Apparatus for Producing at Least One Container, in Particular in Ampule Form, Made of Thermoplastic Material

The invention relates to an apparatus for producing at least one container, in particular in ampule form, made of a thermoplastic material, said apparatus comprising a mold with mold components, which can be moved between an open position and a closed position in relation to one another and in which a synthetic plastic material can be placed against the wall of the mold by means of a pressure gradient, which acts on said plastic material in order to form the container; comprising a first and a second calibrating mandrel, which can be moved coaxially in relation to the longitudinal direction of the container and to one another, wherein the first calibrating mandrel and the second calibrating mandrel can move in relation to one another, so that the first calibrating mandrel can move through the container, which is located in the mold, and the second calibrating mandrel can move from the outside of the container, into a shaping position in which they calibrate a bottom area, which forms at least part of a container bottom, between their mandrel ends; and comprising a severing device, which has a movable cutting or punching surface in order to sever excess plastic material, which forms in interaction with a cutting or contact edge on the mold components assigned to the bottom region, during the shaping process.

In order to produce different types of plastic containers, in particular also containers that resemble ampules for pharmaceuticals, reagents, or the like, in an efficient and economical manner, the prior art uses to advantage apparatus that work according to the well-known bottelpack® process.

DEVICE FOR PRODUCING A CONTAINER

The invention relates to an apparatus for producing at least one container, in particular in ampule form, made of a thermoplastic material, said apparatus comprising a mold with mold components, which can be moved between an open position and a closed position in relation to one another and in which a synthetic plastic material can be placed against the wall of the mold by means of a pressure gradient, which acts on said plastic material in order to form the container; comprising a first and a second calibrating mandrel, which can be moved coaxially in relation to the longitudinal direction of the container and to one another, wherein the first calibrating mandrel and the second calibrating mandrel can move in relation to one another, so that the first calibrating mandrel can move through the container, which is located in the mold, and the second calibrating mandrel can move from the outside of the container, into a shaping position in which they calibrate a bottom area, which forms at least part of a container bottom, between their mandrel ends; and comprising a severing device, which has a movable cutting or punching surface in order to sever excess plastic material, which forms in interaction with a cutting or contact edge on the mold components assigned to the bottom region, during the shaping process.

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