



ESDU SPF-M3-7

Developing a high temperature and pressure fluid dynamic gauge for the crude oil annular test section

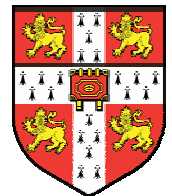
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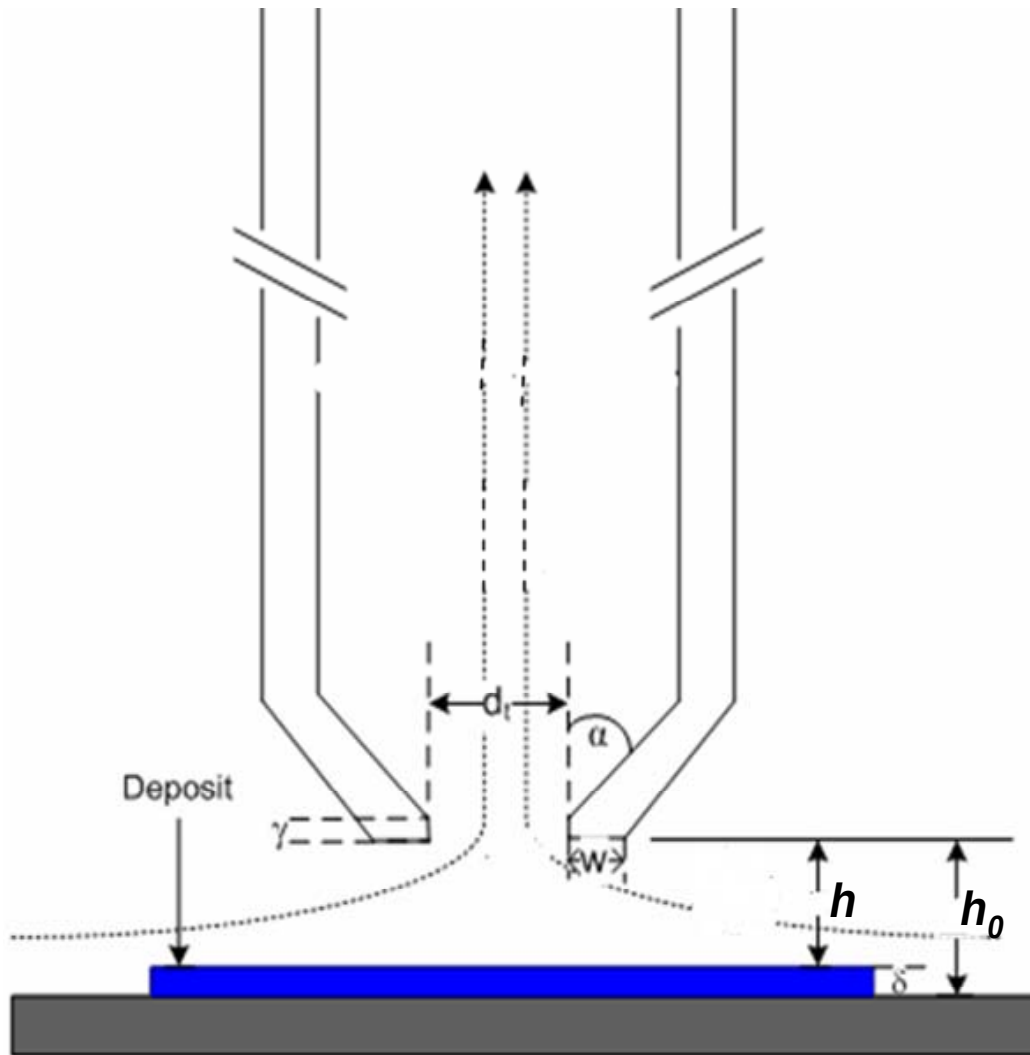
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28th March 2007
