

PRESSERV



# TOTAL CORROSION SOLUTIONS

Norway

Scotland

Brazil

Singapore

South Korea

[www.presserv.com](http://www.presserv.com)

Main Suppliers



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Presserv AS Norway  
Total Corrosion Solutions

## Overfladebehandling



**GROUP**  
work 'n safety

>Faglig dygtighed<

>Fleksibilitet<

>En aftale er en aftale<

# What if there is a corrosion protection system

- That is 100% HMS safe.
  - Contains no VOC.
  - Has next to nothing environmental impact.
  - Has a high sustainability.
  - Represent a low carbon footprint.
- 
- Is surface tolerant and easy to apply.
  - Has maintenance intervals like no other solutions.
- 
- And that can be applied like sheets, tape or wallpaper.





## Stopaq corrosion protection

Stopaq viscoelastic corrosion protection is a permanent protective system on rolls. Stopaq prevents oxygen, moisture and salts from contaminating the surface.

- Cold or. Warm application.
- No need of garnet blasting (SA).
- No volatile chemicals / no hazardous waste.
- No shelf or pot life.

- Pipe systems above and below the ground.
- Subsea / squash zone.
- Condensing pipelines.
- Structure.







Proven technology. Above ground solutions more used after recession in Oil&Gas industry – looking for cheaper and faster solutions.

