pitch].

[Claim 2] The winding core according to Claim 1, further comprising: flanges on end faces; and a mis-attachment preventing means arranged at least one of the flanges and the curved peripheral surface.

[Claim 3] The winding reel according to Claim 1 or 2, wherein nonslip strip grooves formed on the peripheral surface in a circumferential direction are arranged from one side end to the other.

[Claim 4] The winding reel according to Claim 1, 2 or 3, further comprising an inner core and a cylindrical outer core fitted on the inner core, the outer peripheral surface of the outer core being inclined radially outwards.

[Claim 5] The winding reel according to any one of Claims 1 to 4, wherein the strip is a carrier tape comprising: a long tape; a plurality of storing cavities arrayed and formed

at intervals in the longitudinal direction of the tape; and a plurality of feed holes placed at intervals along at least one longitudinal side of the tape.

[Claim 6] A winding reel characterized in that when a strip is traverse wound on the winding core according to any one of Claims 1 through 5, the strip is adapted to be wound so that one side of the strip overlaps the side of the wound strip.

[Claim 7] A strip winding method of traverse winding a strip on the winding core according to any one of Claims 1 through 5, comprising the steps of:

winding the strip in such a manner that one side of the strip overlaps the side of the wound strip; and

winding the strip without laying one side of the strip over the wound strip,

the above steps being repeated alternately.

CLAIMS

[Claim 1] A winding core having a cylindrical shape, winding a strip in such a manner that one side of the strip overlaps the side of the wound strip when the strip is traverse wound on a curved peripheral surface, characterized in that

the curved peripheral surface is inclined radially outwards as the peripheral surface goes from one end to the other end, an inclination θ of the peripheral surface is based on $0<\theta\leq 2\arctan$ [thickness of the strip/ traverse pitch],

the winding core has the peripheral surface inclining radially outwards as the peripheral surface goes from the one end to the other end along a axial direction,

a diameter of the one end of the winding core is smaller than a diameter of the other end,

a strip is wound on the winding core in an overlap winding from the one end having the small diameter to the other end having the large diameter while the strip is wound on the winding core in an ordinary winding, in which the strip is wound side by side without overlapping, from the other end to the one end, and

the overlapping winding and the ordinary winding are repeated alternately.

[Claim 2] The winding core according to Claim 1, further comprising: flanges on end faces; and a mis-attachment preventing means arranged at least one of the flanges and the

curved peripheral surface.

[Claim 3] The winding core according to Claim 1, wherein nonslip strip grooves formed on the peripheral surface in a circumferential direction are arranged from one side end to the other.

[Claim 4] The winding core according to Claim 1 further comprising an inner core and a cylindrical outer core fitted on the inner core, the outer peripheral surface of the outer core being inclined radially outwards.

[Claim 5] A winding reel characterized in that when a strip is traverse wound on the winding core according to any one of Claims 1 through 4, the strip is adapted to be wound so that one side of the strip overlaps the side of the wound strip.

[Claim 6] The winding reel according to Claim 5, wherein the strip is a carrier tape comprising: a long tape; a plurality of storing cavities arrayed and formed at intervals in the longitudinal direction of the tape; and a plurality of feed holes placed at intervals along at least one longitudinal side of the tape.

[Claim 7] A strip winding method of traverse winding a strip on the winding core according to any one of Claims 1 through

4, comprising the steps of:

winding the strip in such a manner that one side of the strip overlaps the other side of the wound strip; and

winding the strip without laying one side of the strip over the other side of the wound strip,

the above steps being repeated alternately.