



**HOLLAND
SHIPYARDS
GROUP**

05/04/2024

Schuttevaer Innovation Award

Thijs van der Schaaf
Technisch Manager

**INSPIRED BY THE
FUTURE**

A COMPANY OF FIRSTS

In the world

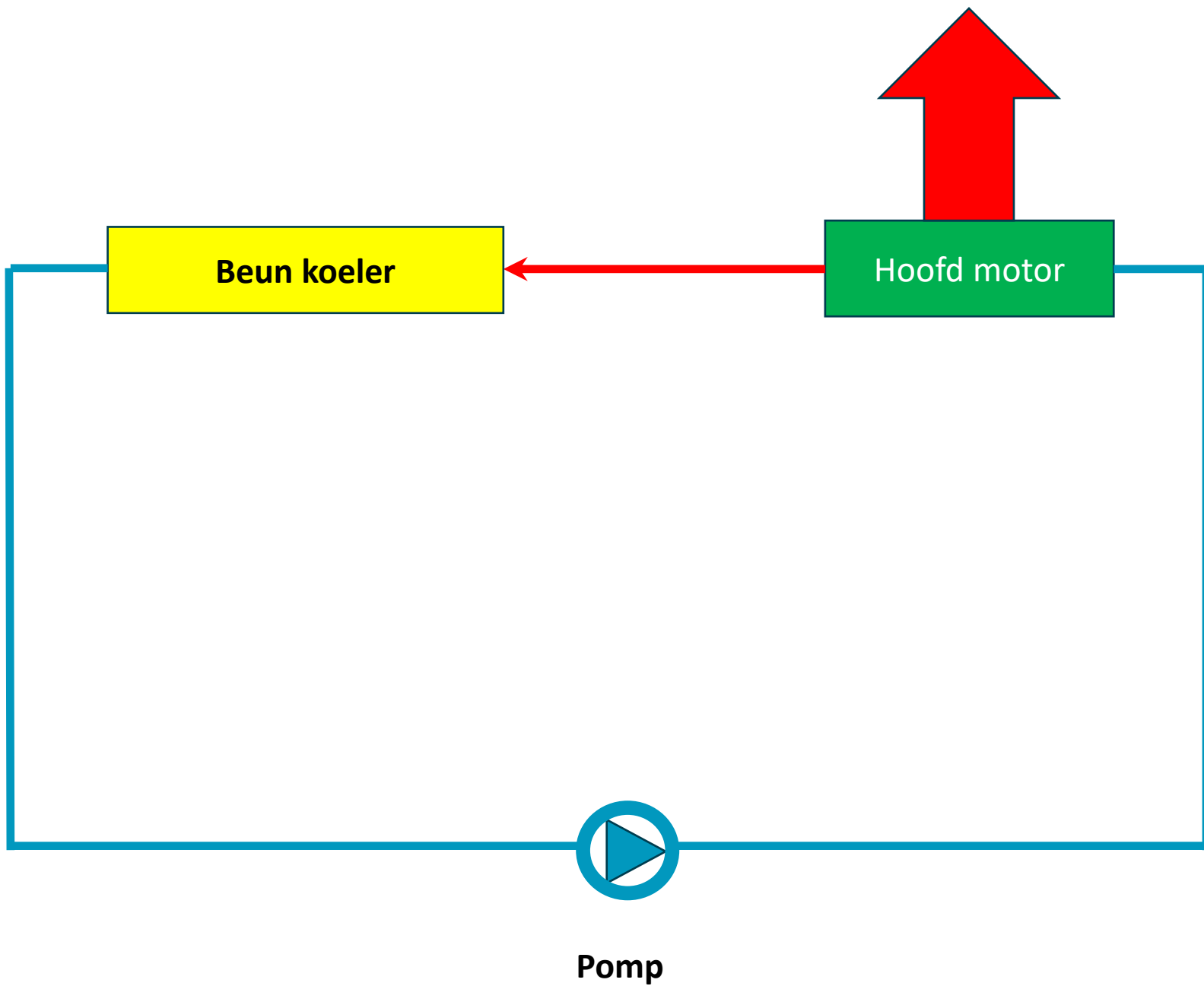
- First diesel-electric cargo vessel 2011
- First offshore walk-to-work vessel 2012
- First hybrid ferry in W-Europe 2015
- First all-electric vessel under ES-TRIN 2019
- First hydrogen driven cargo vessel 2023
- First 3D printed commercial vessel