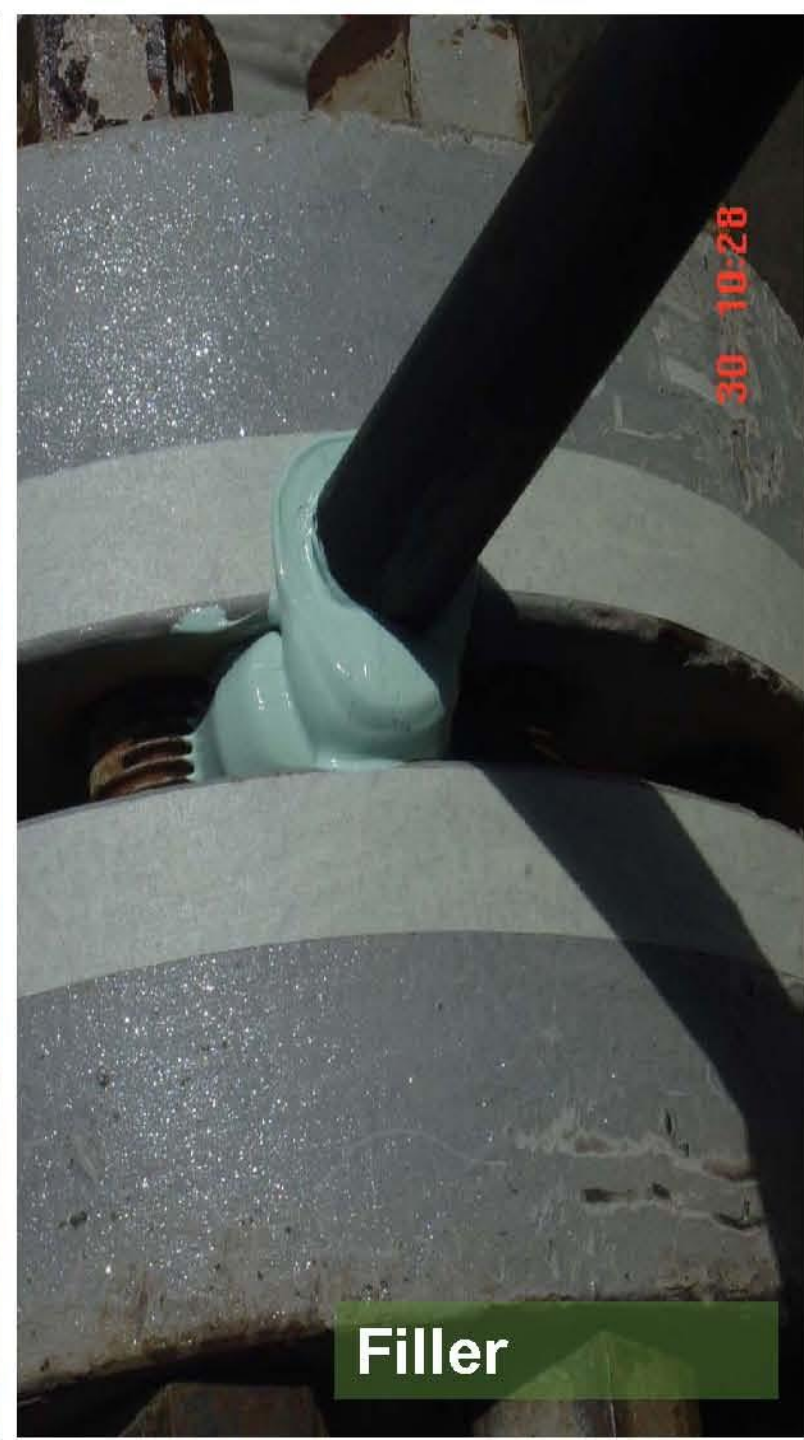




Pipelines



Structure



Filler

Stopaq as a repair system

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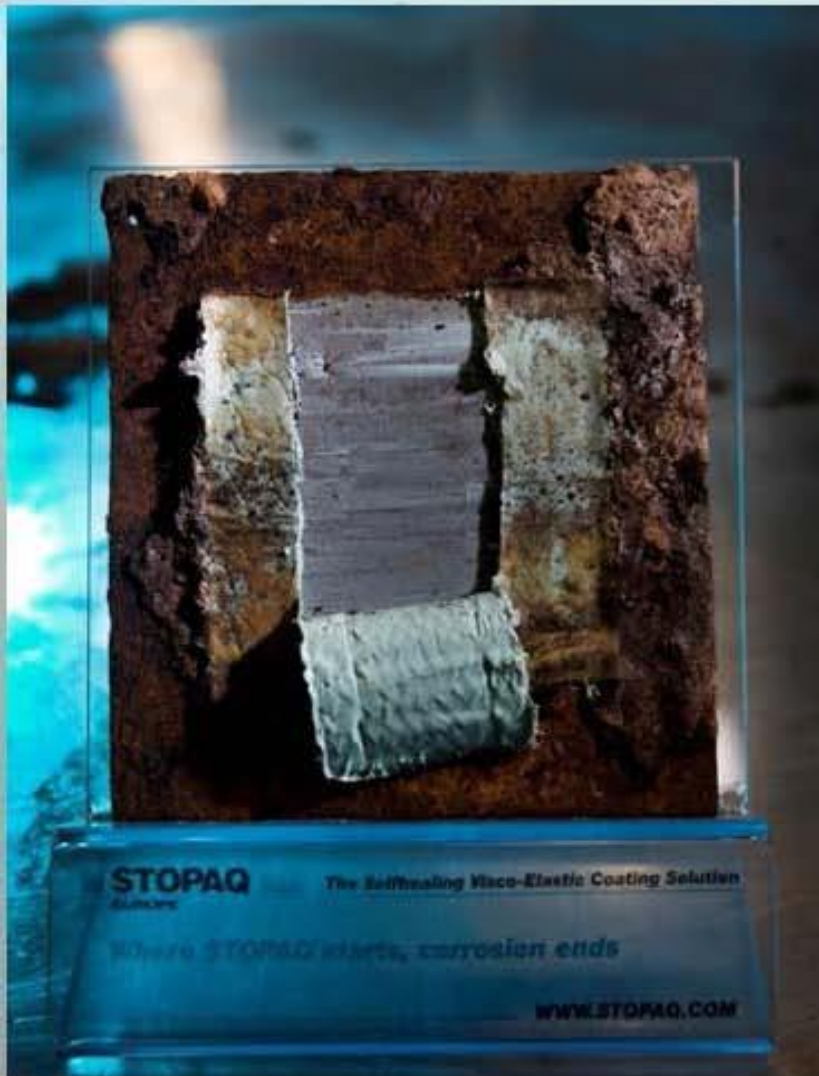




Easy application.  
Only the need of hand tools.  
Stopaq: unlimited shelf life.  
Stopaq: +30 year system.



