

ABSTRACT

The present invention generally relates to the modification of 2 identical impulse sealers more particularly to a Honey Straw Sealing Machine.

There is a known impulse sealer, available over the shelf, using an adjusted heat filament mounted on the main body and a movable sealing arm with a hard rubber pad to press onto the heated filament to seal plastic bags and similar materials as exhibited in Figure 1. However, using this impulse sealer to seal plastic straws filled with honey is slow and irregular as the straws have to be sealed on both ends and trimmed to size. It can only be done one at a time.

By fixing 2 identical impulse sealers together to a base plate, Figure 5 (2), and removing the sealing filament, originally affixed to the main body, to an additional top blade, Figure 5 (7), mounted on the pressing arm to be pressed onto a flat glass plate, Figure 5 (4), where the sealing arm can be held in position by clipping the metal arm on the base plate, Figure 5 (1) onto the extension of the sealing arm, Figure 5 (8), as exhibited in Figure 3.

TITLE OF INVENTION

Honey Straw Sealing Machine

TECHNICAL FIELD

The present invention generally relates to the modification of 2 identical impulse sealers more particularly to a Honey Straw Sealing Machine.

BACKGROUND ART

There is an Over The Shelf, OTS, impulse sealer used for the purpose of sealing the opening of variable sizes of plastic bags, where such sealer is also able to seal plastic straws filled with honey, it does not have a hold position and a flat surface at the seal position to facilitate trimming the straws into equal length with filled honey.

SUMMARY OF THE INVENTION

The objective of the present invention is to facilitate the sealing of multiple plastic straws filled with honey in a single press and to cut them into equal length at the same time.

As such, the machine shall have a steel base plate with 2 movable clip arms to fix the impulse sealers together. The rubber pad on the pressing arm of the sealer shall be replaced with a flat steel blade able to accommodate the heating filament for sealing the

plastic materials. The sealing arm is then raised to accommodate the placement of a glass plate to form a base for the sealer blade to press on. The glass plate also forms a flat surface to facilitate the cutting of the straws into equal length where the waste could be easily scrapped off from the glass plate.

The pressing arm is also attached with a steel extension of appropriate length for the clip arm on the steel base plate to hold the pressing arm in the pressed position to facilitate the straws trimming.

BRIEF DESCRIPTIONS OF THE DRAWINGS

Figure 1, is an over-the-shelf 30 cm impulse sealer available in the market.

Figure 2, is a Honey Straw Sealing Machine invented by making modification to the over the shelf impulse sealer.

Figure 3, exhibit how the Honey Straw Sealing Machine can seal multiple straws and be held in its sealing position to facilitate cutting the straws filled with honey into equal length.

Figure 4, exhibit how the straws are being released after they are cut to size.

Figure 5, exhibit the schematic breakdown of how the modification are made.

DETAILED DESCRIPTIONS OF THE EMBODIMENTS

A Honey Straw is a food product made by filling honey into plastic drinking straw and sealed at both ends. To seal the plastic straw, an impulse sealer would be appropriately used, but it does not facilitate any platform to cut the excess straw into desired length. It is also not possible to hold 2 impulse sealers and cut the straw at the same time for a single operator.

A stainless steel base plate is then design and built, Figure 5 (2), to secure 2 impulse sealer in place.

The rubber pad from the sealing arm of the impulse sealer is then replaced with a design and built stainless steel sealing blade, Figure 5 (7), to be affixed with the heating filament.

The sealing arm is also raised by placing a spacer nut, Figure 5 (5), to its mounting so that a glass plate, Figure 5 (4), could be attached to the impulse sealer to facilitate cutting the excess straws.

In order to have sealing of multiple straw at a single press, a stainless steel straw spacer, Figure 5 (6), is introduced for optimal spacing of the straws.

To facilitate trimming of the straws into equal length, the sealing arm is held in its sealed position by fixing a stainless steel extender, Figure 5 (8), so that it can be locked in place by a stainless steel clip arm, Figure 5 (1), mounted on the stainless steel base plate.

CLAIM

1. A modular desktop machine capable of sealing multiple straws filled with honey which comprises:-

(a) two impulse sealers fixedly disposed parallel to each other with a gap therebetween, wherein each of the two impulse sealers comprises a base, a sealing arm pivotally connected to the base, and a sealing element secured on the sealing arm for sealing ends of the straws;

(b) a flat platform secured on top of the base of each of the impulse sealers for placing the straws filled with honey and is disposed in such a way to abut against the sealing arm when the sealing arm is pressed downwards to a sealing position, and the flat platform has a width which is larger than the base of the impulse sealer so that an outer side of the flat platform protrudes outwards from the impulse sealer; the flat platforms of the two impulse sealers are arranged on the same horizontal plane;

(c) a spacer disposed between the two impulse sealers for spacing out the straws evenly;

(d) a locking mechanism provided for each of the impulse sealers to lock the sealing arm in the sealing position for straws trimming.

2. The machine as claimed in claim 1, characterized in that the spacer is in shape of a U-shaped channel with two side walls, with a plurality of U-shaped grooves evenly arranged along a top side of each of the side walls.

3. The machine as claimed in claim 1, wherein the two impulse sealers are securely fastened on a base plate.

4. The machine as claimed in claim 2, wherein the locking mechanism comprises an extender protruded from the sealing arm, and a clip arm hinged on the base plate and pivotable upwards to lock the extender in place when the sealing arm is pressed downwards to the sealing position.

5. The machine as claimed in claim 1, wherein the sealing element comprises a stainless steel sealing blade affixed with a heating filament.