

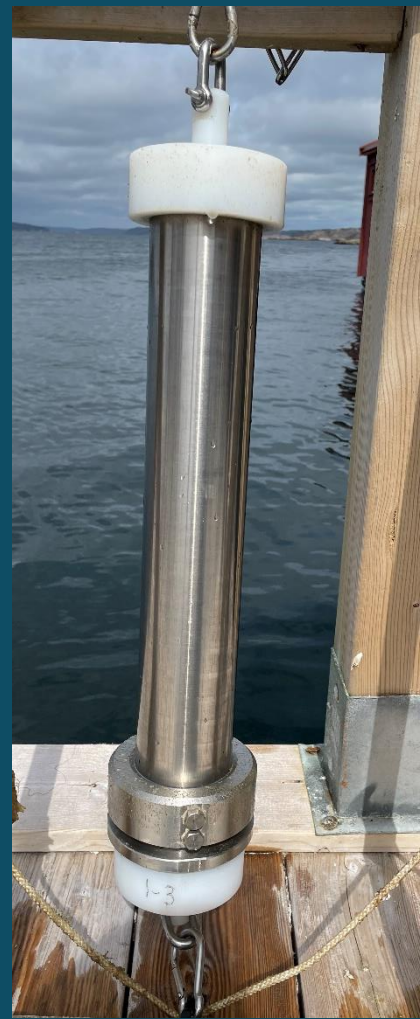
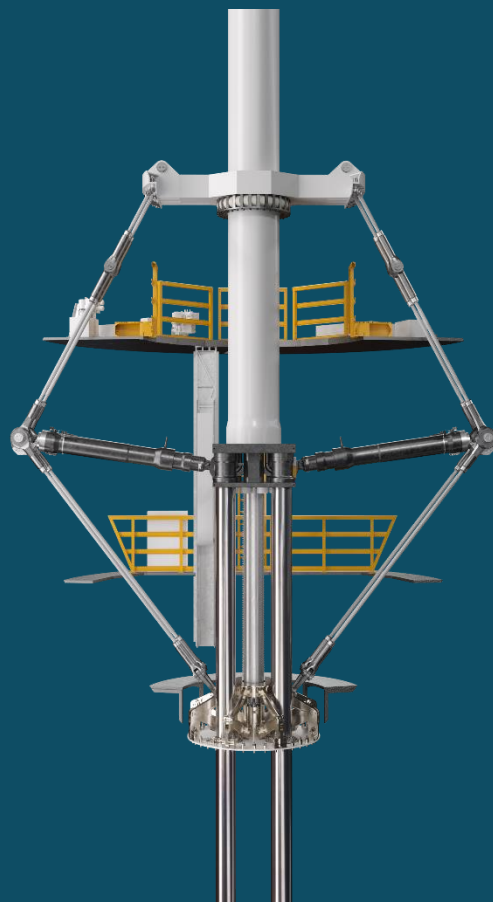
Biofouling mitigation and corrosion protection testing of laser cladded power-take off rods for optimising operation and maintenance

