# Environmental friendly technologies
# KEE/ENT

ESF II project of the University of West Bohemia in Pilsen

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## Lecture 4

## Wet mechanical separators

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# Wet mechanical separators

Separation on drops (inertial principle)

Separation on wet surface (inertial, centripetal principle)

Separation on bubble surface (transfer through the layer of a liquid)

showering

inertial

turbulent

foam

stream

rotational

$$m = \frac{V_v}{V_p}$$

Water consumption

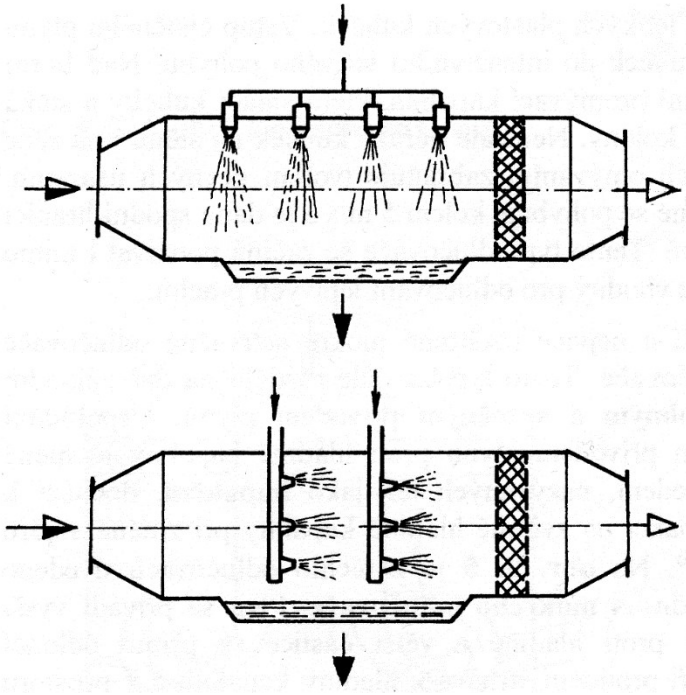
Waste treatment

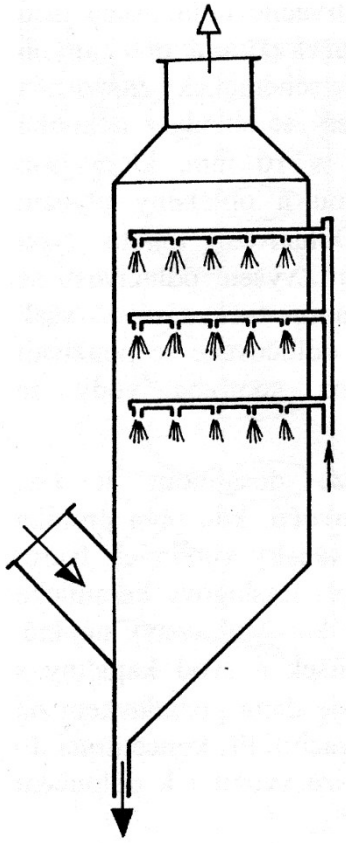
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# Showering separators

- Showering chambers
- Showering towers





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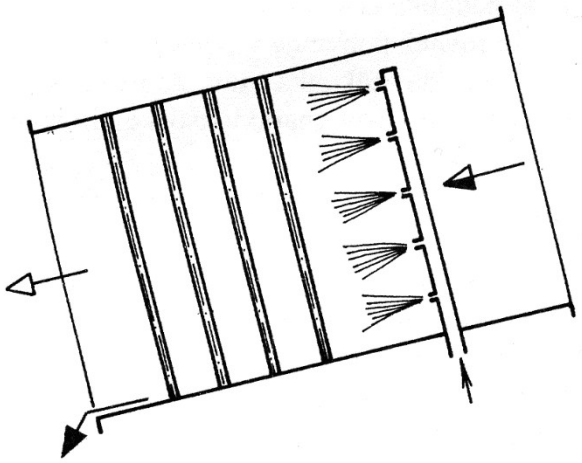
# Inertial separators