Ageing resistance test Acc. ISO 20340:2009 Annex A (4200 h),  
tested on carbon steel (St 3, Sa 2 ½), on 304 stainless steel, and  
on existing liquid epoxy coating over carbon steel.



Corrosion creep from scribe:  $M \leq 8.0$  mm  
-ISO 4628-2 Blistering: 0(S0)  
-ISO 4628-3 Rusting: Ri 0  
-ISO 4628-4 Cracking: 0(S0)  
-ISO 4628-5 Flaking: 0(S0)  
-ISO 4628-6 Chalking: 0





## PRESERV

Adhesion based on Van der Waals forces, attraction of atoms and not mechanical - therefore no roughness necessary.

St2 is sufficient.

Steel side is like honey, plant sap or chewing gum.

Stopaq compound will never cure.

Picture: pull off test



Stopaq extremely surface tolerant

SCOTCH-  
BRITE



BRUSH



FOAM



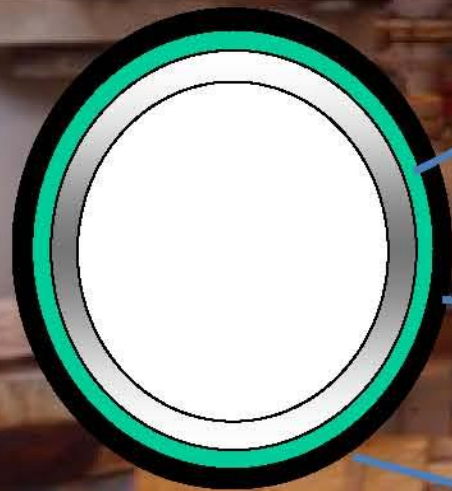
PAPER DISC



- Requirements for pre-treatment: minimum ST 2 Standard.
- No requirements for SA Standard.
- Bristle blaster, grinding wheel, steel brush and like is often sufficient.
- Coarse surface corrosion and loose paint can be removed with water - ex. HT 300-500 bar.



