

## Swimming pools "turn key" revamping package

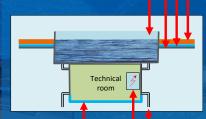
We have developed a comprehensive Turn-Key Package for the revamping and the operational improvement of the swimming pools for the Cruise Ships.

The Turn-Key package extends to the following areas:

- Pool deck
  - removal of the existing deck finishing
  - steelworks
  - surface preparation
  - application of Polyflake 110 corrosion protection resins or synthetic flooring manufacturer's primer
- Swimming Pool
  - removal of existing coating
  - steelworks
  - surface preparation
  - application of NSF approved top-quality, Polyflake Coating System resin 880.
- Technical Room
  - removal of existing deck coating
  - steelworks
  - Surface preparation
  - Application of corrosion-resistant Polyflake resin
     220
  - Automation replacement with state of art new units
- Pool system
  - automation system field cabling and sensors validation
  - Electric and automation systems check and repairs
  - piping repair, with Polyflake coating, or renewal as applicable.

## The swimming pool system

- 1. Synthetic flooring
- 2. POLYFLAKE® 110
- 3. Ship deck
- I. POLYFLAKE® 880



- 5. POLYFLAKE® 220
- 6. Automation system
- 7. Piping

#### **Technical Partners**

Specialists have come together to solve the swimming pools operational problems:

- Corrosion protection improvement to extend the system life.
- Renewal of the obsolescing equipment.
- Revamping of degraded areas.
- Synthetic flooring at Customer choice and care.



# Swimming pools treatment cycles for an extended, low maintenance, new life

#### The key advantages of POLYFLAKE®'s treatments are:

- The extreme resistance to corrosion, marine salted atmosphere, and sun light.
- The flexibility of the resins coat able to resist to thermal excursions, vibrations and follow the ship structure deflections due to the motion and bad sea conditions.
- The reparability on site of the coat in case of damages; using the original POLYFLAKE® repair kit the ship crew can take care during the night just in a couple of hours.
  - Fast curing time minimizes downtime without affecting daily pool availability.
- The POLYFLAKE package includes:
  - Removal of pool accessories and existing coat.
  - Repair to the pool structure providing eventually cutting, new plates and welding.
  - Final surface cleaning and preparation
  - Application of base coat and resistant finishing POLYFLAKE® resin 880.
  - Finishing and reinstallation of pool accessories.
- In the case the pool needs a specific architectural décor, it can be applied on the POLYFLAKE coating that provides the best corrosion protection barrier today available in the market.
- Treatment life extends well beyond the original arriving to over 20 years simply renewing the top coat that will perfectly bond to the existing coat.

#### POLYFLAKE® Coating

- POLYFLAKE® technology is based on well proven GRP "Cflakes" and resin compounds.
- Application is very convenient.
- Coating results are measurable on all surface and can be tested and certified in field.
- Coat damages can be easily and inexpensively repaired on site by untrained personnel with original POLIFLAKE® Kit and instructions.
- The resin is NSF approved for potable water.

### Jacuzzi's Basement Coating

 POLYFLAKE® coating technology provides the best corrosion barrier to the basements and deck under the Jacuzzi pools.





#### POLYFLAKE® LLC

We supply

MARINE CORROSION ENGINEERING



















#### Common defects and pitfalls of standard treatments

- Any discontinuity in the pool base shape is a potential starting point of corrosion.
- Accessories, lighting fixtures and nozzles are the weakest points in the corrosion chain as mechanical shocks on the treated surface.







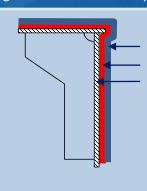




# The protection technology is not expensive and pays for itself in no time

Traditional treatments shows immediate evidences of local cracks and coat deteriorations.

- All coat degradation areas and mechanical shocks are immediately marking the pool surface with unaesthetic shades and rust spots.
- Treatment patching is almost impossible and need sensible downtime with discomfort for the passenger in one of the most loved and frequented ship areas.
- The patches do not solve the problem of the water penetration; behind the coat inevitably starts to corrode the carbon steel structure with rapid reappearance of rust spots and shades and possible local damages to the ship superstructure.
- POLYFLAKE® treatments resolve definitely all those problems;
   higher resistance and easy repairable just in case.



- .. POLYFLAKE® Top coat
- 2. POLYFLAKE® Base base
- 3. Swimming Pool base structure



The cracks fix needs few simple operations: clean and sand the area, apply the POLYFLAKE® kit resin with a trowel.

After two hours the pool can recover the normal operability.

