

➤ Poul Due Jensen – grundlægger

Poul Due Jensen grundlagde i 1945 virksomheden. Han var:

- visionær
- en gudsbenådet opfinder
- en leder der forstod værdien af teamwork
- en stor personlighed i dansk industri

Poul Due Jensen døde i 1977 – 65 år gammel.



➤ Grundfos' hovedsæde



Grundfos produktprogram



Grundfos' resultater:

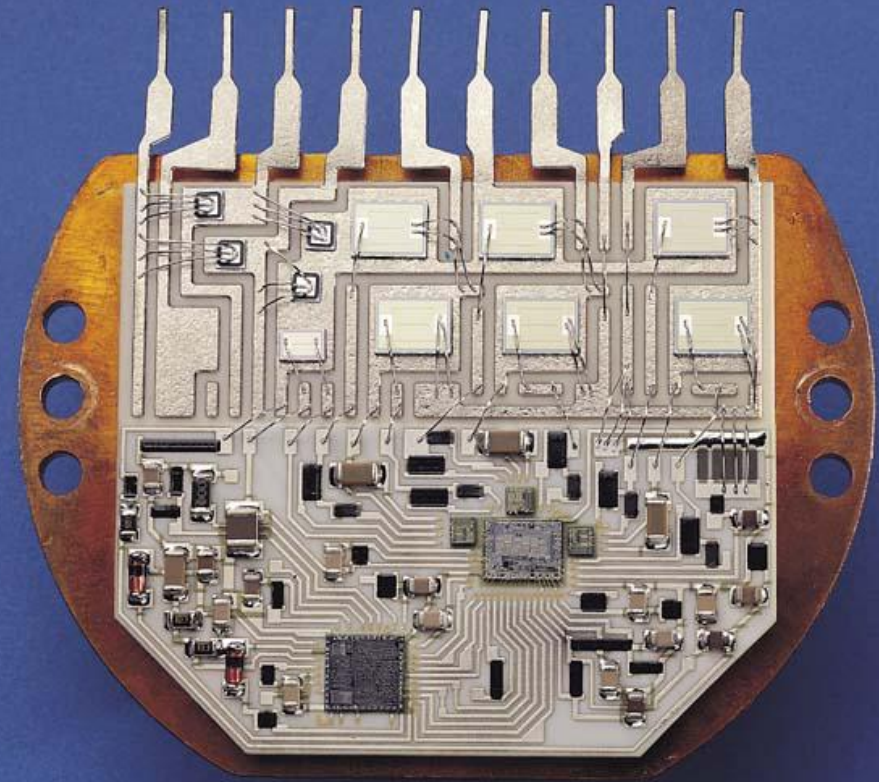
- Omsætning 2006: 15.0 Mia. kr
- Resultat før skat: 1.5 mia. DKK
- Soliditetsgrad: 52 %
- Afkastningsgrad: 12.7 %
- Medarbejderantal: 16.000
- Grundfos' "globale markedsandel": 7-8 %

- Grundfos er en fondsejet virksomhed-ejet af Poul Due Jensen's Fond
- Grundfos har i dag 72 selskaber i 40 lande