RISE

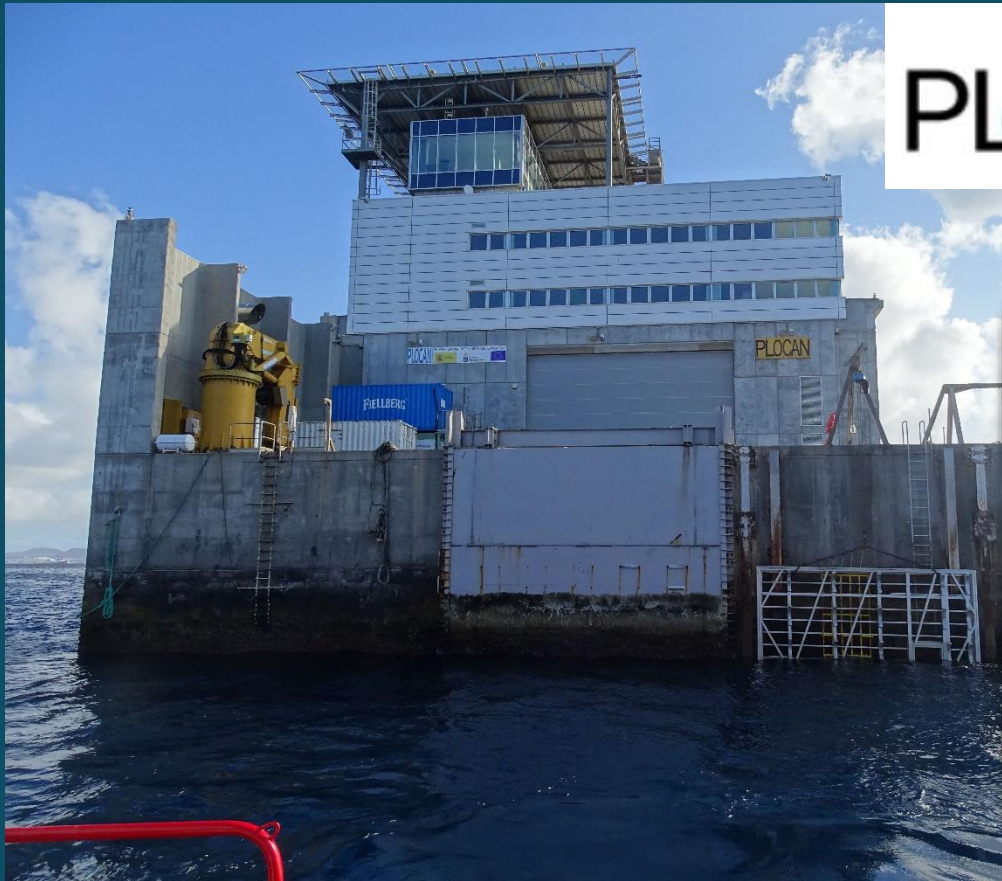
Johan B Lindén, PhD, RISE Research Institutes of Sweden

