

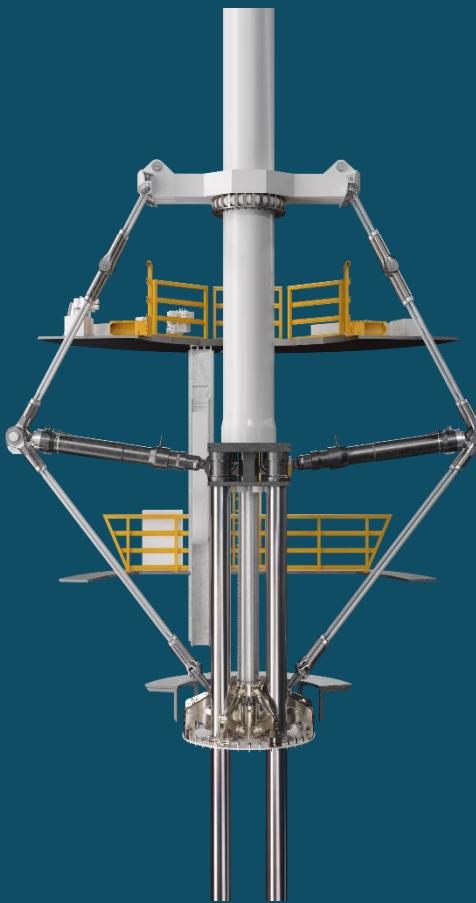
Biofouling mitigation and corrosion protection testing of laser cladded power-take off rods for optimising operation and maintenance