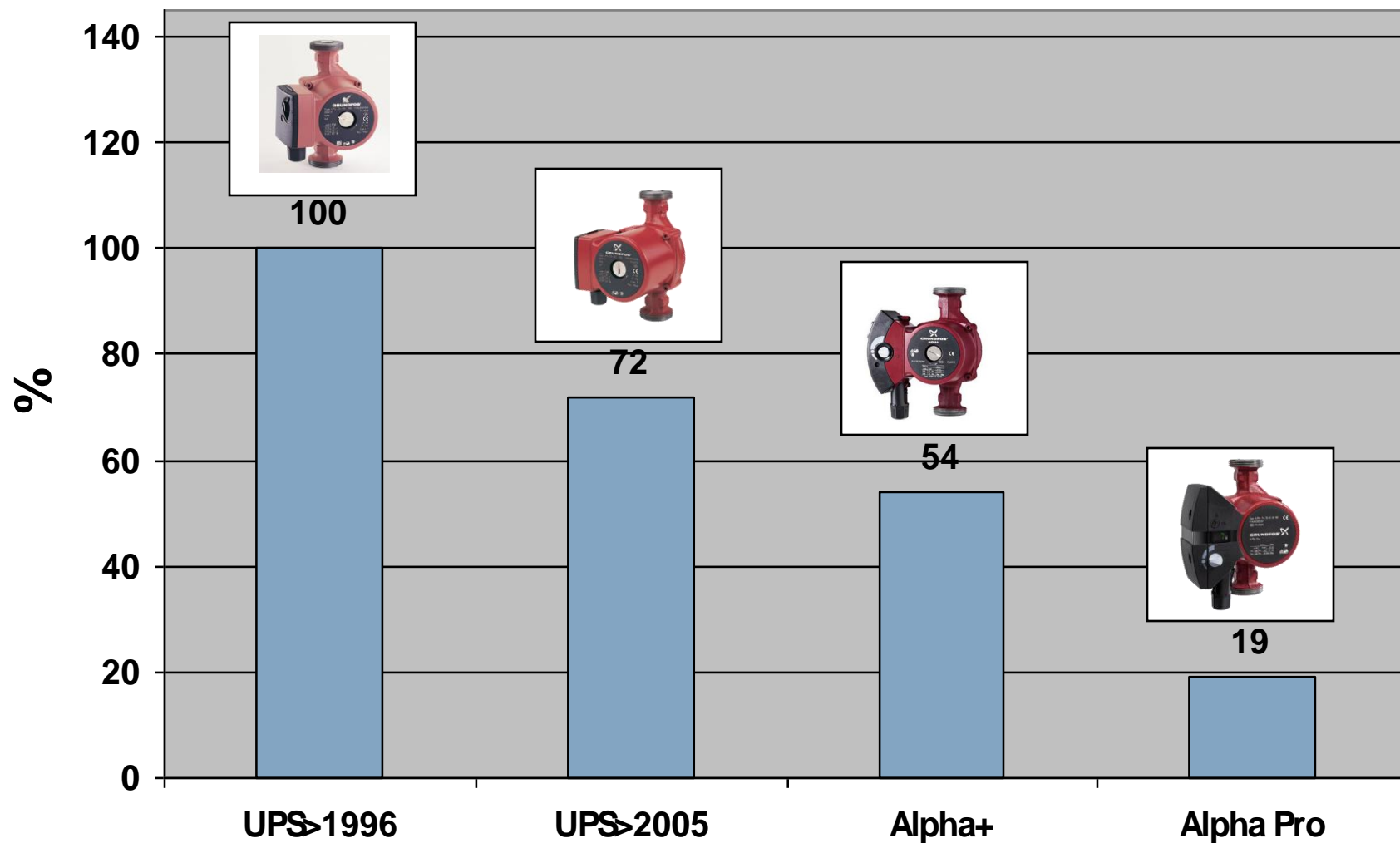
X99 - i 1991 verdens mest avancerede powermodul

