

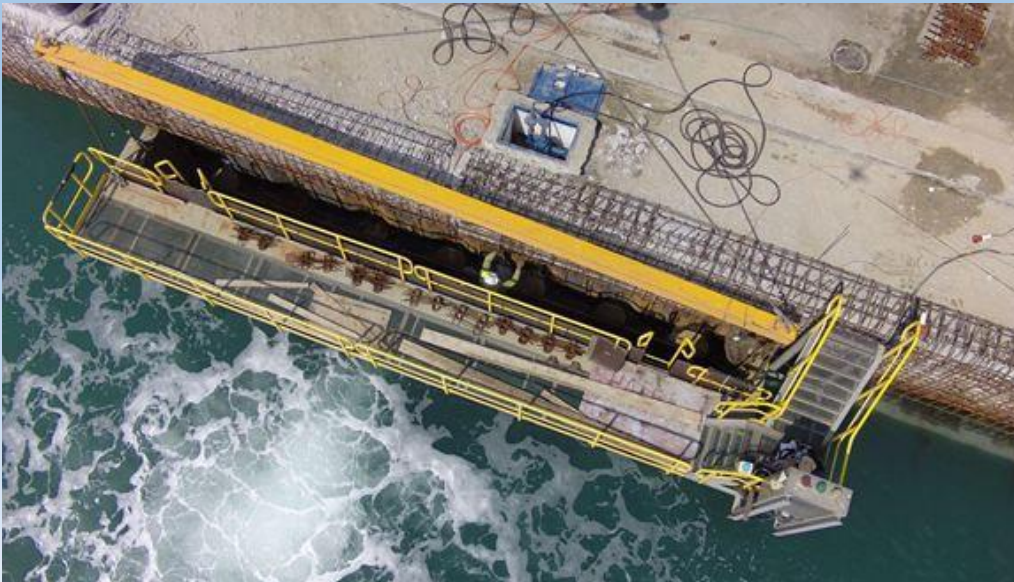
## HUMIDUR® Single Coat System

### About ACOTEC and HUMIDUR

- **ACOTEC's** = **Anti CO**rrosion **TECH**nology
- Headquarters based in Belgium
- **HUMIDUR®** = **HUMI**idity + **DUR**ability

### MOBILIE COFFERDAM DZI for Submerge Application

- **Safe and dry** access to submerged areas
- No divers required
- Sheet piles, tubular piles, capping beams, ...
- **Customisable** for each application



**For enquiries, please contact us at**

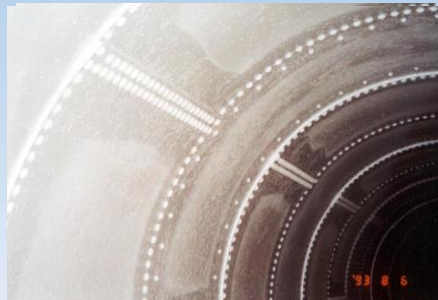
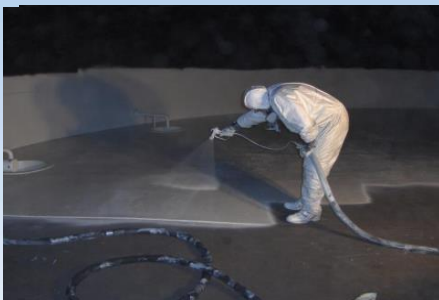
**Phone** : +603 2711 1011  
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**Website** : www.jurunature.com

## 5 Humidur systems covers most structures compared to 100

- ✓ **Successful in all types of water environment**
    - Proven system in salt – brackish – fresh water
    - Officially approved for potable drinking water structures
  - ✓ **Ideal for structures in water**
    - Works in fully submerged zone, tidal / splash zone and atmospheric zone
    - Perfect for pipelines, offshore and marine structures, ballast tanks
  - ✓ **Increased Flow velocity**
    - Smooth surface
    - Perfect in moving water → increase flow velocity, capacity
  - ✓ **Cures under water**
    - Immediate use of structure
    - Minimum downtime
    - Unique efficiency in coating of submerged and splash zones!
  - ✓ **Single-layer system**
    - 1 layer built up to the requested DFT
    - No primers required
    - Reduced production and application costs substantially
- **User friendly; min surface preparation**
- **30-year claim-free** system and satisfied customers worldwide
- Ideal solution for **Sweating Lines** and **CUI**
- **Surface tolerant:** even under **minimal surface preparation** conditions the coating withstands extreme conditions (adhesion values reach up to **25 MPa**)