ICOE-OEE 2022, Donostia / San Sebastian





Springer, El Mar y Offshore marina



PLOCAN

Plataforma Oceánica
de Canarias



Sweden
Nearshore

Portugal
Marina

Spain
Offshore

3w

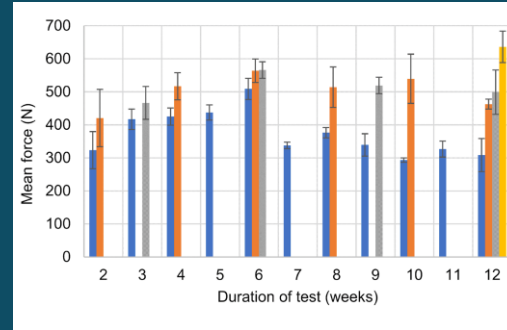
6w

9w

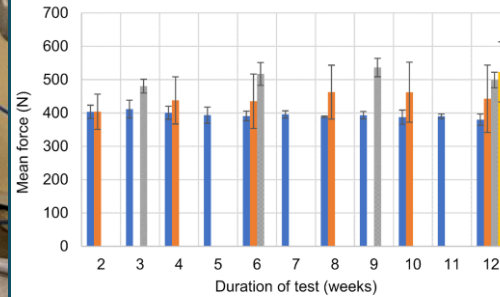




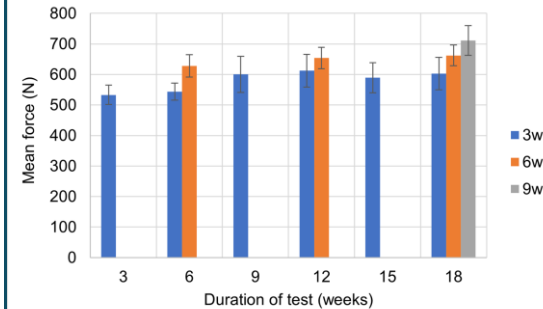
Sweden - Nearshore

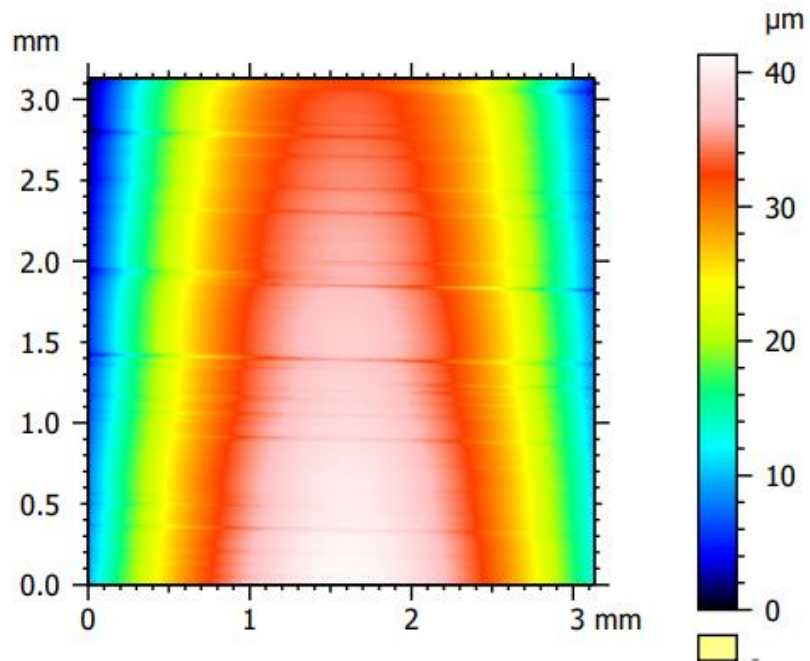
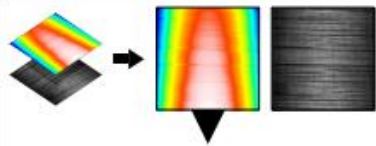