Johan B Lindén, PhD, RISE Research Institutes of Sweden

ICOE-OEE 2022, Donostia / San Sebastian



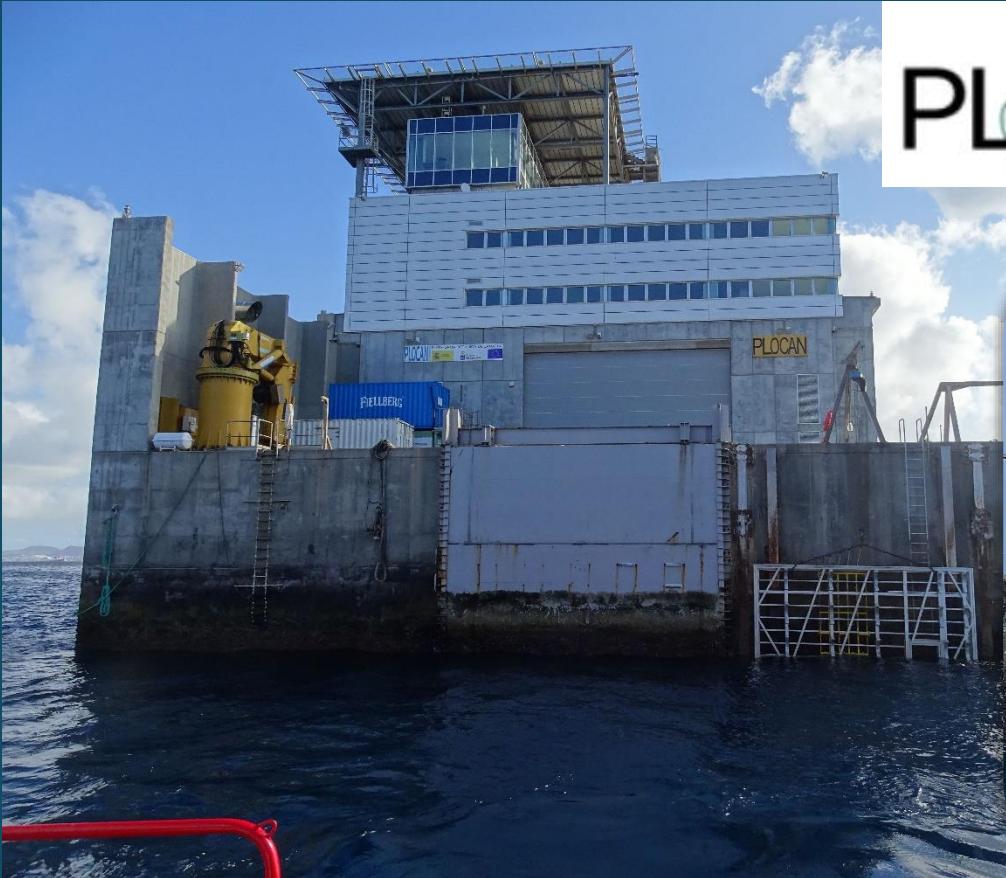


Biodiversidad Mar Esféricoarená



PLOCAN

Plataforma Oceánica
de Canarias



Sweden Nearshore

3w



Portugal Marina



Spain Offshore

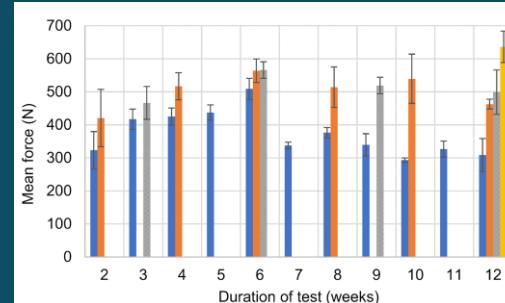


6w

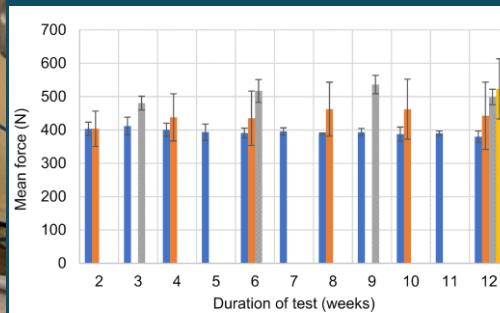
9w



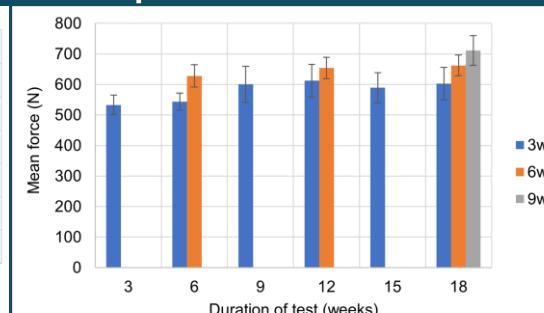
Sweden - Nearshore

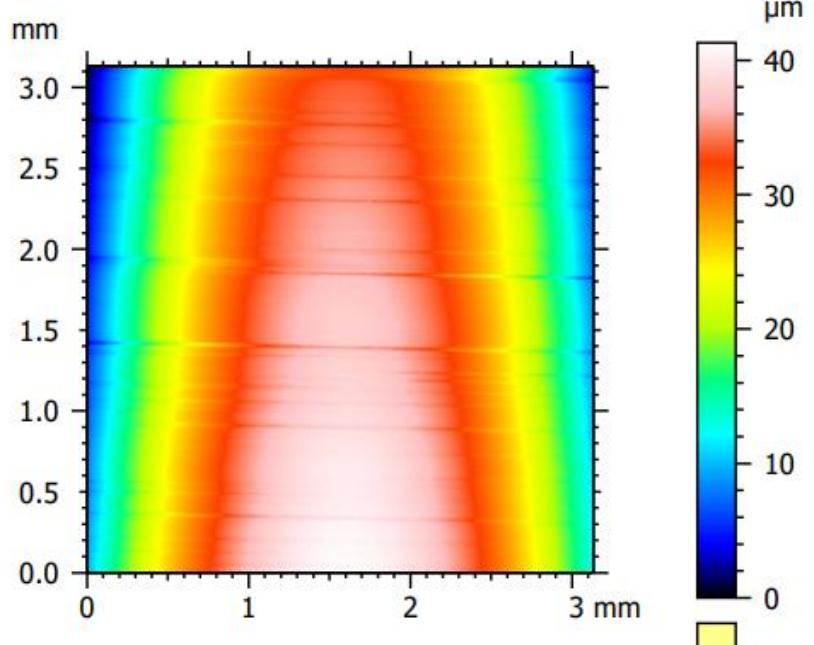
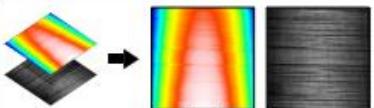