A company of Nominations

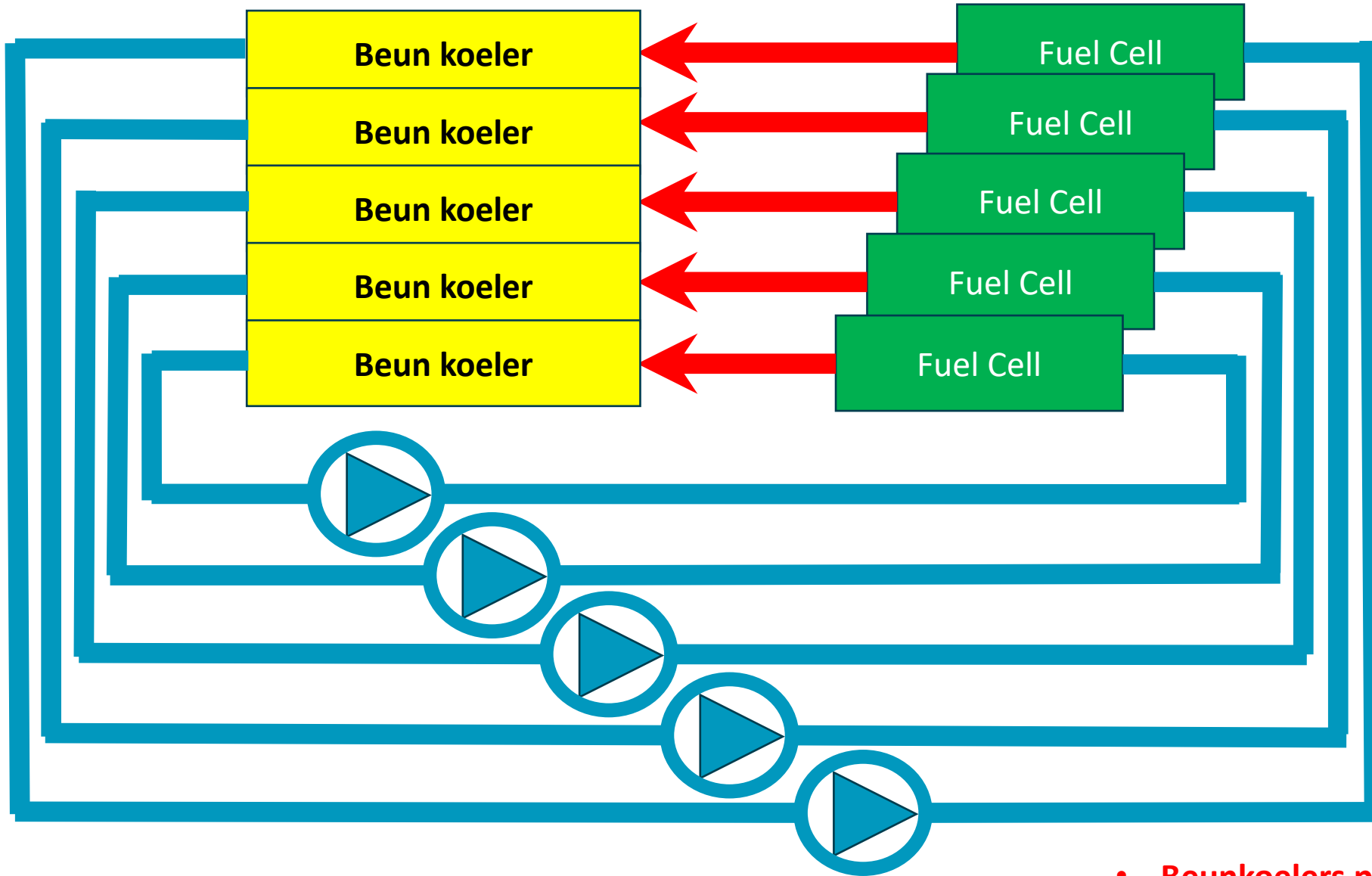
- 2021 KNVTS Ship of the year
- 2021 KNVTS Ship of the year
- 2023 NMT Innovation award
- 2024 Schuttevaer Innovation Award
- 2024 Schuttevaer Innovation Award



