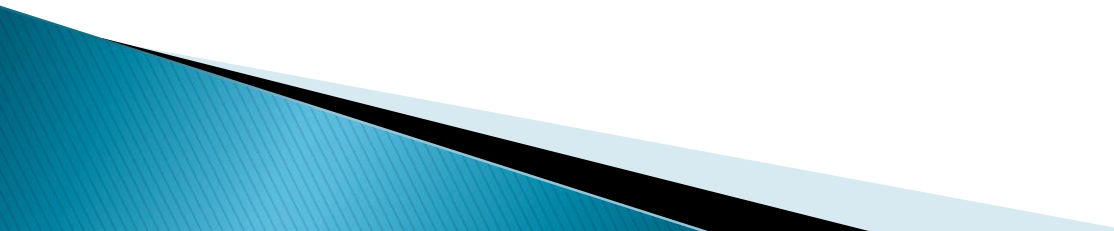


Pulse fishing

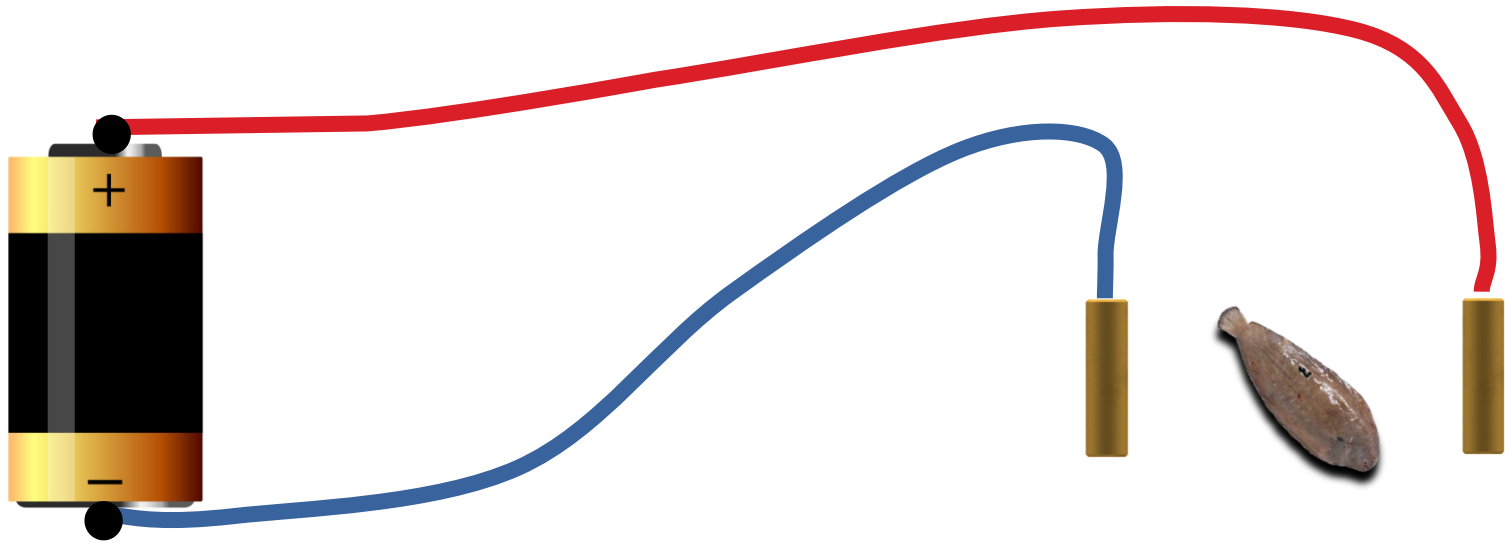
How does it work?