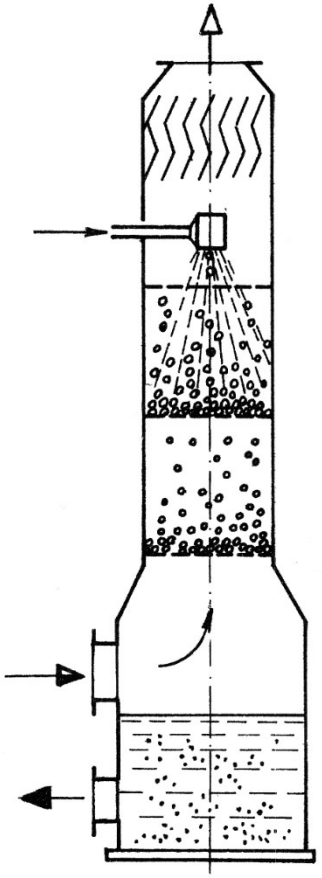
- With wet obstacles

-With wet solid layer

-With wet fluidal layer

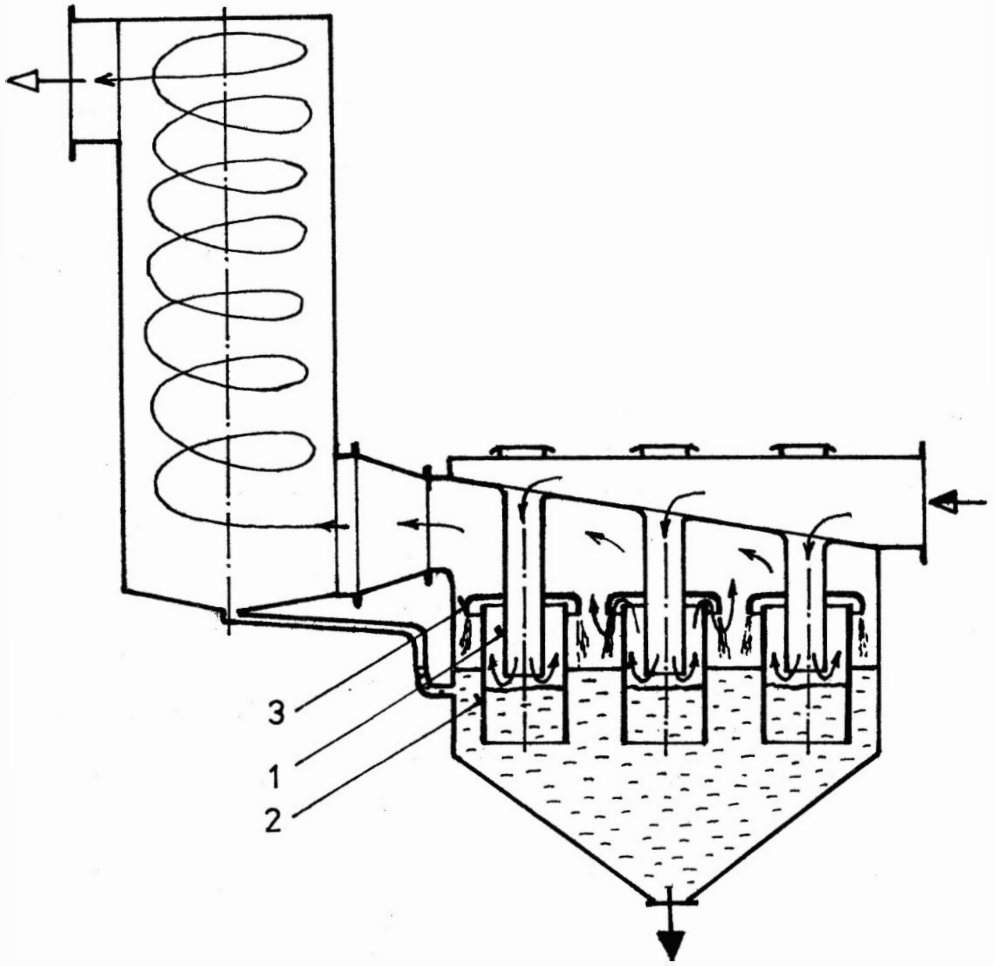
-surface





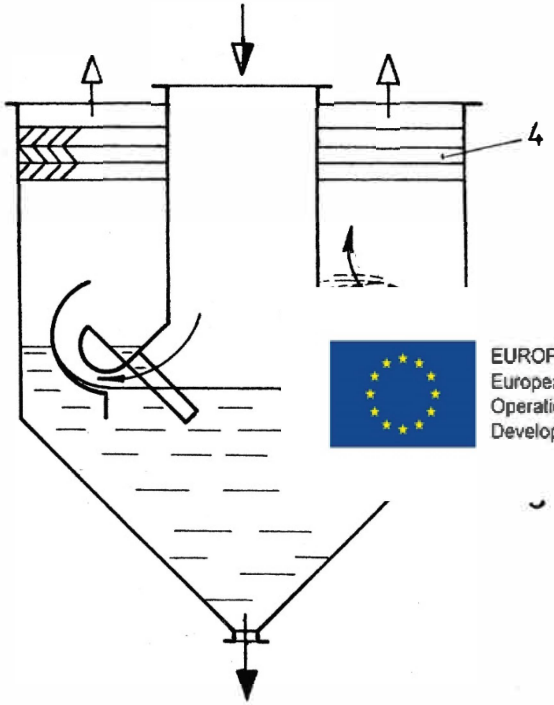
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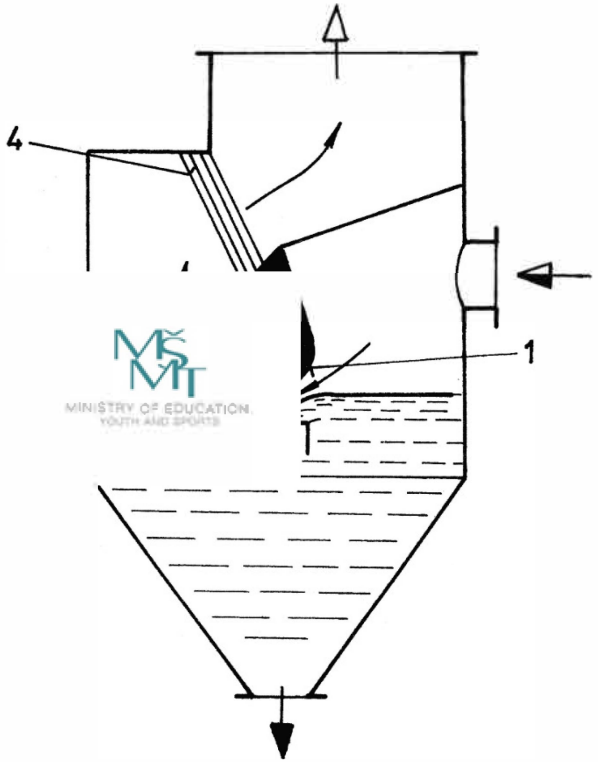
