

ABSTRACT

CONTINUOUS BLOW-FILL-SEAL DEVICE AND USE METHOD

A continuous blow-fill-seal device, comprising a base frame (1), an extrusion screw assembly (2), an extrusion die head (3), a filling needle assembly (4), a first clean zone (5) and a second clean zone (6), wherein the frame (1) is provided with a moving mechanism (7) to drive the extrusion die head (3) to make a reciprocating motion between the first clean zone (5) and the second clean zone (6), upper sides of both the first clean zone (5) and the second clean zone (6) are provided with a laminar flow assembly (9), a first partition (81) is disposed between the first clean zone (5) and the second clean zone (6), the first partition (81) is provided with a passage (82), the extrusion screw assembly (2) and the first partition (81) are provided with a second partition (83) and a third partition (84) respectively; when the extrusion die head (3) and the filling needle assembly (4) are within the first clean zone (5), turning on the laminar flow assembly (9) above the first clean zone (5), turning off the laminar flow assembly (9) above the second clean zone (6), sealing the passage (82) by the second partition (83), and separating the third partition (84) from the passage (82); and when the extrusion die head (3) needs to be cleaned or to be replaced, turning on the laminar flow assembly (9) above the second clean zone (6), driving the extrusion die head (3) by the moving mechanism (7) to move to the second clean zone (6), separating the second partition (83) from the passage (82), and sealing the passage (82) by the third partition (84). The continuous blow-fill-seal device ensures that the first clean zone (5) and the second clean zone (6) are partitioned from each other to avoid cross contamination, and also saves energy consumption, reducing operation costs of the device.

Figure 1