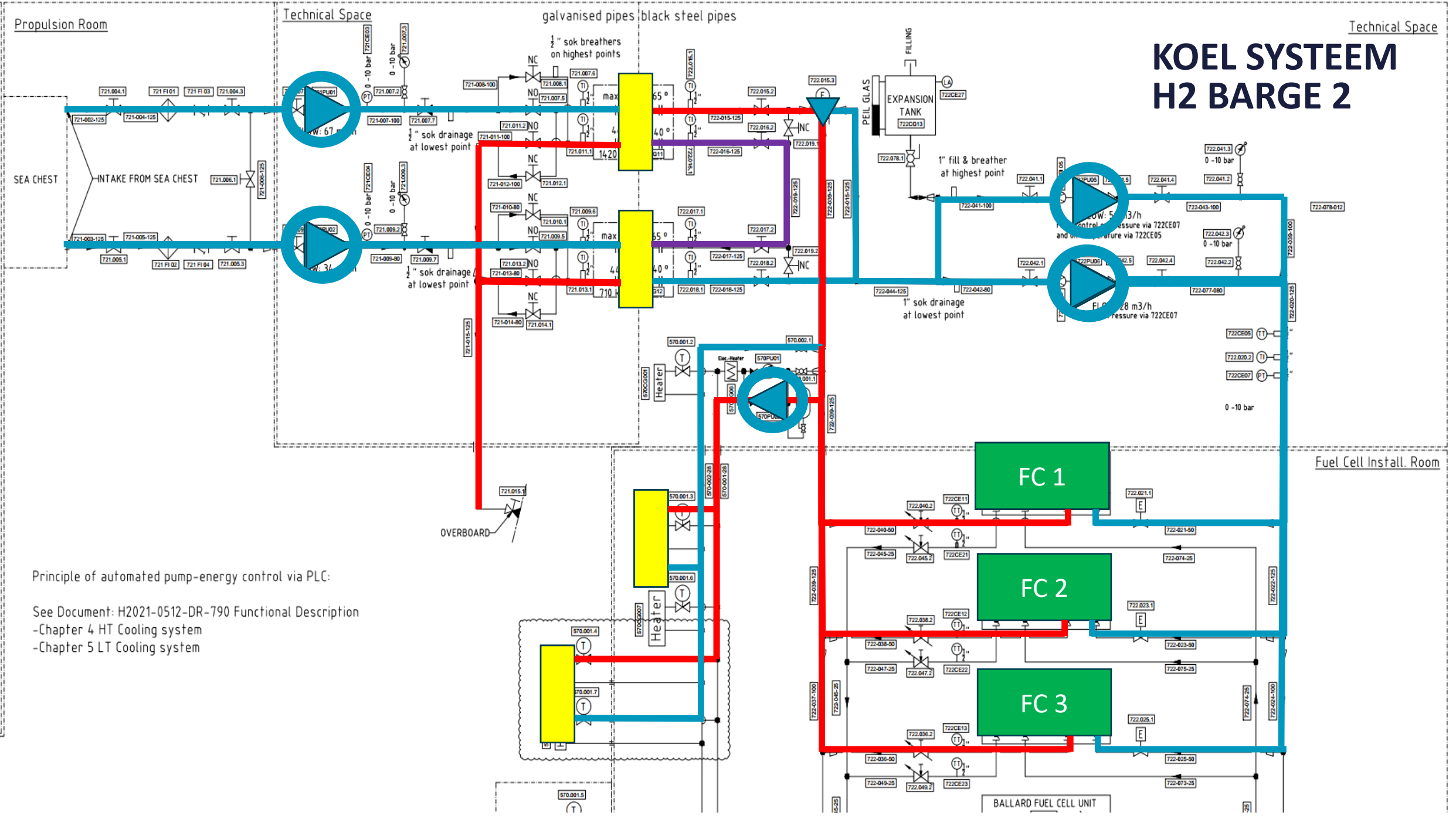
KOEL SYSTEEM DIESEL SCHIP



KOEL SYSTEEM FUEL CELL'S ?