- Designet og produceret af Grundfos

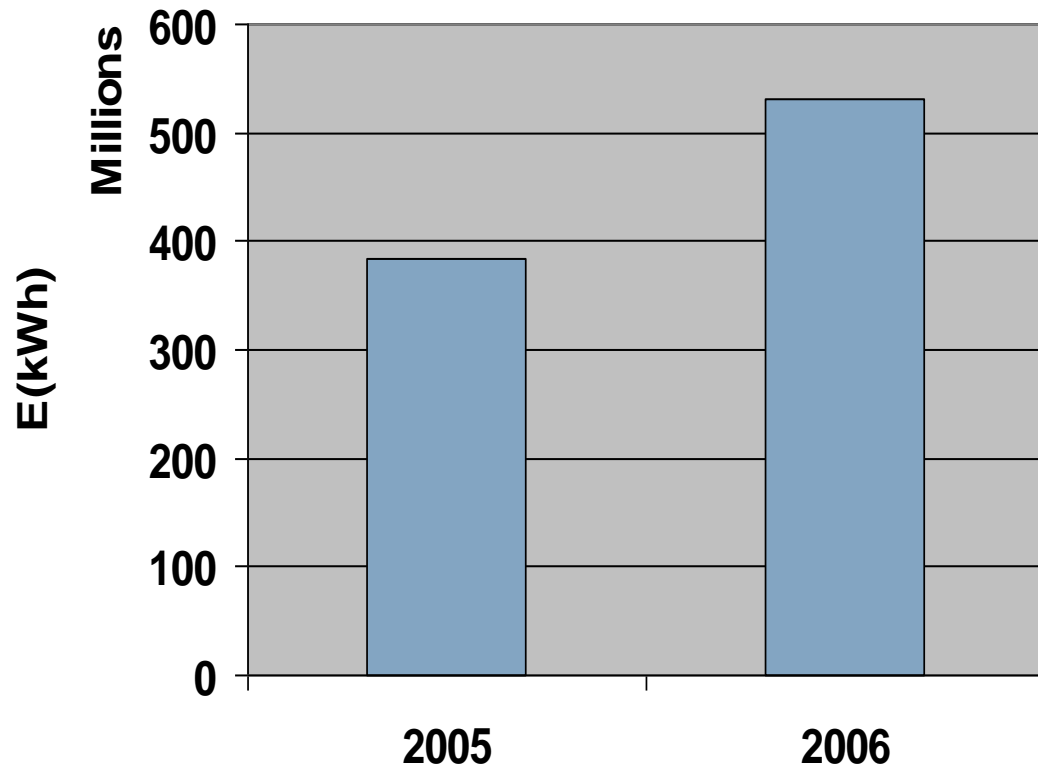




Udvikling i cirkulationspumpers årlige elforbrug



Årlig elbesparelse for GRUNDFOS' energimærkede cirkulationspumper installeret i EU



–2005: 384 mio kWh/år

–2006: 532 mio kWh/år*

*De energibesparende cirkulationspumper, der er installeret i 2006, sparer 532 mio kWh hvert år i hele pumpernes levetid



Grundfos har stået i spidsen for tilvejebringelsen af en A-G energimærkningsordning for cirkulationspumper i EU

Energy

1984
Saving the light
Using only 1/5 of the electricity of conventional bulbs, and being longer, energy saving light bulbs are a sound financial and environmental investment.

1995
Colder, cheaper
Consumers quickly appreciated that A-labeled refrigerators used up to 30% less energy than their C-labeled counterparts.

2001
Harder for less
The development of environmentally friendly fuel-efficient car technology now allows 300 kilometers on just 3 litres of diesel.

2005
The label continues to circulate
The energy-labelling scheme for pumps was launched. Grundfos led the way, introducing two ranges of highly efficient standard and electronically controlled circulators through the Energy Project.