Portugal - Marina



Spain - Offshore

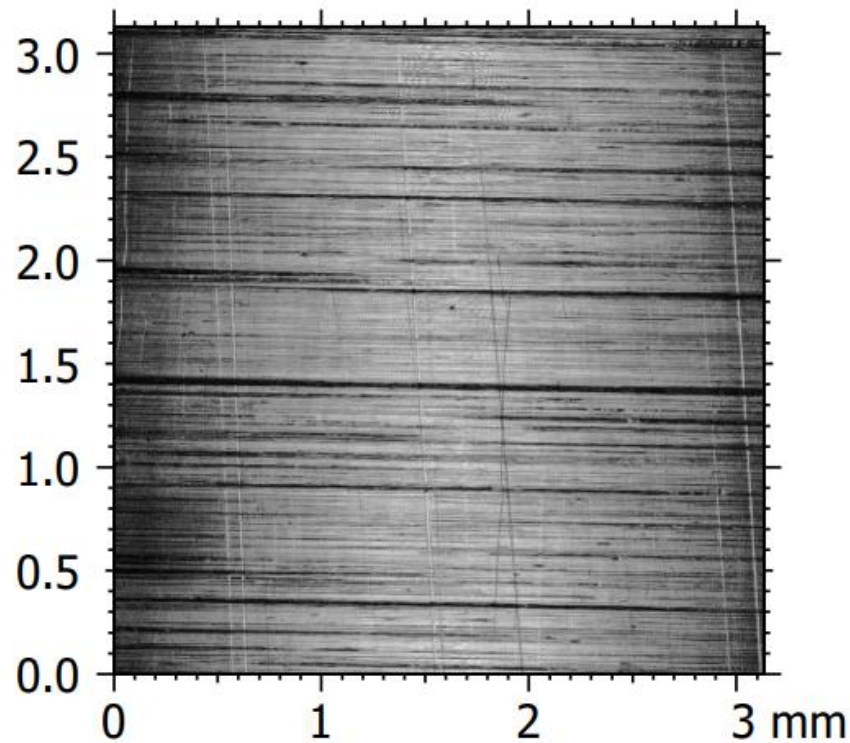




Information

Layer	Topography layer
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mm

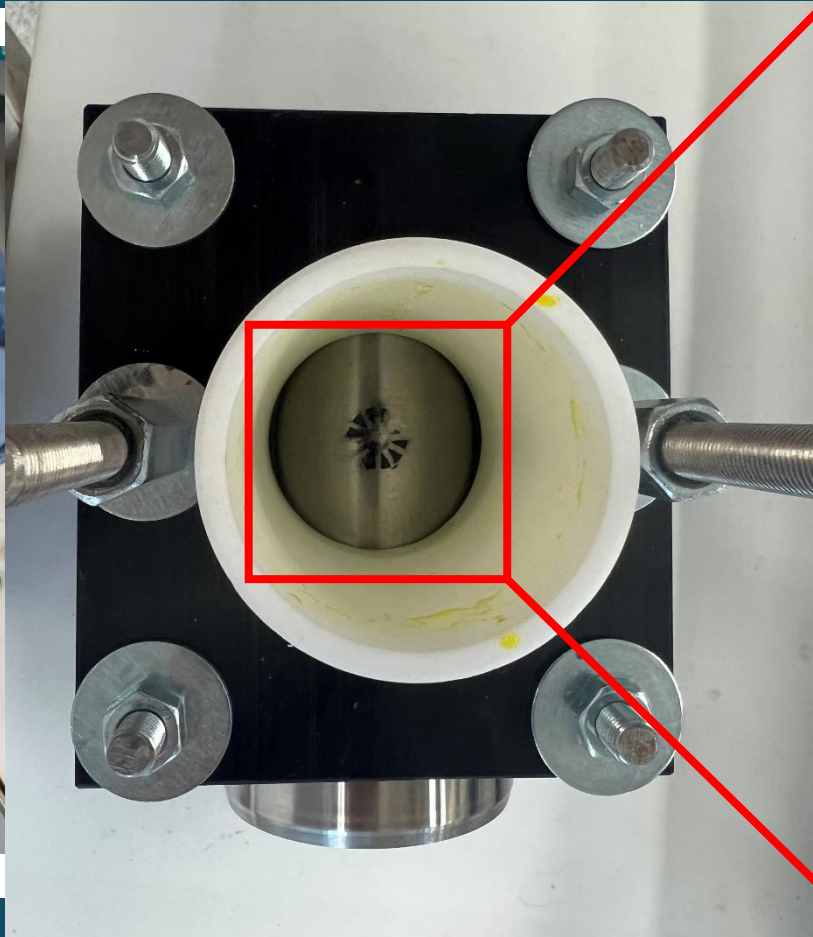


Salt spray test



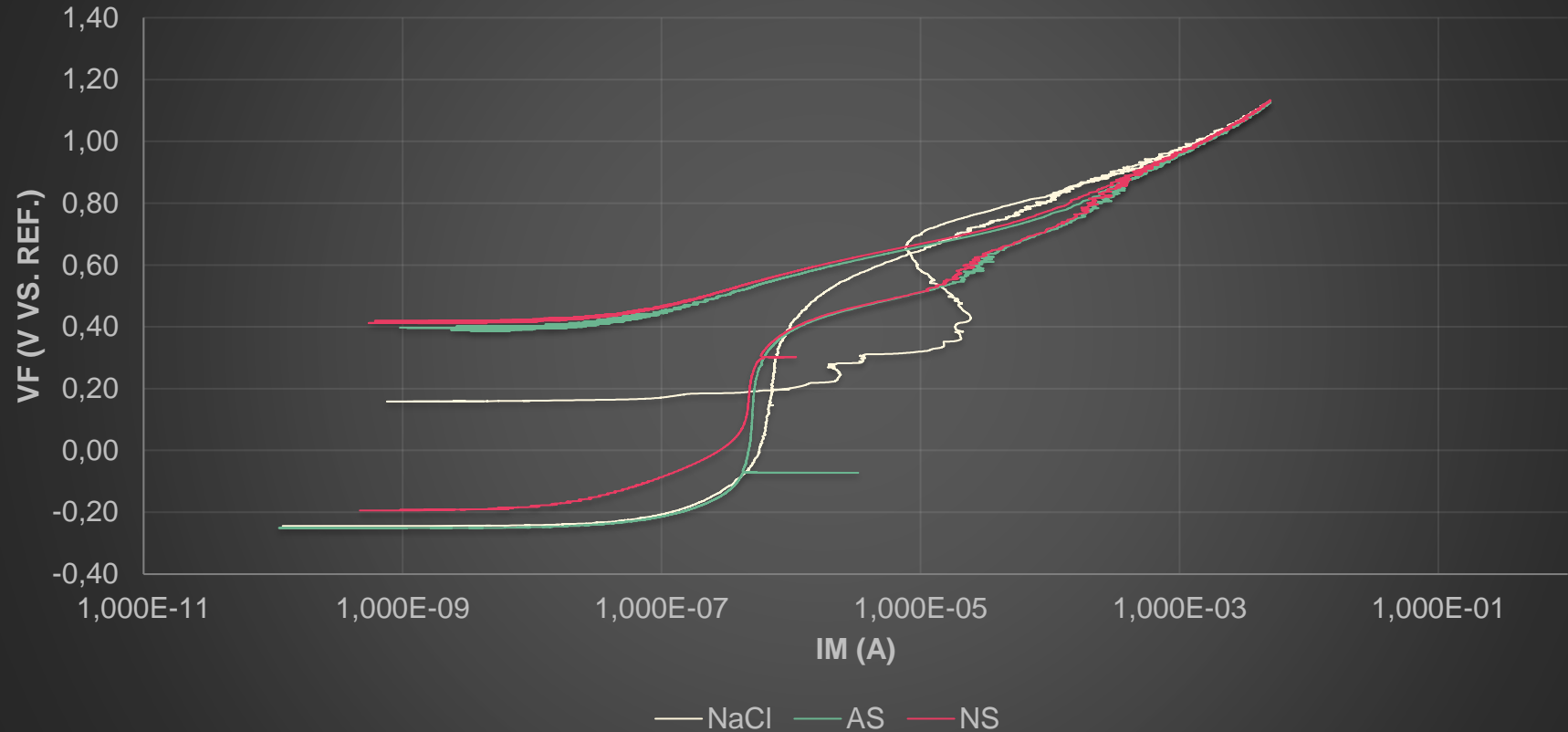
RI.
SE

ASTM G48

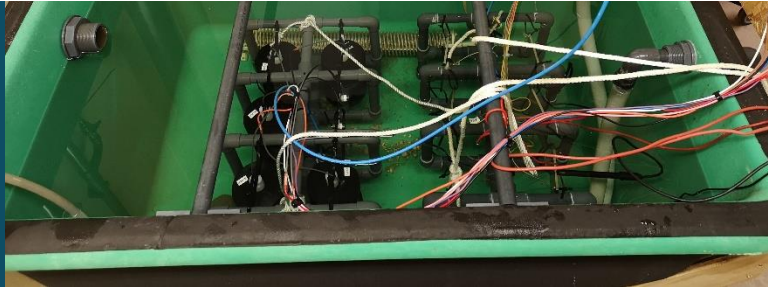
