CASE HISTORY

Date: 8 March 2001
To: Egg Processors
From: Rick Smith

Re: Separation of Liquid Egg from Eggshells

Numerous EGG PRODUCERS throughout the world break eggs and separate the contents into liquid egg yolk, egg white and whole egg products. These liquids are often processed by the addition of ingredients followed by pasteurization. They are then packaged and sold to bakeries, cookie and candy manufacturers, restaurants and fast-food organizations. From the egg breaking process there is a large amount of waste eggshells and egg liquid generated which is a tremendous waste disposal problem for these producers.

When the egg is cracked open most of the liquid drops out the shell but there is some residual egg white that remains inside. Also there are many eggs that are graded as inedible and are removed from the production line. These inedible eggs and eggshells are collected into a screw conveyor, transported to a refuse room, and fed into an FES INTERNATIONAL basket centrifuge. The

eggshell and liquid egg is fed continuously up to 20 hours per day, 7 days per week into the separator. The basket centrifuge rotates at high rpm separating the egg liquid from the eggshell by centrifugal force. The dry eggshell is discharged continuously through the solids discharge chute.

The liquid product removed from the eggshell is processed into inedible product and is sold as an ingredient for animal feed. The eggshell can be spread on agricultural land as a mineral supplement, hauled away to a landfill, or it can be dried further and sold as a calcium supplement in animal feed.

The FES model 3001 basket centrifuge comes with many types and sizes of screens to fit the needs of different processes. Several units are available in the pilot laboratory for demonstration and testing. Please contact one of our sales engineers for more information and assistance in putting this technology to work for you.