Finally, energy labelling for pumps

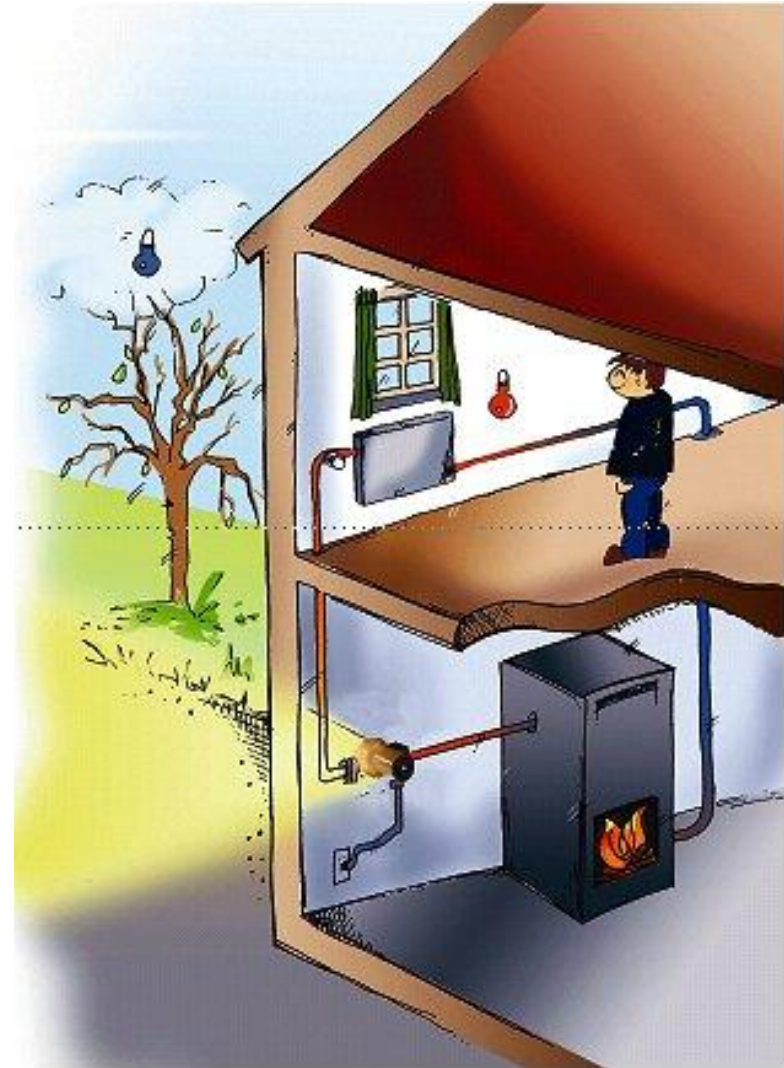
The European pump labelling scheme enables easy recognition of circulator energy consumption. It acts as a consumer guide when choosing a pump, aiming to promote energy saving throughout the market.

Grundfos were involved in initiating the Europump scheme launched in 2005 and immediately applied the new label to our own circulators.

Each easily read label rates energy consumption on a scale running from A to G, the A-grade being the most efficient. The D-grade on the scale is a representation of the average consumption of circulators installed today. Energy labels are easily recognizable, familiar to most people through their use on domestic appliances and light bulbs. Applying them to circulators creates awareness of pump energy consumption, and in turn, increases customer demand for more efficient energy-saving solutions.

Cirkulationspumper

- **120 mio** cirkulationspumper installeret i EU25
- **12 mio** nye pumper på markedet om året i EU25
- Årligt elforbrug af installerede pumper i EU 25 er **60 TWh/år** i EU25
- Op til **10%** af en husholdnings elforbrug kan spares ved at skifte til de mest effektive pumper på markedet



Årlig reduktion af el-
forbrug i Europa
- ved skift til A-
mærkede pumper:

44 TWh/år

(Til sammenligning
Er Danmarks elforbrug 30 TWh/år)



Årlig CO2-
besparelse i Europa
- ved skift til A-
mærkede pumper:

*17,6 mio tons
CO2*

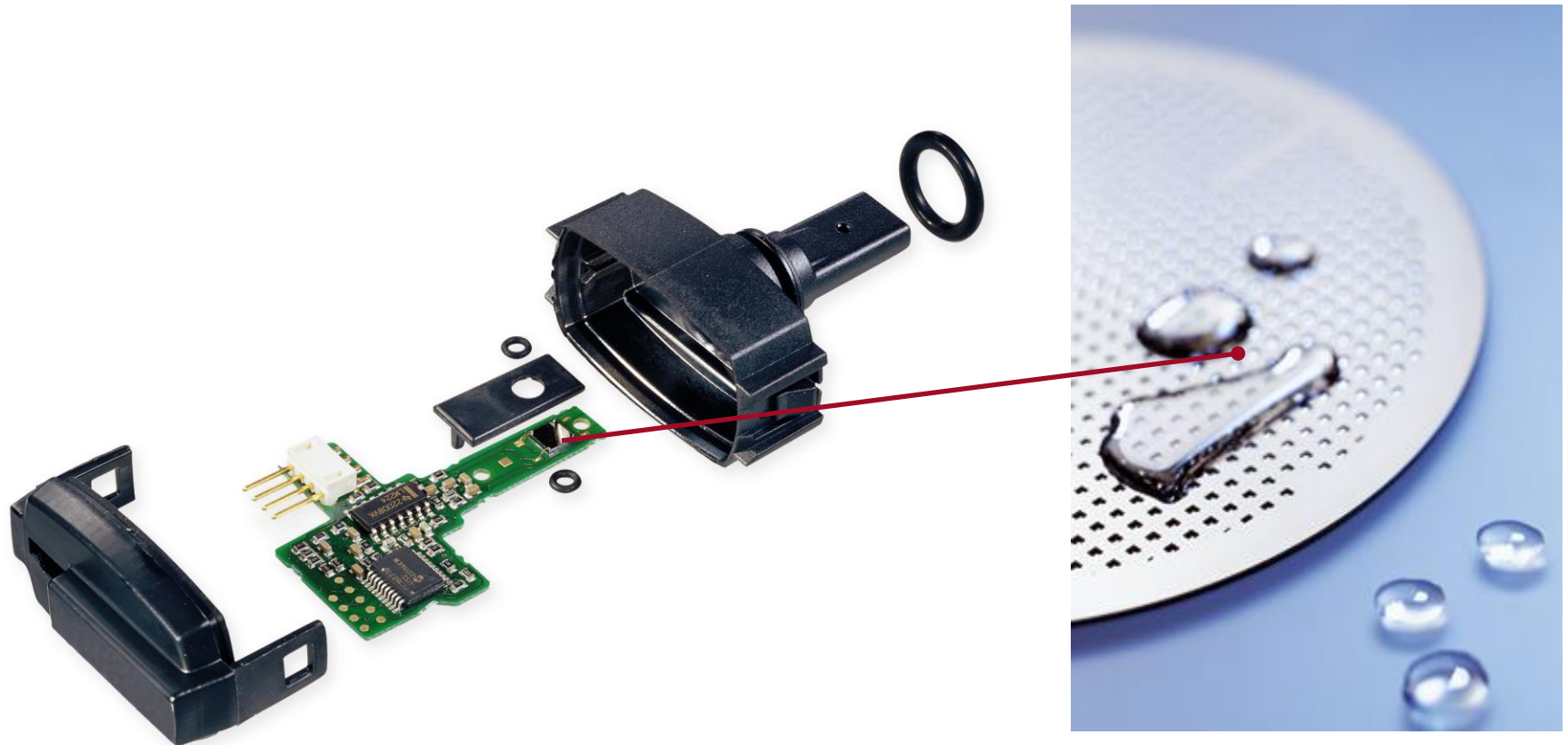




Clean room – state of the art facilities



Pressure sensor – relative and differential



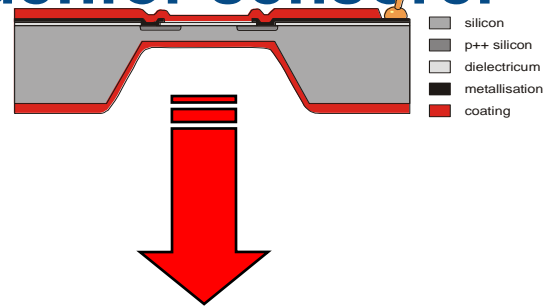
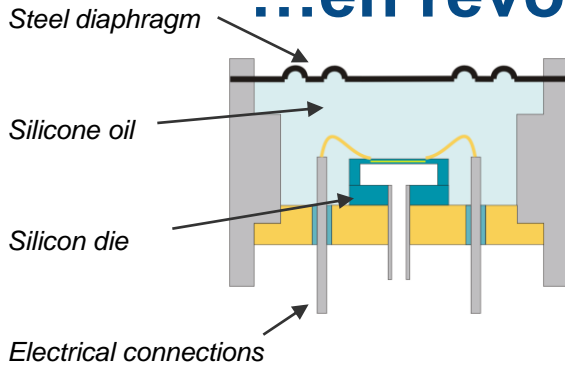