## Pipelines



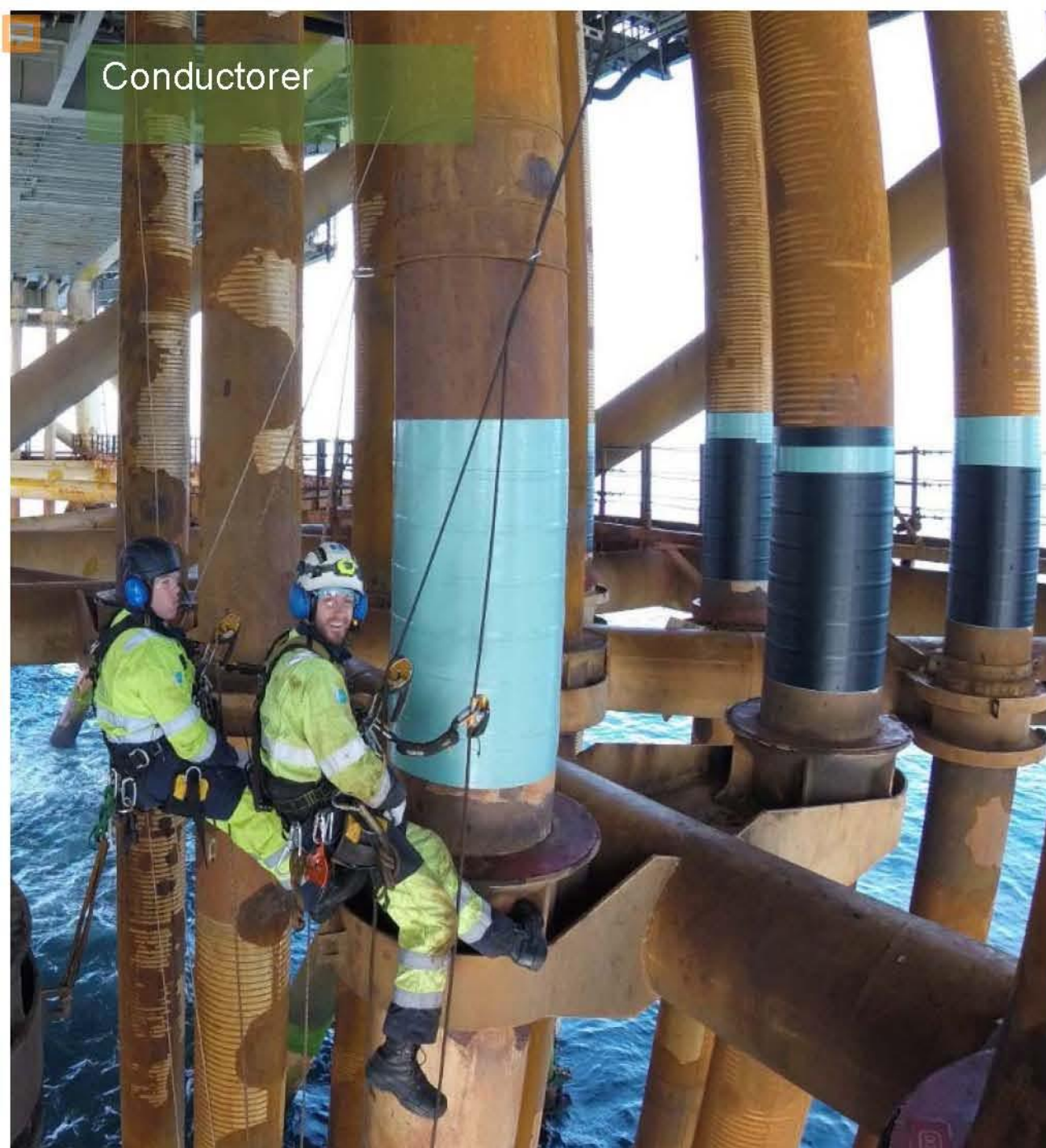
First layer: Stopaq Wrappingband corrosion protection:  
Stopaq CZ, CZH and CZHT – dry (temperature  $-45^{\circ}\text{C}$  -  $120^{\circ}\text{C}$ )  
Stopaq CL – condensing lines.  
Stopaq SZ – splash zone/subsea

Second layer: Stopaq Outherwrap mechanical protection  
-PVC/ PP/PE  
-Polyester/Vinyl ester

Third layer (optional): Stopaq Outherwrap ekstra mechanical protection  
-Glass Reinforced Epoxy / UV curing polyester.



