

EGG SHELL DRYERS

A WASTE PROBLEM



In the early days of the egg processing industry, the shells were considered a pure loss. Now, with the growing importance of egg products and under pressure of pollution control, it is becoming more and more costly to dispose of the shells, which represent circa 14% of the total egg weight. This includes the membranes and liquid adhering to the inside of the shell and which cannot be

removed in a hygienic way with the existing and approved breaking machines. The processor has to pay for the collection, the disposal and/or destruction of these shells.

A processing plant breaking 2.500 cases (900.000 eggs) of shell eggs/day, will produce about 7.000 kg of wet centrifuged shells/day containing about 1.200 kg of moisture. This remaining liquid drips from trucks, goes into drains, attracts flies and causes odours.

To solve this, a shell dryer has been developed which works simultaneously with the breaking operation.

This system is designed specifically to remove gently the moisture from the eggshells and membranes after they have passed through the Coenraads-centrifuge. The shells and membranes will contain ca 12-15% moisture after centrifuging and removal of the inedible liquid. After dehydration the corresponding figure is approximately 1