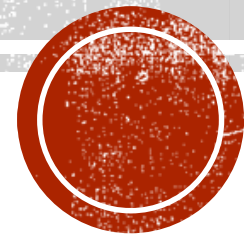


SMOKING TECHNOLOGY



Smoking Technology

Smoking technology arose long ago, and has been used as a method of long-term preservation. The advantages of exposing food to smoke are several: a more preserved food, enhanced flavor and the prevention of infestation of by insects.

The processing of smoked fish involves five major steps

- *Selection, handling and preparation of raw material*
- *Brining/salting*
- *Hanging and drying*
- *Smoking*
- *Packaging*



Compounds identified in wood smoke

- Acids
- Alcohols
- Carbonyls
- Esters
- Furans
- Lactones
- Phenols
- Miscellaneous



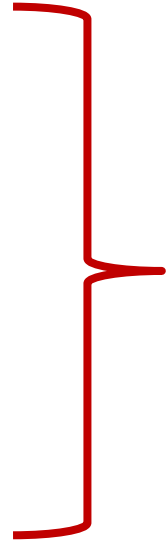
Factors affecting the smoking

- Pre-salting
- Smoke
- Raw material
- Smoking time and temperature



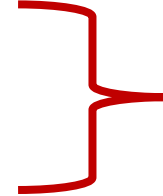
Wood source in smoking

- Beech
- Linden
- Birch
- Alder
- Oak
- Apple
- Cherry



Mostly preferred

- Pine
- Pinales



High tar content

Smoke can be obtained in two forms;

- In gas
- In liquid



Smoke (In gas form)

Drying

The pyrolysis of hemicellulose (200-260°C)

The pyrolysis of cellulose (260-310°C)

The pyrolysis of lignin (310-500°C)

Smoke (In liquid form)

*Desolved wood pyrolisate
water*

Major phases of smoke

- *Particle phase*
- *Gas phase*
- *Condensing
phase*



Smoking methods

Application methods

- Wood smoke
- Liquid smoking
- Elektrostatic smoking



Temperature

- Cold smoking-a few weeks (12-25°C)
- Warm smoking- 1-3 hours (25-50°C)
- Hot smoking -20-60 min.(50-80°C)



Smoking procedure