Conductorer

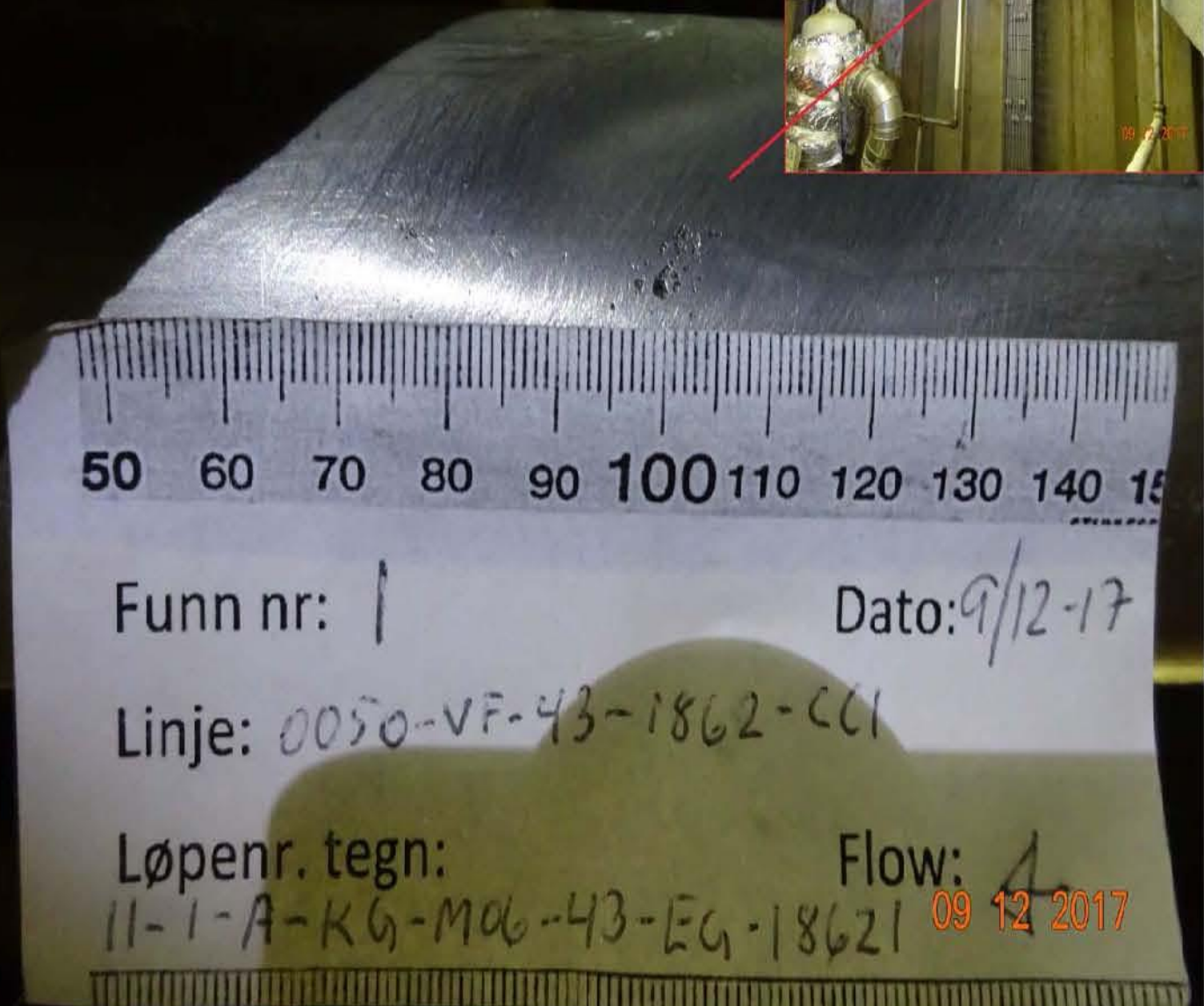


First layer: Stopaq CZ  
Second layer: Stopaq black PVC  
Third layer: Stopaq GRP



FN 0050 T-Nom 2,8 mm.		2017	2014						
Funn nr.	Feiltype	Område	Dekk	Miljø	Dybde	Dybde	Ø	Posisjon	Lokalisering
1	5	M06	H.D	2b	0,7mm	0,8mm	1x1	kl.8	500mm cppstrøm fra sveis W005

