mechanism, which even though they may be in the range of thousandths, affects the angle point of calibration of the arm.

SUMMARY

According to an aspect, the present disclosure refers to an inverting mechanism for a glassware forming machine of the type comprising: a supporting structure; a shaft horizontally located on upper of the supporting structure to rotate on its own axis, said shaft including a longitudinal central passage with a closed end and an open end and, at least one exit passage connecting the central part of the central passage towards the surface part of the shaft, for the introduction of a fluid under pressure; drive means coupled to the shaft to provide rotational movement to the shaft, on its own horizontal axis, to the left or to the right; at least one cylindrical body having a front face and a rear face, this cylindrical body has a longitudinal hole in an eccentric reference axis, this cylindrical body being fixedly coupled to the shaft through its longitudinal hole, in an eccentric position; at least one hollow cylinder coupled to each cylindrical body, each hollow cylinder having supports coupled on its outer part, which are connected to neck ring holder arms so that, by means of a first sliding movement of the hollow cylinder on the cylindrical body, provides a lateral movement to the right or to the left to open and close the neck ring holder arm supports in parallel and, by means of a rotational movement, to move the neck ring holder arms with a 180° movement from a parison mold to a final blow mold; at least one cover with one hole in eccentric position, said cover being coupled by means of its eccentric hole to a section of the shaft and, by its periphery, being fixedly coupled and coinciding with one end of each hollow cylinder, said cover

being sliding together with each hollow cylinder, wherein the front face of the cylindrical body and the sliding cover form an intermediate chamber for the inlet of a fluid under pressure through the longitudinal central passage and exit passages of the shaft, said chambers being in coincidence with exit passages of the shaft; at least one adjustment element attached to the shaft and located in facing position with the sliding cover, said coupling of the adjustment element and the sliding cover, forming a hollow internal space therebetween; and, retracting means located in said hollow internal space to provide a retracting motion to said hollow cylinder and to said cover sliding on said shaft, at the time of interrupting the fluid pressure, to parallelly close the supports of the neck ring holder arms.

In order to simplify the construction of the parts constituting the inverting mechanism and specifically the step of opening and closing the neck ring holder arms, as well as facilitating their manufacture and assembly, an example of the present disclosure refers to an inverting mechanism for a glassware forming machine which is easy to build and increases the life of the changes.

The objective of the inverting mechanism of the present disclosure is to minimize the wear between parts (backlash), during its transfer movement, as well as, to open or close the arms.

Another main objective of the present disclosure, is to provide an inverting mechanism for a glass forming machine, which reduces the leakage of compressed air to open and close the neck ring holder arms to zero.

An additional objective of the inverting mechanism for a glassware forming machine of the present disclosure, which uses eccentric guides mounted on a central

shaft which, at the moment of rotation, automatically moves the rotating cylinders of the arms, thereby replacing the coupling system based on slots or grooves.

An additional objective of the inverting mechanism for a glassware forming machine of the present disclosure, which utilizes a double-envelope transmission system (worm screw and gear wrap around each other), considerably increasing the load capacity by providing more contact with the tooth area and more mesh teeth than any other worm gear design.