## Proven system in petrochemical environments for decades

**Products:** Crude oil, Kerosene, Jet Fuel A1, Gasoline, Biodiesel, Palm oil, Sulphuric acid (20%), Hydrochloric acid (32%), Nitric Acid (20%), Waste water



**Clients:** Shell, ExxonMobil, Statoil, BP, Marathon, Talisman Energy, Total Oil & Gas, Texaco, Sinopec, Lynergy, Conoco Phillips -Onshore/Offshore, Chevron Offshore, BG Trinidad Offshore, Technip Offshore, BG India Offshore, Reliance Oil Refinery (Largest refinery in the world) India, Transocean Drilling Offshore, Bibby Offshore, Subsea7, Maersk Oil & Gas, Fairfield Energy Offshore, etc.

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## Key Benefits

### ➤ Cost Effective



- Single Coat
- Minimal surface preparation and shutdown
- No Primer and Top Coat required
- Allows for NDT inspection at 400µm DFT
- 1/3 losses compared to 3 - layer coating system
- Up to 30 Year Warranty



### ➤ Significant Productivity Increase

- Up to 40% productivity increase over 3-layer system
- No revisit for 2<sup>nd</sup> and 3<sup>rd</sup> coat application - 1 day application time vs. min 3 days for 3-layer system
- No intermediate curing times for multiple layers
- Cures Underwater



### ➤ Increased Window of Application



- Can be applied :
  - In high humidity conditions i.e. as high as 95% Humidity
  - Within a temperature Range -35°C to 150°C
  - To pH levels  $0 < \text{pH} < 14$
  - To salt levels  $< 65 \text{ mg/m}^2$



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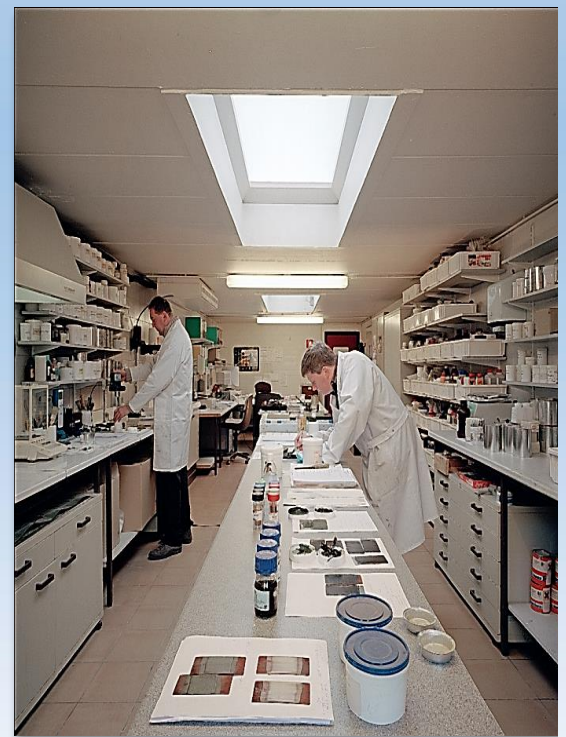
## ➤ Enhanced HSE Management

- It is environmentally friendly (no VOC's, no coal tar, no heavy metals, no isocyanates)
- Eliminates need for multiple solvents/chemical
- No risk of pollution; solvent free - no heavy metals, coal tar or isocyanates
- No leaching when curing under water
- No HSE risk - 100% VOC free
- Minimum risk of explosion due to higher flash point (>100°C)



## SUMMARY

- Provides the Asset Owners with the best in class solution to meet the challenge of keeping costs down and increasing productivity
- Ideal for fabric maintenance activities both offshore and onshore
- Accreditations include Norsok M-501, IMO, TAMAP, SGS etc
- Received Shell Global TRT (Technology Replication Thrust) recognition in one layer anti-corrosion coating and is currently being replicated worldwide. Regionally Malaysia, Singapore, Brunei and Philippines have commenced Humidur application
- Saudi-Aramco approval obtained in February 2017. The tests conducted were far more severe than the Norsok test program



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