

PILOTOINTIKOKEET: alustavia kyselyitä



SINTEF MobileSeaLab, Norja

- We should perhaps inform you that though we have a lot of experience with hydrolysis processes, **we have never done gelatine processing or pH shift in Mobile Sealab.** (We might also be able to do the second part of the gelatine process if required; we have no sieve to do the first part.)
- We did not try pH shift or gelatine extraction in our container, but most of the technological processes can be tested after some adjustments.
- Normally we draw the line at planning two batches of hydrolysis per day. But yes, without major unforeseen difficulties, we should be able to run both of these tests in one (long) day.
- It is difficult to estimate the price, but approximately **one day of the processing** (normally it is quite long days : 10-12 hours) **costs approx. 75-100.000 NOK** (engineers and operating staff included). In addition it costs transportation and cleaning parts and due to this it would be advisable to run as much as possible processes in "one run".
- **>>>> 7 700-10 300 €/päivä**

Muuta

- The minimum amount of raw material in the container is approx. 400 kg (in order to have sufficient mixing). 4 C for herring processing could be a challenging as herring oil is solid at his temperature and separation could be stopped.



Meatco BV (Hollanti)

I read the refinements and have no hesitation that we can do the trials.
The only challenge as I see is the concentration/drying of the gelatin fraction.
This might have a quite strong gelification which could hinder the concentration/drying step.

Also the inactivation step for trial A should be minimal 90° Celsius.
Furthermore I suggest to try and dry the protein mass from the pH shift test.

Cost estimation:

Process A. Enzymatic Hydrolyzing

1 day hydrolyzing at Meatco Pilot plant	€ 2.500,-
1 day concentration/spray drying hydrolysate	€ 3.000,-

Process B. pH shift

1 day processing at Meatco Pilot plant	€ 2.500,-
--	-----------

Process C. Gelatin process

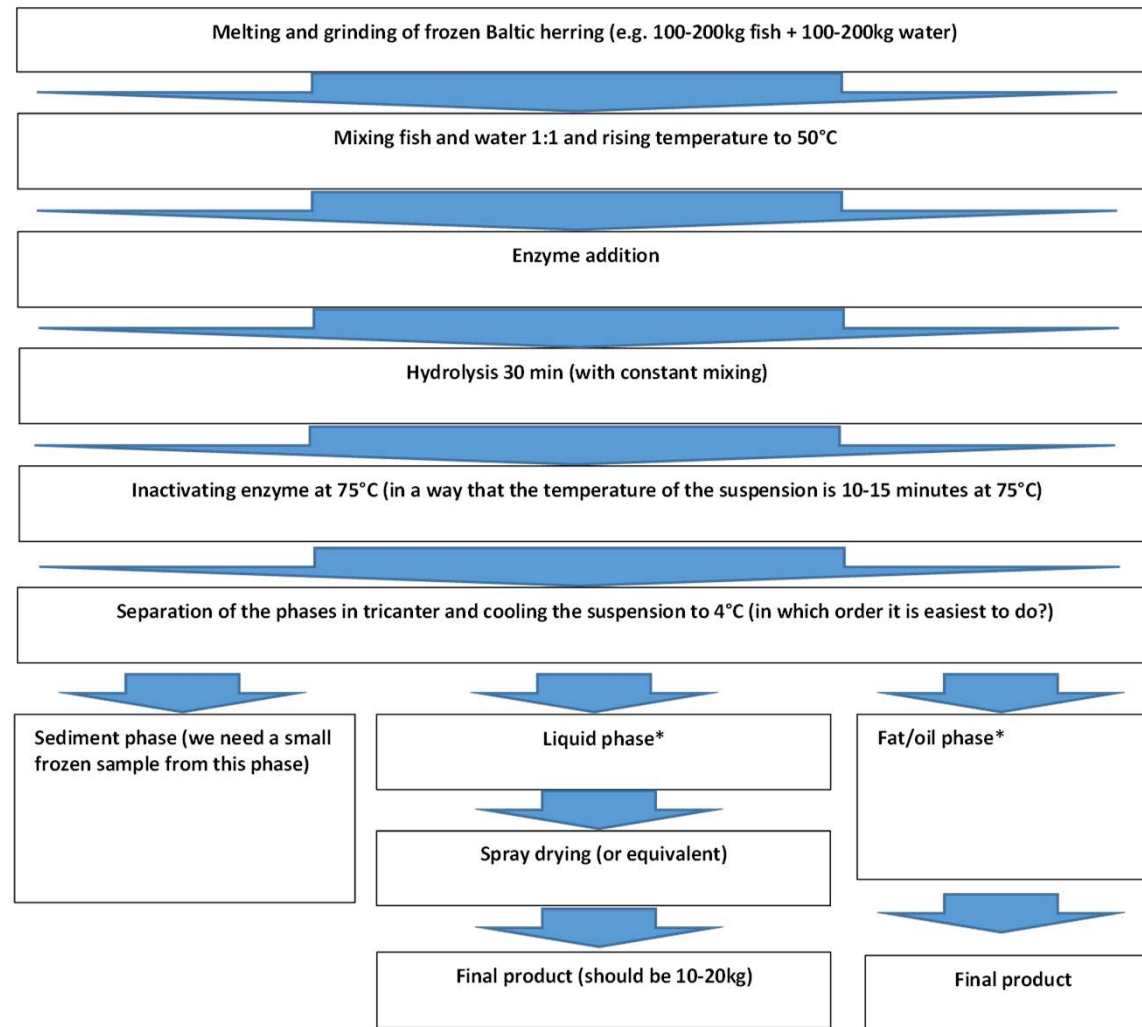
1 day processing at Meatco Pilot plant	€ 2.500,-
1 day concentration/spray drying hydrolysate	€ 3.000,-
1 day drying (Protein from pH shift, gelatin & solids)	€ 1.000,-