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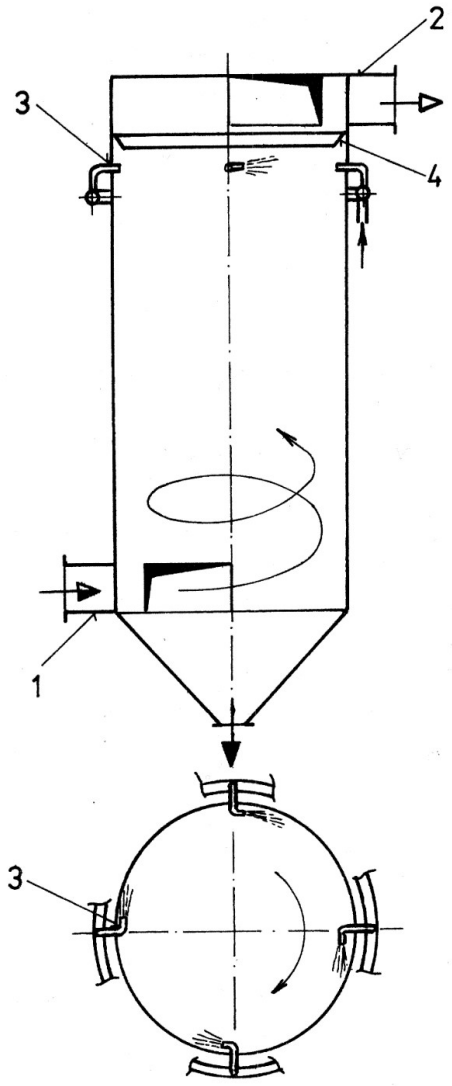
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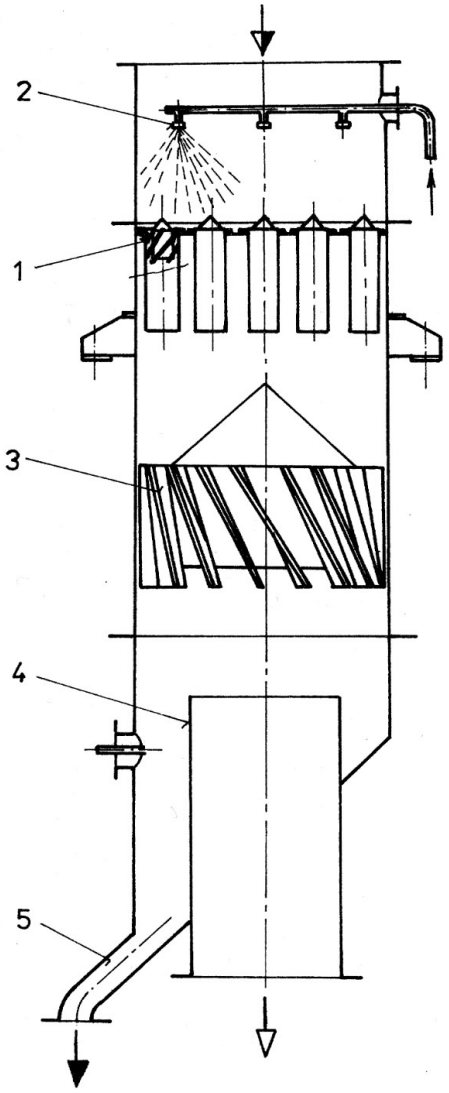
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# Turbulent separators