Sensorik ved optimering af pumpesystemer

- Optimeret styre signal – tættere på ønskede tilstand
 - Analoge sensorer bliver standard
- Optimeret brug af sensorer forventes at give yderligere **minimum 10%** effektivitetsforbedring
- Problemet er prisen for sensorerne

Tryksensorer : Den gamle måde og Grundfos måden

...en revolution indenfor sensorer



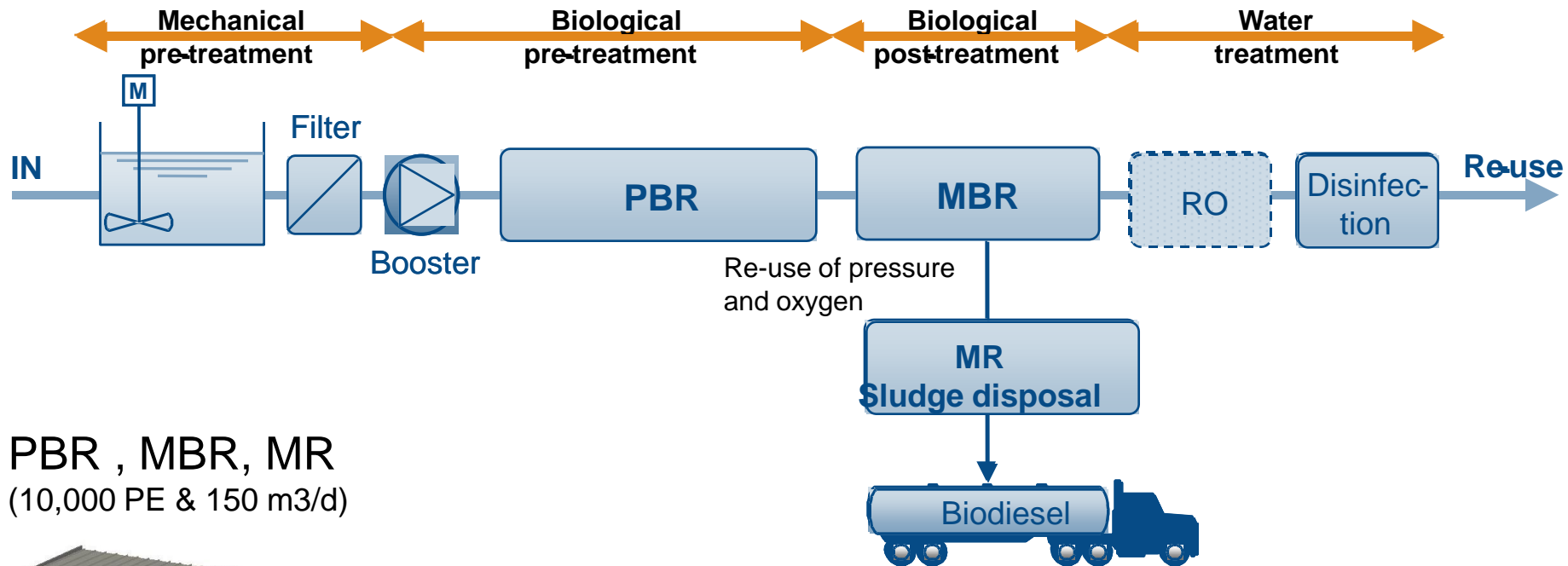
- Tryk
- Tryk + Temperatur
- Differenstryk
- Vortex flow + temperatur
- Tryk + Flow + Temperatur
- med mere...



