SURIMI IS AVAILABLE in a wide variety of colours and flavours to match just about anything, and products are being further developed in response to current market demands for low-fat, low-calorie foods.

During manufacture there is a loss of meat fibre, but German company Flottweg says that modern separation technology is the answer to this problem.

Surimi is a seafood product based on fish protein. It is nearly entirely free of odour or flavour, and has a high water and protein content. These properties make it the perfect raw material for industrial processing to make many different products.

The manufacture of surimi primarily starts with Alaskan pollock. The fish is deboned, chopped and washed in water with added salt. The result is a fish broth that is then screened and pressed in a screw press.

By adding sorbite and phosphates, the pressed fish material takes on a viscous texture and can bind relatively large amounts of water. After water is added, a raw material results that is rich in water and protein.

Separation technology in surimi manufacturing



WASHING

Before reaching the end product, surimi goes through different washing phases. In plants of average size, on average 30m³ of water per hour is required for these washing phases. And meat fibres are also lost during washing. The solid portion runs to about 0.25% of the total by weight. When it's calculated out, that means a loss of dried fish fibres of 75kg per hour. In all, about 210kg of surimi per hour is lost.

To counteract the loss of fibres, modern separation technology with a

centrifuge is an ideal solution. The decanters used are suitable both for the dewatering of surimi as well as for the clarification of surimi press water.

Flottweg claims that the results are outstanding – yields from the manufacture of surimi have been increased by up to 50% since the use of the first decanters in the 1980's. At a volume of washing water of 30m³ per hour, just a single decanter centrifuge can recover up to 924,000kg of surimi per year, which means that when the costs of purchase, personnel, energy, and maintenance are considered, the purchase can be amortised in less than six months.

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PROCESS CYCLE of surimi



FLOTTWEG DECANTER processing surimi