Harmen Klein Woolthuis – HFK Engineering BV
Brussels, 21-6-2017

Introduction

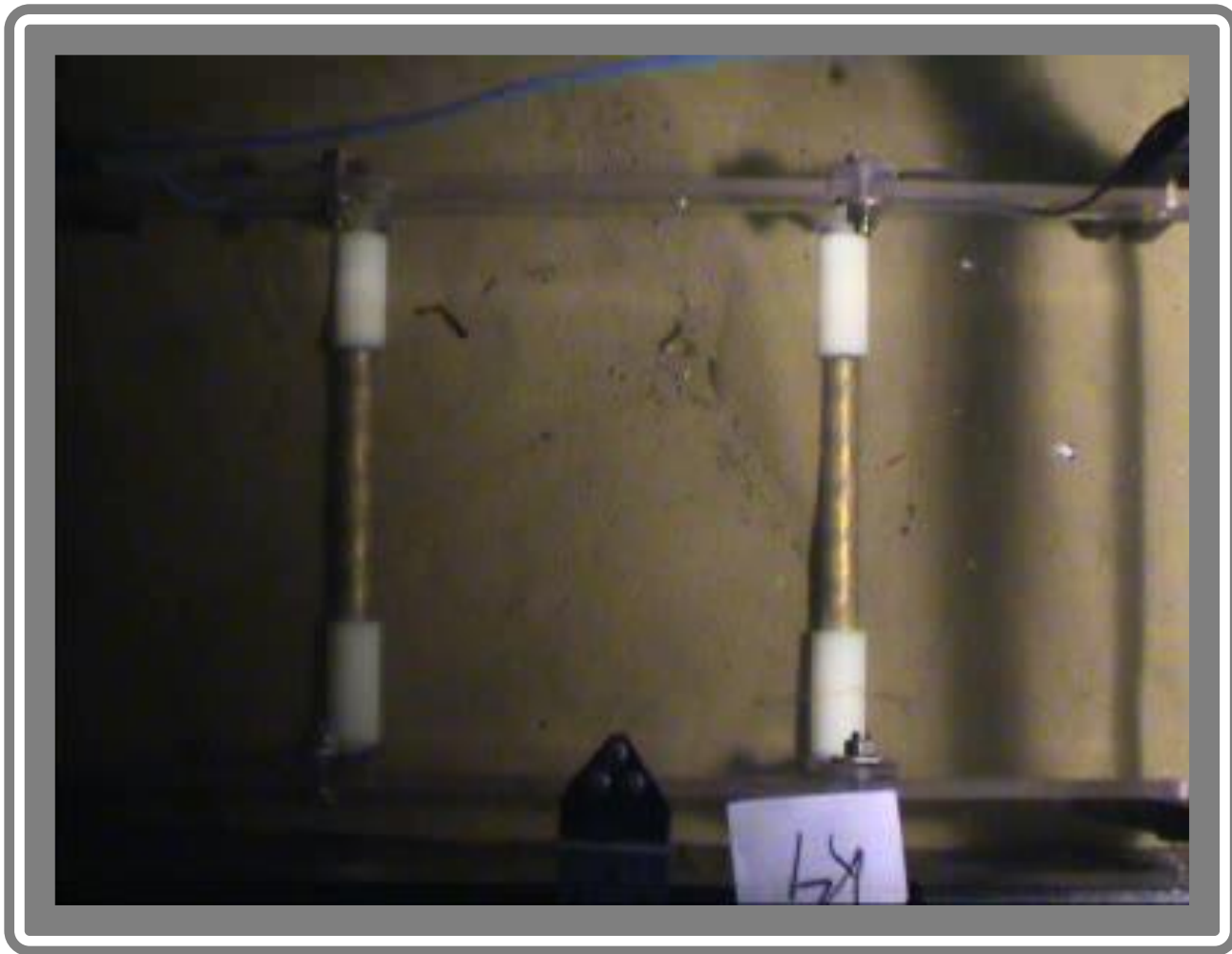
- ▶ Technique behind pulse fishing (using logic)
 - ▶ 1970: ILVO/IMARES started experiments using electricity to fish
 - ▶ Can we use electricity instead of tickler chains to stimulate flatfish to leave their shelter in the seabed?
- 

The outcome: electrical pulses work best



- ▶ Muscles contract when low voltage electrical pulses are applied.