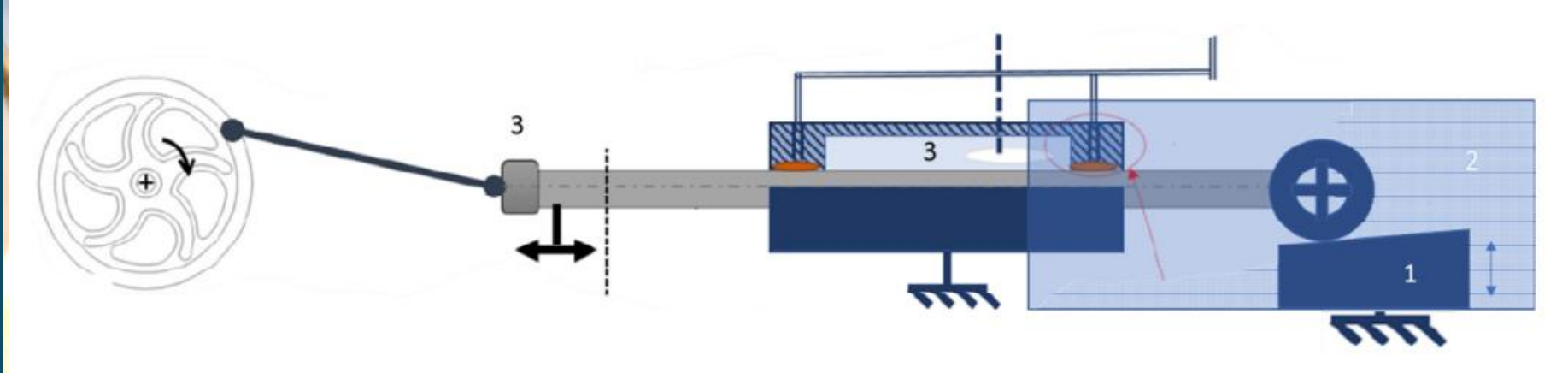
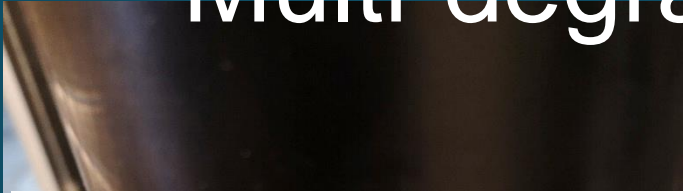


ASTM G61

Coating 2



OCP + Crevice former Multi-degradation exposure



Biofouling

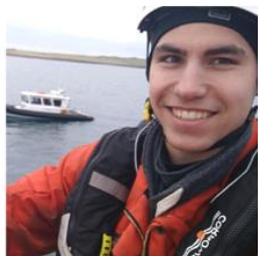
Conclusions

- 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





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