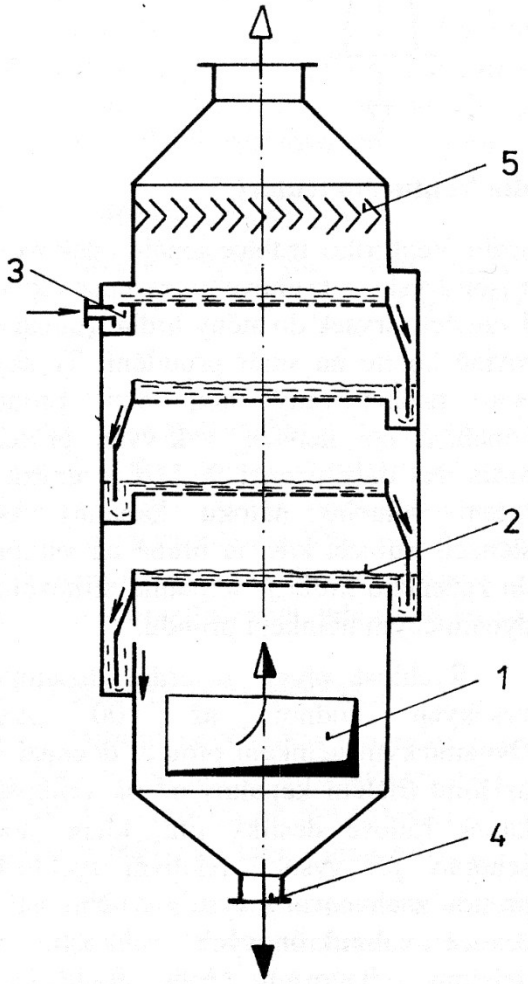
- With wet walls

- turbulencers



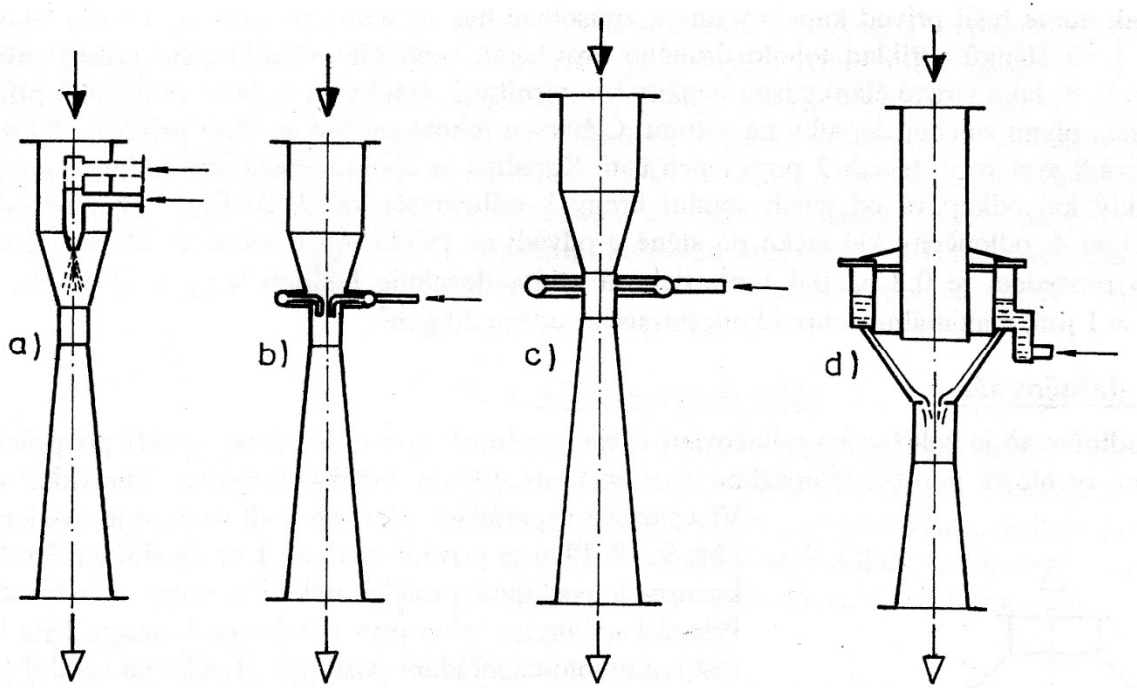
# Foam separators




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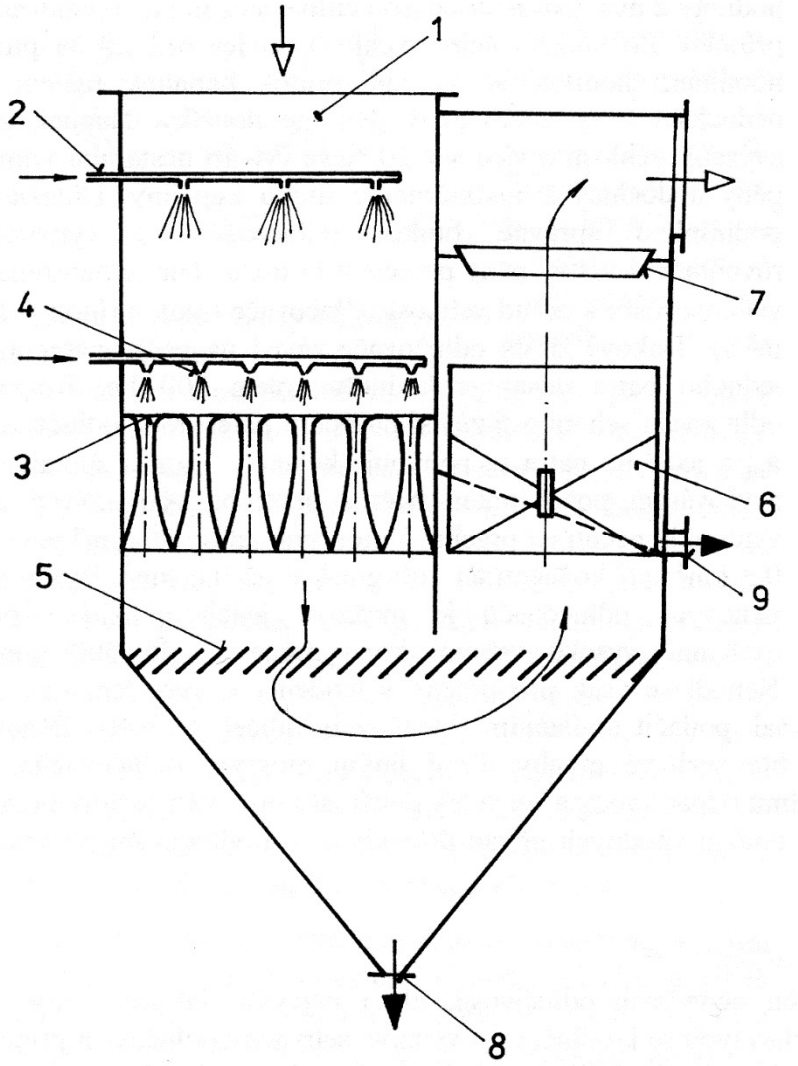
# Stream separators




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# Stream separators




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# Thank you for your attention...

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