- Beunkoelers passen fysiek niet
- Pompen veel energie gebruik



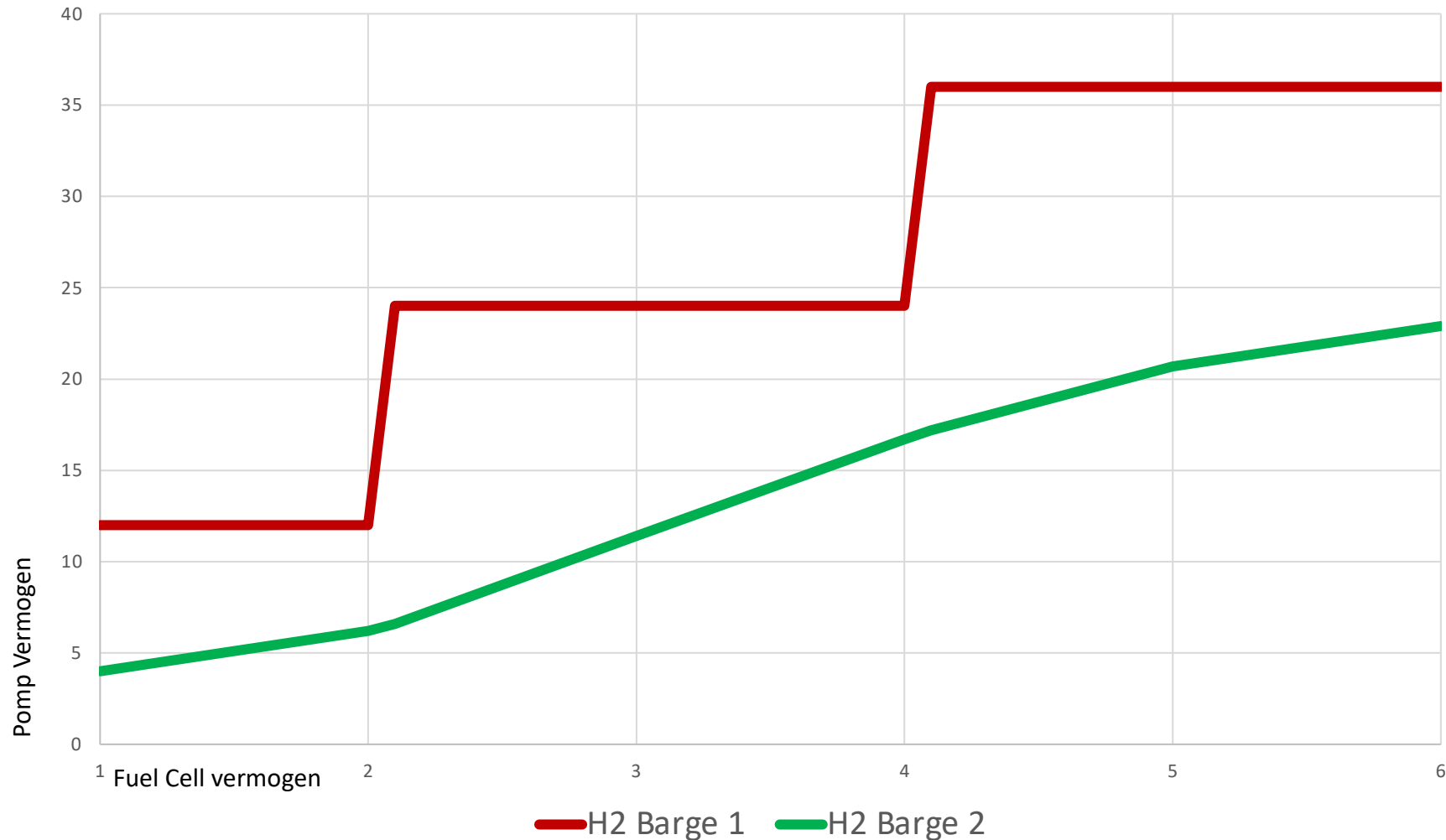
KOEL SYSTEM H2 BARGE 2

Principle of automated pump-energy control via PLC:

- See Document: H2021-0512-DR-790 Functional Description
- Chapter 4 HT Cooling system
- Chapter 5 LT Cooling system

VERGELIJK KOELPRINCIPES "H2 BARGE 1 & 2"

Power consumption pumps



- Zuiniger energie
- Beter regelbaar
- Warmte terugwinning
- Pre-outfit mogelijk
- Lagere investering

- River water inlet
- 4 double filters
- 1/3 – 2/3 pumps
- Plate coolers with
- Back flushing.





THANK YOU