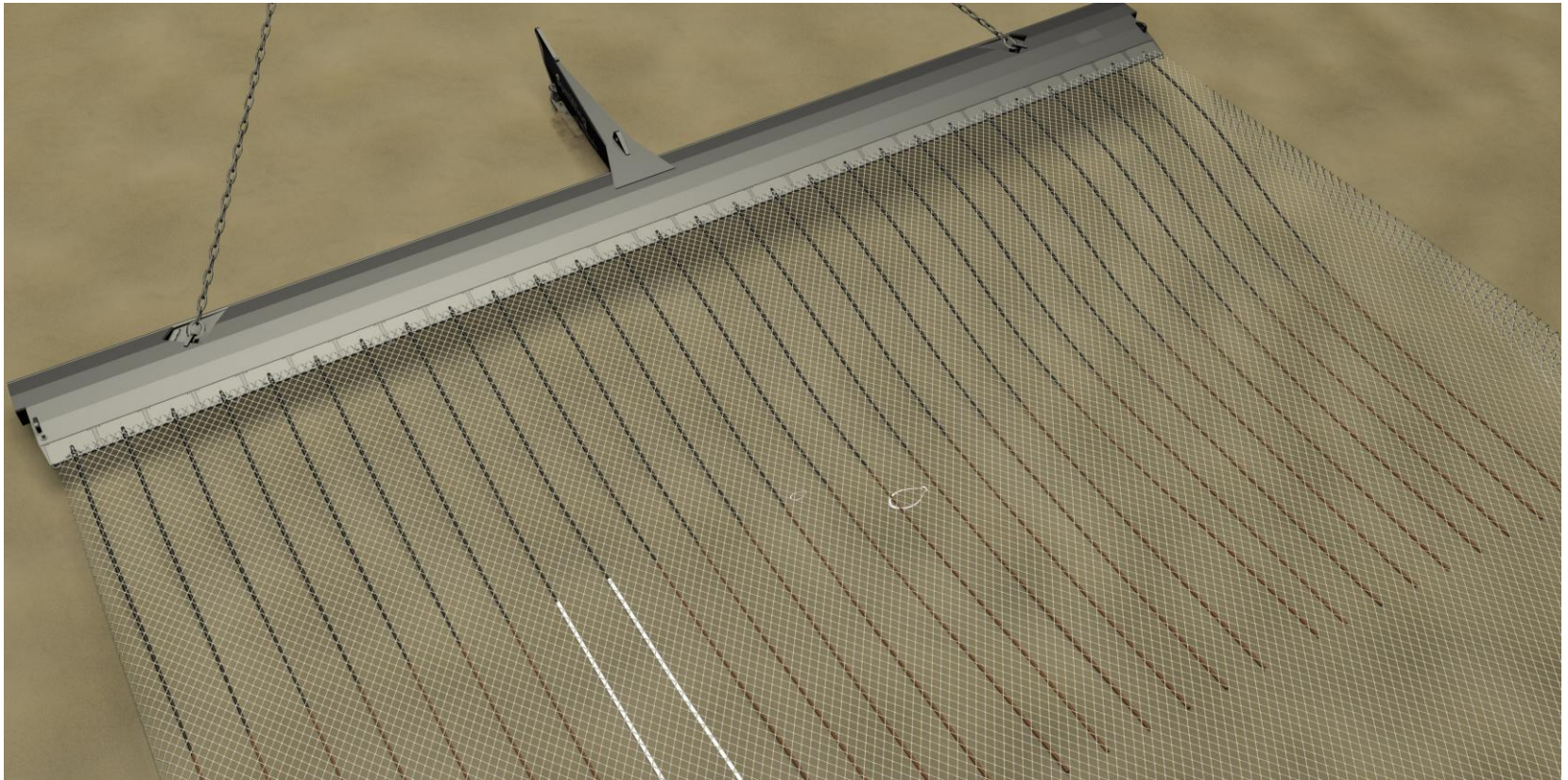




Credits: Delmeco Fishing Technology

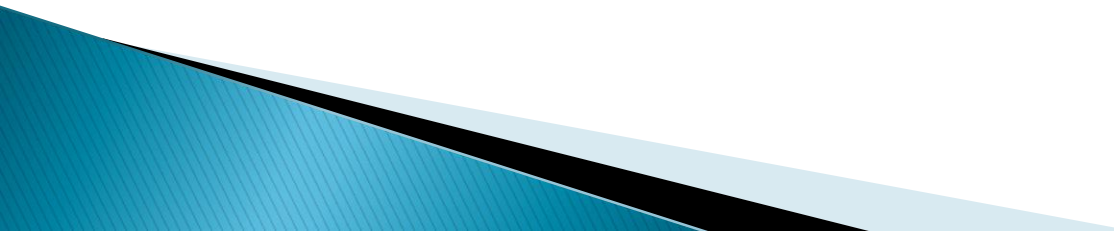
From blueprint and experiments to reality