Portugal - Marina



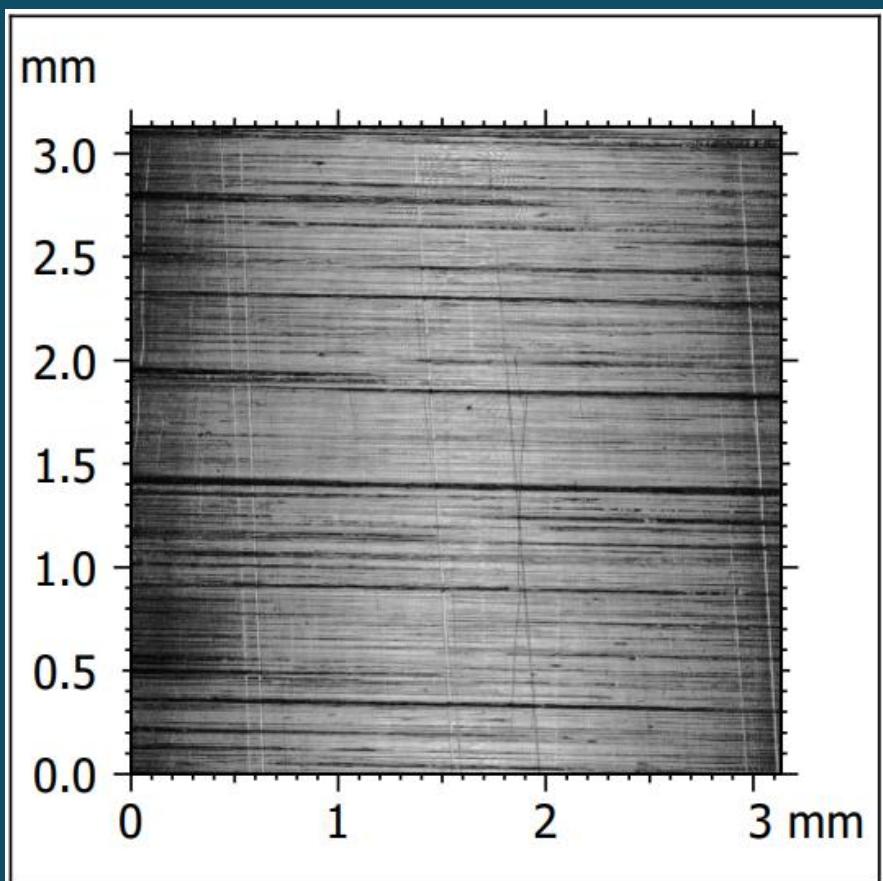
Spain - Offshore





Information

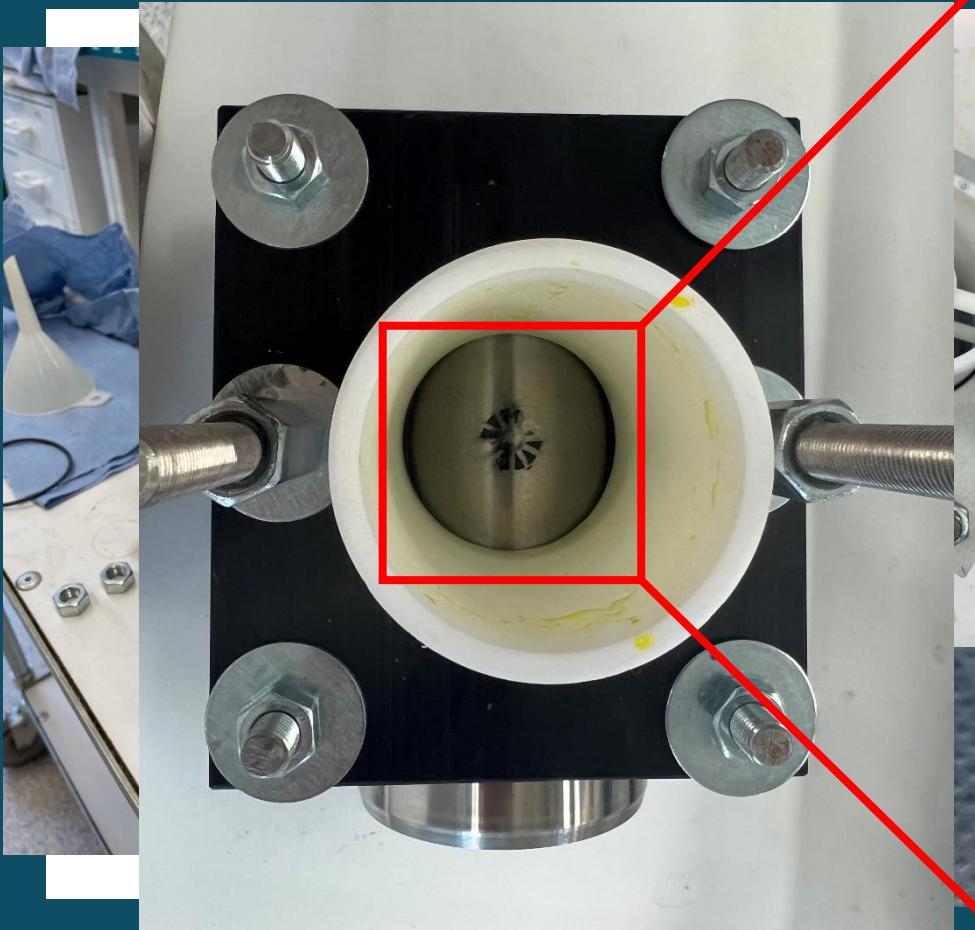
Layer Topography layer



Salt spray test

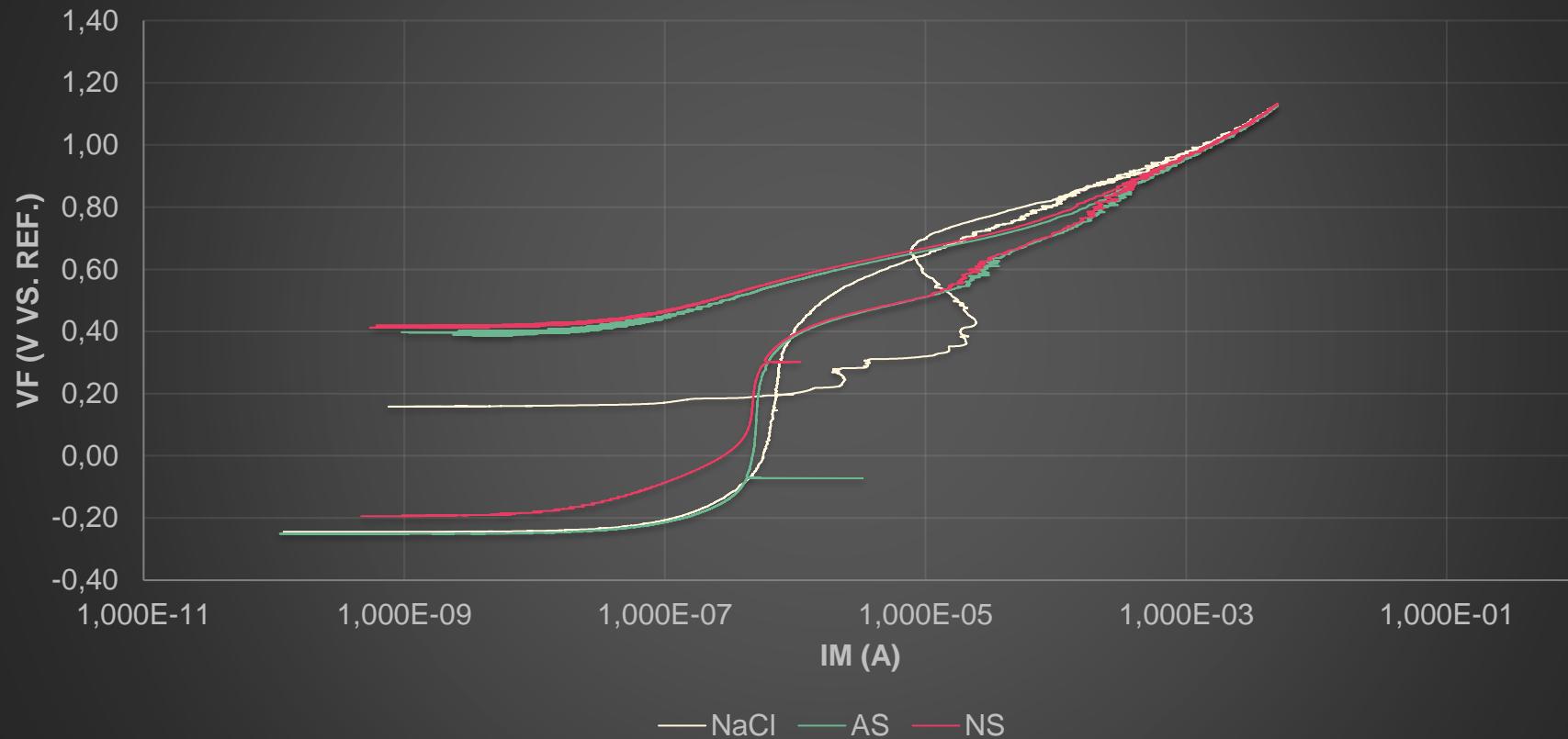