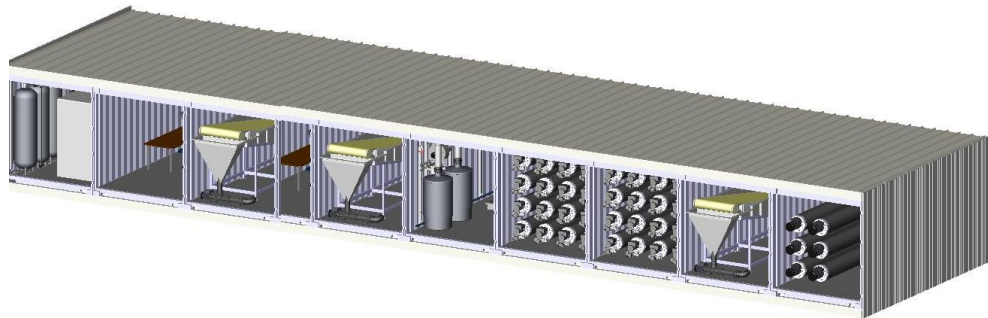


PBR , MBR, MR

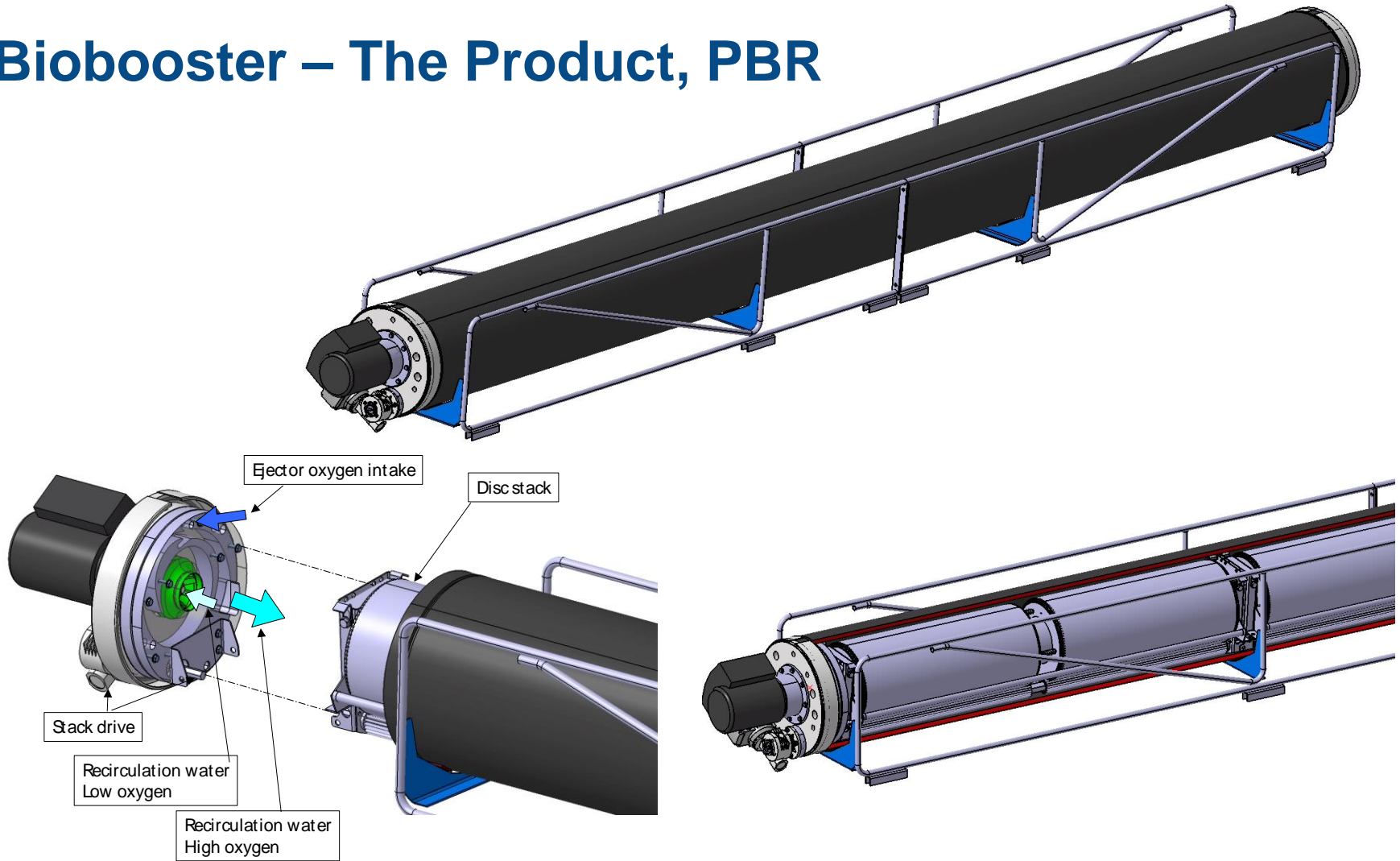
Process flow and history



PBR , MBR, MR
(10,000 PE & 150 m3/d)