SS 316 v/pittings







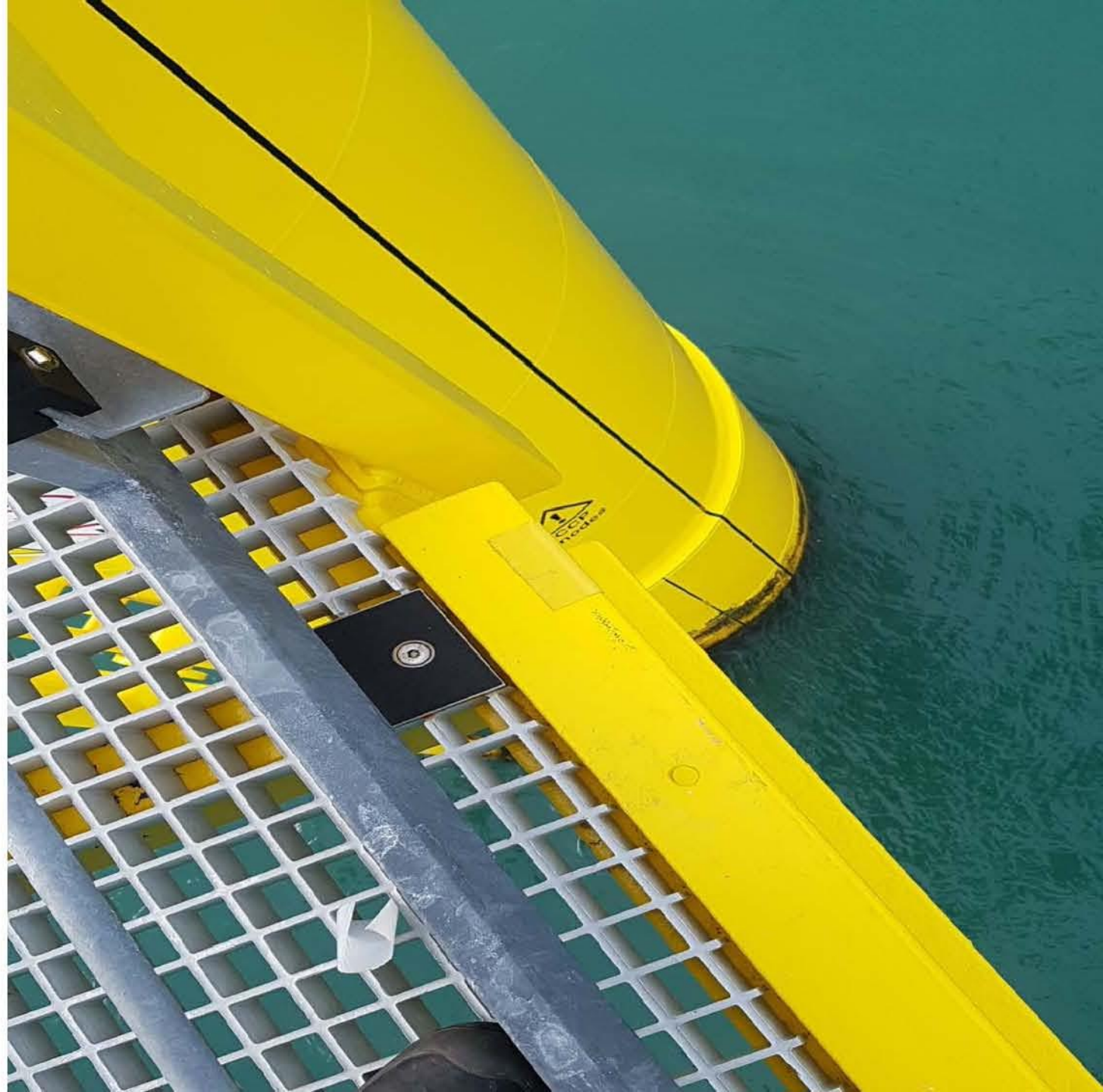
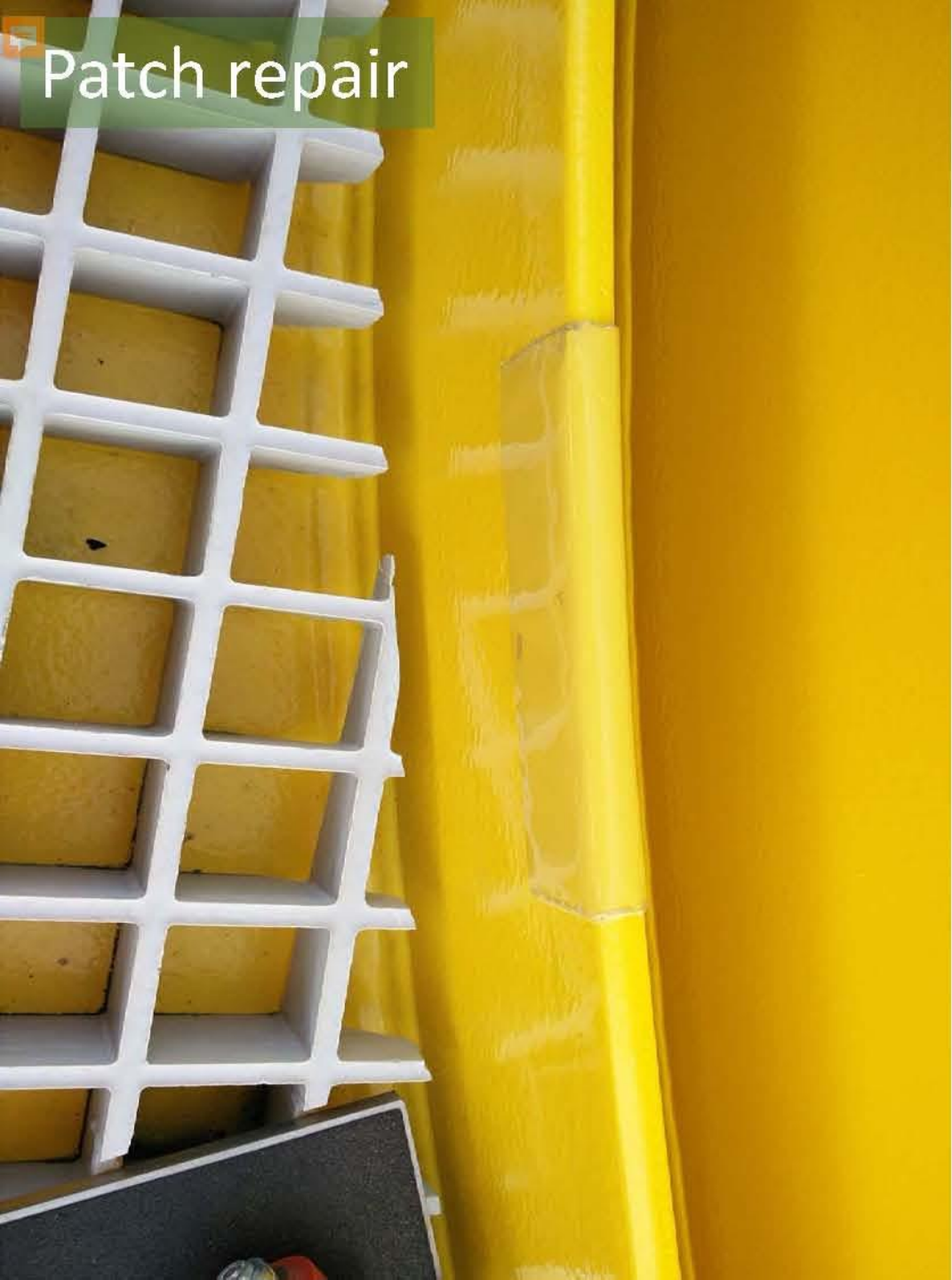
Splash zone













