ABSTRAC

Cooking oil is one of the daily staples that require packaging in each storage, sale, and distribution process. Apart from being used as the containers or wrappers, now the packaging is also designed to make the products look more elegant and attractive, so that the shapes, materials, and the making processes of packaging becomes very varied. Currently, there are several types of packaging for cooking oil, such as a stand pouch packaging, pillow packs, bottles, cups, jerrycan, and bag in boxes (BIB). The packaging material used in the standing pouch and pillow pack is a plastic sheet arranged in a roll film. Meanwhile, bottles, cups, and jerrycan packages are made from plastic pellets that are processed and printed by injection or extrusion machines. The packaging of cooking oil which is a food ingredient uses the principle of pressure packaging.

In the production process, packaging leaks are often found. Types of packaging leaks that arise are body defects, horizontal seal defects, and vertical seal defects. Based on these problems, an analysis of the defect observation data on the products packaging with a size of 1 liter x 12, 1 liter x 24, 500 ml, and 250 ml was carried out. From the analysis of defect observation data, the pillowpack package leakage can be detailed which is presented in the form of statistical data.

From the analysis, it can be concluded that there is a relationship between engine temperature and the number of defects that arise. In horizontal seal temperature, the number of product defects was around 48.7 and the vertical seal temperature was around 8.4. The comparison of cooking oil pillow pack packaging defects if all types of packaging are added up, the most dominant consecutively is horizontal defects by 53%, body defects by 27%, and vertical defects by 20%.

Keyword: Defects, pillow pack, cooking oil

INTISARI

Minyak goreng adalah salah satu bahan pokok sehari-hari yang membutuhkan kemasan dalam setiap penyimpanan, penjualan, dan proses distribusi. Selain digunakan sebagai wadah atau pembungkus, kini kemasan juga dirancang agar tampak lebih anggun dan menarik, sehingga bentuk, bahan, dan prosesnya menjadi sangat bervariasi. Bentuk kemasan pada minyak goreng saat ini terdapat beberapa macam, seperti kemasan *stand pouch, pillow pack, bottle, cup, jerrycan,* dan *bag in box* (BIB). Bahan yang digunakan pada kemasan *stand pouch* dan *pillow pack* yaitu berupa lembaran plastik yang diatur dalam *roll film.* Sedangkan untuk kemasan *bottle, cup,* dan *jerrycan* terbuat dari biji plastik yang diolah kemudian dicetak dengan diinjeksi atau diekstruksi. Pengemasan minyak goreng yang merupakan bahan pangan menggunakan prinsip pengemasan bertekanan.

Pada proses produksi sering ditemukan kebocoran kemasan. Jenis kebocoran kemasan yang timbul yaitu cacat *body,* cacat *seal* horizontal, dan cacat *seal* vertikal. Berdasarkan permasalah tersebut dilakukan analisa terhadap data observasi cacat pada produk kemasan yang berukuran 1 Liter x 12, 1 Liter x 24, 500 ml, dan 250 ml, maka dari data observasi cacat pada produk-produk tersebut dapat dilakukan analisa kebocoran kemasan *pillow pack* yang disajikan dalam bentuk data statistik.

Dari analisa dapat disimpulkan bahwa terdapat hubungan antara temperatur mesin terhadap jumlah cacat yang timbul, pada temperatur *seal* horizontal jumlah cacat produk berkisar 48,7 dan temperatur *seal* vertikal jumlah cacat produk berkisar 18,4. Perbandingan cacat kemasan *pillow pack* minyak goreng jika dijumlahkan semua jenis kemasan maka yang paling dominan secara berurut yaitu cacat horizontal sebesar 53%, cacat *body* sebesar 27%, dan cacat vertical sebesar 20%.

Kata kunci: Cacat, *pillow pack,* minyak goreng