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54 **Apparatus for dispensing plastics stretch film.**

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Description

This invention relates to apparatus for dispensing plastics stretch film and in particular for manually wrapping plastics stretch film around a package, for example a loaded pellet.

There exist many apparatus for wrapping a plastic film around a package. For example, U.S. Patent No. 4,179,081 discloses apparatus for manually dispensing plastics stretch film in which the film is contained on a core having extended ends. A pair of flexible hand grips are rotatably mounted on the ends of the core whereby control of the tension on the film during dispensing can be achieved by manually squeezing the hand grips to effect a braking action on the core. While this apparatus provides a satisfactory manual dispenser for stretch film, it suffers from the disadvantage that it is difficult, in view of the projecting ends of the core, to wrap film around a package near the ground-engaging surface of the package. An object of the present invention is therefore to obviate or minimize this problem. Another type of film dispensing apparatus is disclosed in U.S. Patent No. 4102513.

Accordingly, the invention resides in apparatus for manually dispensing plastic stretch film comprising a hollow core around which is wrapped a roll of film so that the core is rotatable with the film and wherein one end of the core projects from the roll of film so that a flexible hand grip can be rotatably mounted on said one end of the core to permit control of the tension of the film during manual dispensing of the film, (known from US—A—4179081), characterised in that only said one end of the core projects from the roll of film and that in the other end of the core is rotatably mounted one limb of a generally U-shaped handle so as to be resiliently deformed against the internal surface of the core while the other limb of the handle is generally parallel with, but spaced from, the axis of the core and extends towards said one end of the core.

The accompanying drawing is a sectional view of a plastic film dispenser according to one example of the invention.

Referring to the drawing, the apparatus includes a hollow core 11 around which is wound a roll of plastics stretch film 12. The length of the core 11 exceeds the width of the film 12 so that one end 13 of the core 11 extends from the adjacent edge of the roll of stretch film. The other end 14 of the core is, however, arranged so as to lie flush with the adjacent edge of the film.

Rotatably mounted on the extending end 13 of the core 11 is a flexible hand grip 15 conveniently in the form of a cup-shaped PVC member. If desired, the external surface of the hand grip 15 may be provided with axially extending ribs (not shown) to facilitate gripping thereof.

Mounted in the other end 14 of the core 11 is one limb 16 of a generally U-shaped handle 17, conveniently molded in polyethylene or other suitable thermoplastics material. The limb 16 of the handle 17 is generally in the form of a hollow

cylinder which, at least at its free end, is normally of increased external diameter as compared to the internal diameter of the core. The limb 16 is, however, formed with an axially extending slot 18 so that, by resiliently deforming the limb 16 so as to close the slot 18, the limb 16 can be inserted into the end 14 of the core 11. In use, therefore, the limb 16 is urged by its own resilience against the internal surface of the core 11 so that the handle 17 is releasably retained by the core but at the same time the core is free to rotate relative to the handle.

The other limb 19 of the handle 17 is also in the form of a hollow cylinder whose axis is parallel with, but spaced from, the axis of the core 11 and which extends towards the end 13 of the core. The limb 19 is conveniently formed with external, axially extending ribs to facilitate gripping of the handle 17 and is joined to the limb 16 by a base member 21 in the form of a shallow trough strengthened by internal ribs 22. It is to be appreciated that by arranging that the limbs 16, 19 are hollow and the base member 21 is in the form of a trough minimizes the amount of material required to mold the handle 17. In this way the cost of the handle 17 is minimized so that the entire assembly of the handle 17, core 11 and hand grip 15 can be thrown away after the roll of film 12 has been used up.

When the apparatus described above is used to wrap the film 12 around a package, such as a loaded pallet, the operator grips the limb 19 of the handle 17 and the hand grip 15. Then, by squeezing the hand grip 15, the operator can adjust the tension on the film 12 to stretch the film during wrapping. In addition, since the film 12 extends up to the other end 14 of the core 11 and the handle 17 projects therefrom only by the height of the shallow base member 21, the film 12 can be readily wrapped adjacent the ground-engaging surface of the package.

Claim

Apparatus for manually dispensing plastic stretch film comprising a hollow core around which is wrapped a roll of film so that the core is rotatable with the film and wherein one end of the core projects from the roll of film so that a flexible hand grip can be rotatably mounted on said one end of the core to permit control of the tension of the film during manual dispensing of the film, characterised in that only said one end (13) of the core projects from the roll of film and that in the other end of the core is rotatably mounted one limb (16) of a generally U-shaped handle so as to be resiliently deformed against the internal surface of the core while the other limb of the handle is generally parallel with, but spaced from, the axis of the core and extends towards said one end of the core.

Patentanspruch

Vorrichtung zur manuellen Abgabe einer Dehn-

folie aus Kunststoff, die einen hohlen Kern umfaßt, um den eine Folienrolle gewickelt ist, sodaß dieser Kern mit der Folie drehbar ist, und wobei ein Ende dieses Kernes aus der Folienrolle vorsteht, sodaß ein flexibler Handgriff drehbar auf dieses eine Ende des Kernes befestigt werden kann, damit eine Regelung der Spannung der Folie während der manuellen Abgabe der Folie ermöglicht wird, dadurch gekennzeichnet, daß nur ein Ende (13) des Kernes aus der Folienrolle vorsteht und daß im anderen Ende des Kernes ein Schenkel (16) eines im allgemeinen U-förmigen Handgriffes drehbar befestigt ist, sodaß es elastisch gegen die innere Oberfläche des Kernes deformiert werden kann, während der andere Schenkel des Handgriffes im allgemeinen parallel zur Achse des Kernes ist, jedoch räumlich davon getrennt ist, und sich in Richtung eines Endes dieses Kernes erstreckt.

Revendication

Dispositif de distribution manuelle de film en matière plastique extensible, comprenant un mandrin creux autour duquel est enroulé un rouleau de film, de manière que le mandrin puisse tourner avec le film, une première extrémité du mandrin débordant du rouleau de film de manière qu'une poignée flexible puisse être montée à rotation sur ladite première extrémité du mandrin, pour permettre de commander la tension du film au cours de la distribution manuelle du film, caractérisé en ce que seule ladite première extrémité (13) du mandrin débordant du rouleau de film, et en ce qu'une branche (16) d'une poignée ayant une forme générale en U est montée à rotation dans l'autre extrémité de mandrin, de manière à être déformée élastiquement contre la surface interne du mandrin, l'autre branche de cette poignée étant sensiblement parallèle à l'axe du mandrin, toutefois espacée de celui-ci, et s'étendant vers ladite première extrémité du mandrin.

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