# Patch repair





# Approvals

Shell Global Solutions - Holland  
Saudi Aramco - KSA  
Exxon/Mobil - USA  
Nerefco - Holland  
Esso – Germany  
OGC - Oman  
GNPOC – Sudan  
TOTAL – Nigeria  
BP – Azerbaijan  
Equinor - Norway

Conoco Phillips – USA  
PDO Shell - Oman  
Wingas - Germany  
SNGPL - Pakistan  
Pemex - Mexico  
Gasco / Adnoc - U.A.E.  
Wintershall BV – Holland / Libya  
Petrochina – China  
Gaz De France- France  
AkerBp - Norway





## Stopaq



### **For the operator:**

- No VOC exposure when mix/apply.
- No chemical exposure to skin
- No dust exposure
- No need of noise pollution tools
- No vibration from tool
- Less risks of application errors

### **For the environment:**

- No VOC exposure when mix/apply
- No chemical spill to nature
- No shelf life
- No pot life
- No special waste.
- Less maintenance intervals

### **For the project:**

- Less waste/special waste
- Corrosion rate  $\geq 0.00$  mm/year
- Reduced logistic and storage facilities
- No sound pollution during execution of work
- No airborne dust
- Less use of scaffold/tarpaulins.
- Can be applied on ambient, cold or hot surface







PRESSERV

Is Stopaq a game changer?

Regards  
Thomas Merenyi