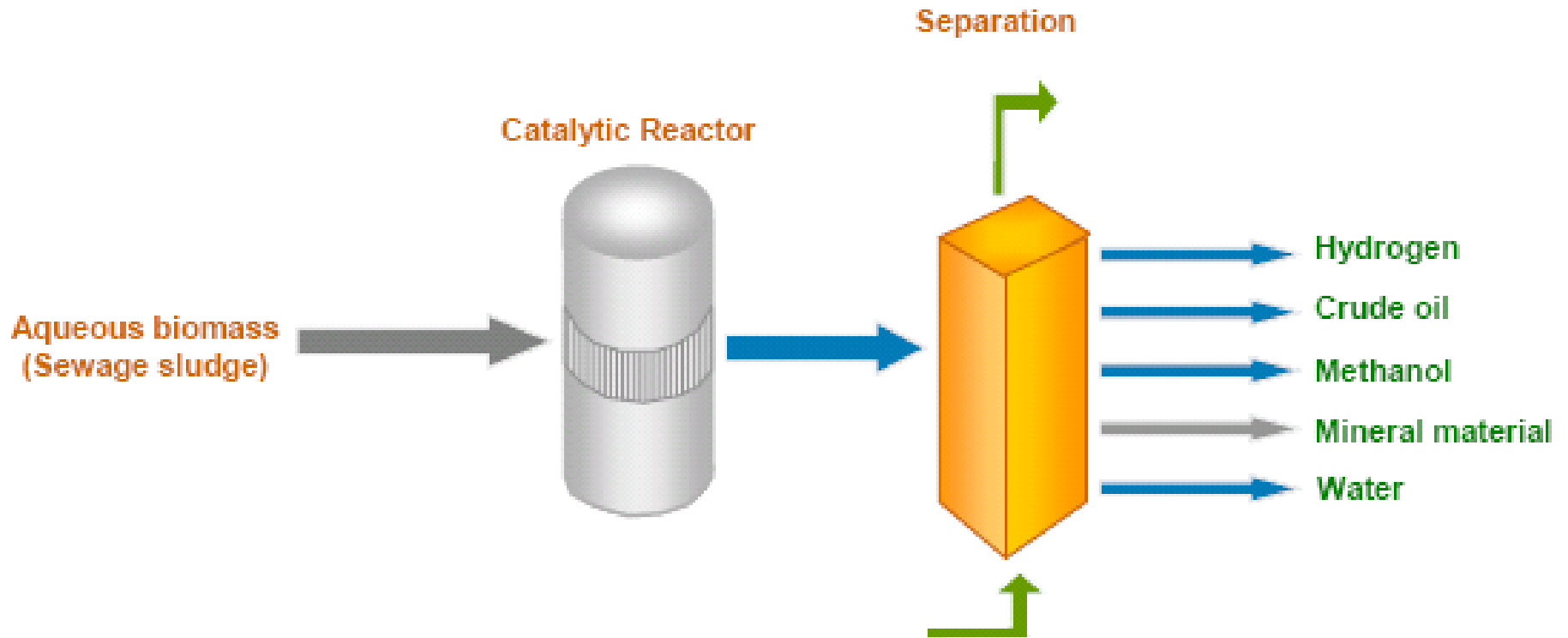
Biobooster – The Product, PBR







Vores vision om



→ **Micro Refinery:** A cost effective competitive technology for conversion of a wide range of biomass and wastes to bio-crude oil or other fuels including hydrogen, methane and methanol

Tak for opmærksomheden