There will be some costs for renting a cooling van for transporting the various fraction. This will be about € 500,-
So total estimation of cost is about € 15.000,-

This includes a full report of the trials, necessary enzymes, waste disposal and cleaning of plant/equipment.
Planning of the trials in April/May is no problem and can be determined when we know the availability of the raw material.



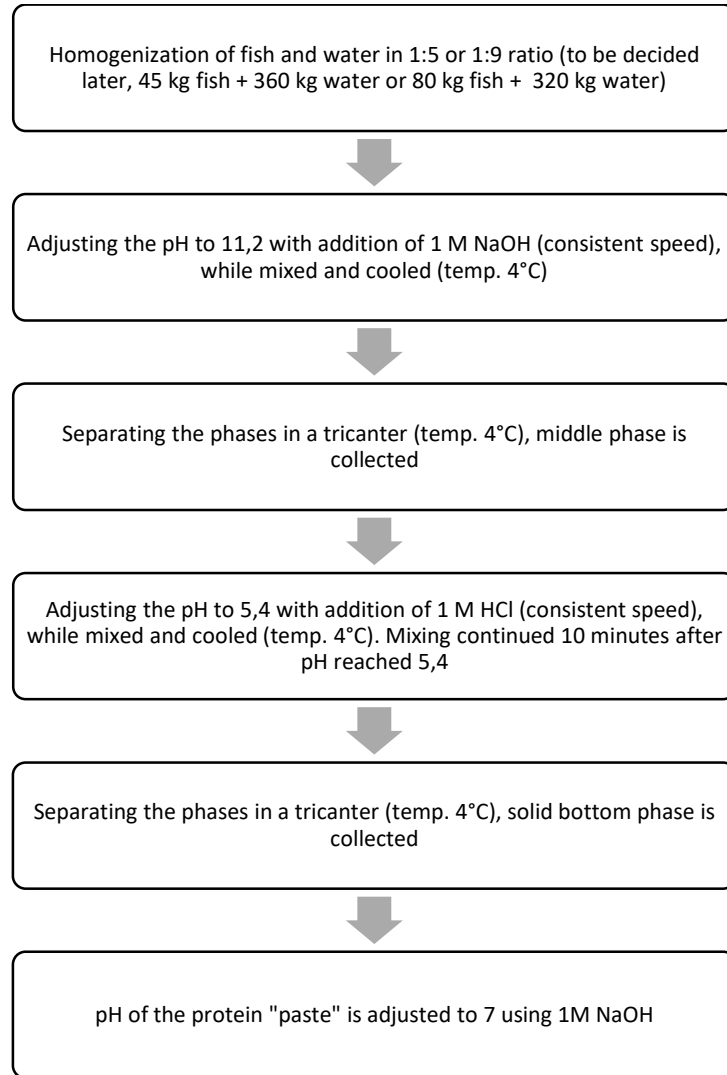
A) Enzymatic hydrolysis for Baltic herring



*)polishing by centrifuging possibly needed



A) pH shift method for Baltic herring



A) Gelatin process for scales