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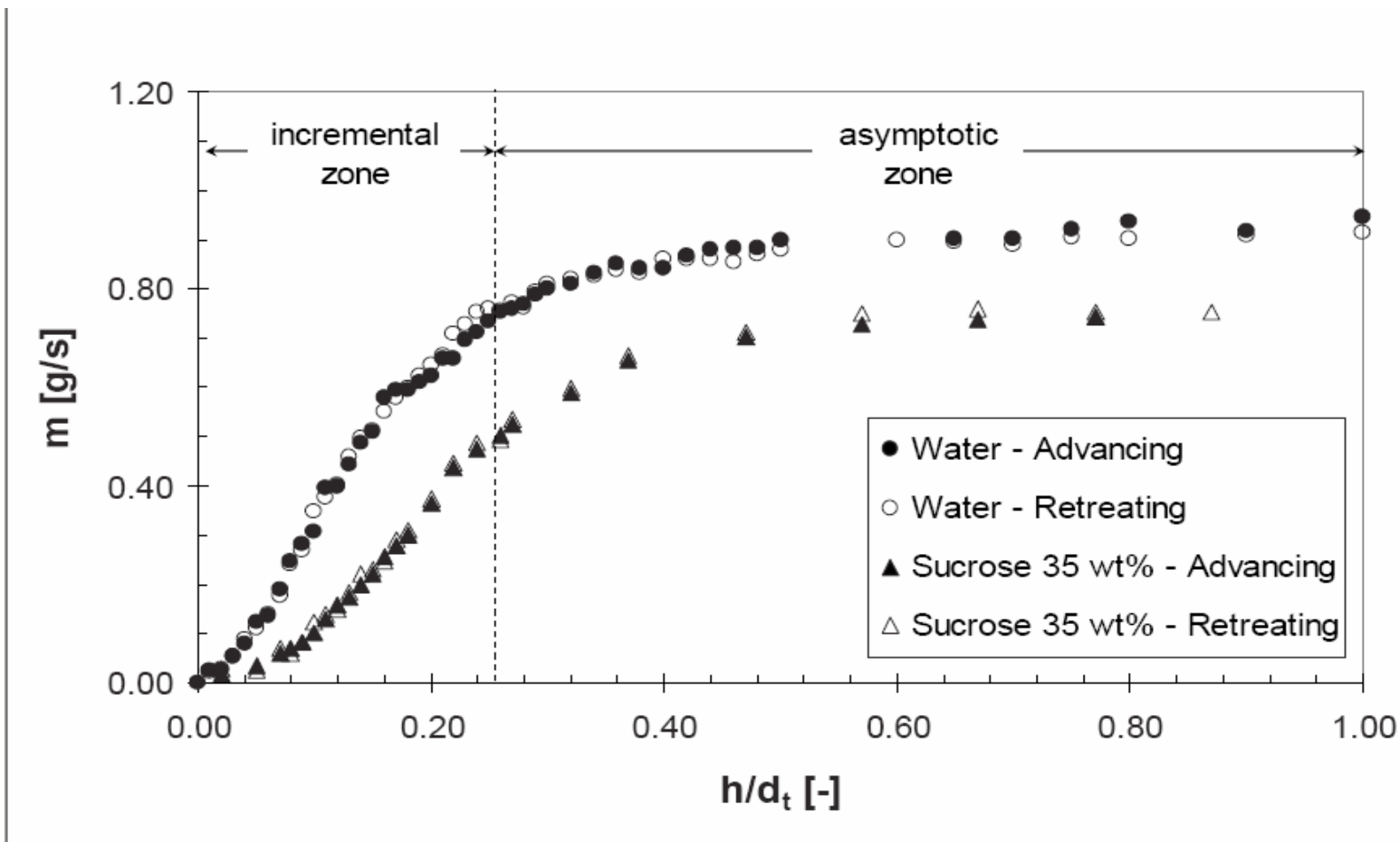
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Engineering



Principle of Fluid Dynamic Gauging



- Measure flow rate at constant ΔP
- Rule: $\frac{h}{d_t} < \frac{1}{4}$
- $\delta = h_0 - h$



Typical mass flow rate profile