- ▶ 1993 to 2007
- ▶ Designing and building pulse system on commercial vessel



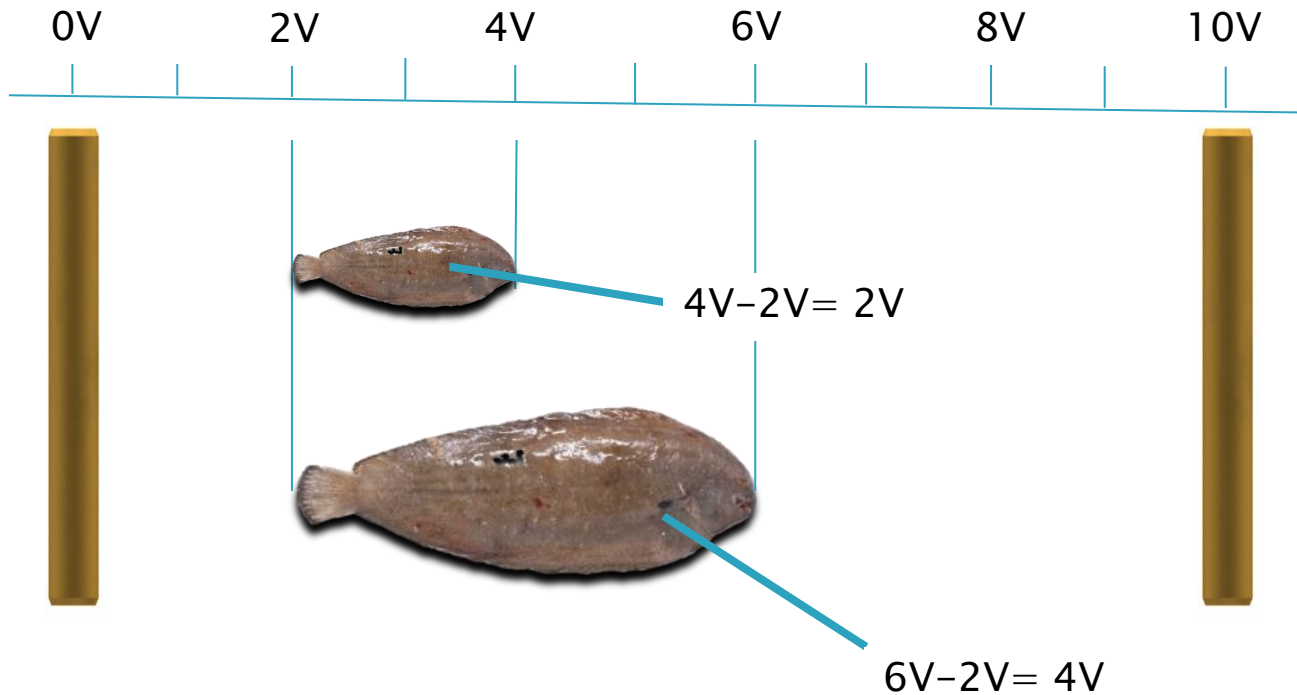


Three major benefits

- ▶ Discard reduction
 - ▶ Fuel and CO² reduction
 - ▶ Reduction of seabed disturbance
- 

Why discard reduction?

Potential (Voltage) lineal



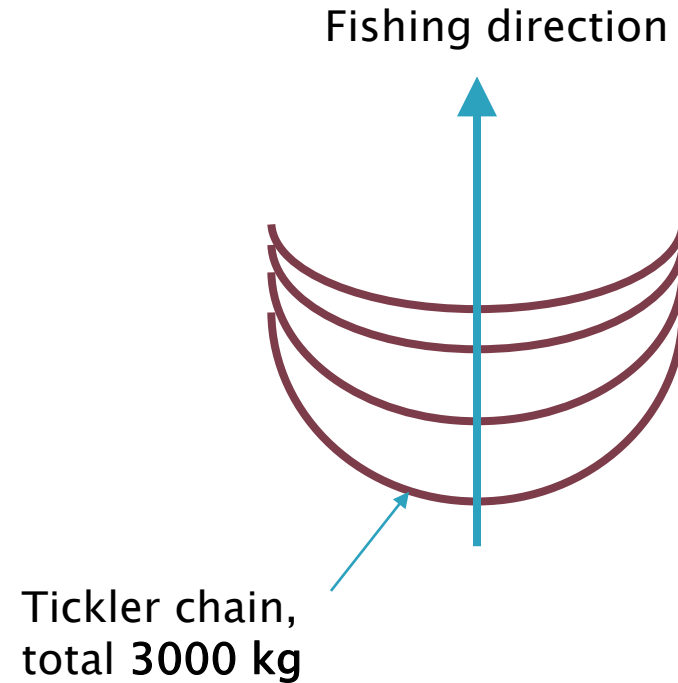
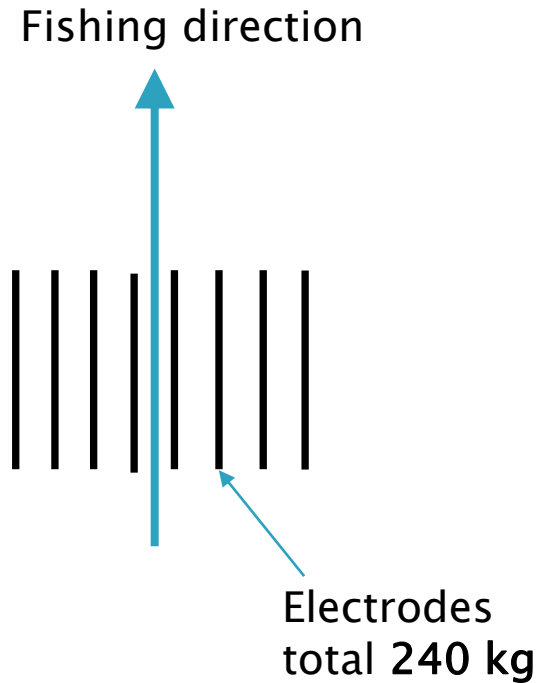
Why discard reduction?



Why reduction of fuel usage and CO² emissions?

- ▶ Less friction on the seabed
- ▶ Due to electrodes instead of tickler chains you can reduce towing speed

Why less seabed impact?



Thank you

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