ASTM G48

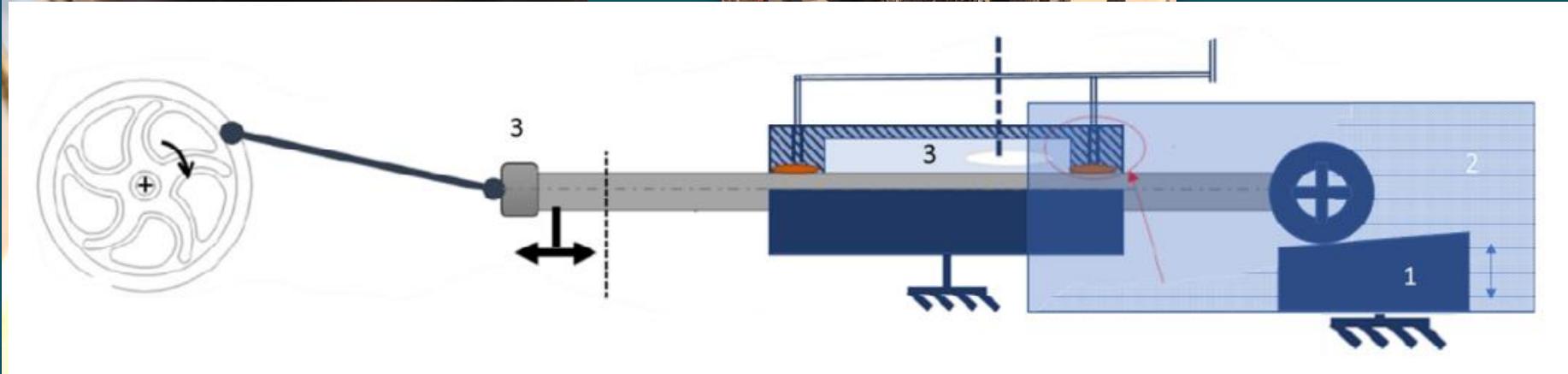


RI.
SE

Coating 2



OCP+Crevice former Multi-degradation exposure



Biofouling

Conclusions

- Weekly = easiest to clean
- Bi- and Tri-weekly = about the same
- Completely cleaned samples for all intervals

Outlook

- New test 2023?
- Wear of coatings and seals



Thank you for your attention!



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