



# Surface / Protective Coating

### SYSTEM FAMILY

Protective coating / application methodology

### TYPE

Anti-corrosive / heat-resistant / tank-lining coatings

### NOMINAL BUILD

per DFT spec

## 1. SCOPE & SYSTEM DESCRIPTION

This Application Data Sheet describes POLYZEN's method for applying **protective and surface coatings** — anti-corrosive coatings to steel, heat-resistant coatings, and chemical-resistant tank / bund linings — to protect structures and contain process media.

Delivered as a **POLYZEN Applied System** using client-approved protective coating systems selected for the exposure — no POLYZEN branded product is required.

## 2. SUBSTRATE REQUIREMENTS

- **Steel:** abrasive blast to the specified cleanliness (e.g., Sa 2½ per ISO 8501-1) with the required surface profile; coat within the permitted time before flash-rust.
- **Concrete (tank/bund):** sound, prepared and dry substrate; repair defects and form coves and terminations.

## 3. SURFACE PREPARATION

- Remove oil/grease and salts; abrasive-blast steel to the specified standard and profile.
- For concrete, grind/shot-blast and repair; assess moisture per ASTM F2170.
- Prime within the allowed time-to-coat; stripe-coat edges, welds and bolt heads on steelwork.

## 4. ENVIRONMENTAL CONDITIONS

- Apply within the selected coating's temperature, humidity and dew-point limits; substrate  $\geq 3$  °C above dew point.
- Avoid application in condensing or contaminated conditions; ventilate enclosed tanks.

## 5. MATERIALS

**Materials:** delivered as a **POLYZEN Applied System** using a client-approved anti-corrosive / heat-resistant / chemical-resistant protective coating system as per the project specification and standards. Exact products, consumption, thickness and cure times are per the **selected material's data sheet**. No POLYZEN branded product is required for this system.

## 6. MIXING

- Mix multi-component coatings strictly per their data sheets; observe induction and pot-life times; mix full units only.

## 7. APPLICATION PROCEDURE

- **Prime:** apply the specified primer to the prepared, blasted substrate; stripe-coat details on steel.
- **Build coats:** apply intermediate and finish coats to the specified dry-film thickness (DFT), respecting overcoat windows.
- **Tank lining:** apply the lining system to the specified DFT with reinforcement at joints; allow full cure and post-cure where required before service.
- **Inspection:** check DFT and (for linings) holiday / spark test for continuity.

## 8. COVERAGE, COATS & THICKNESS

- Number of coats and DFT per coat per the selected material's data sheet; total DFT per the protective specification.

## 9. CURING & RETURN TO SERVICE

- Cure / post-cure and return-to-service times per the selected coating; immersion service usually requires full cure before filling.

## 10. FINISHING & DETAILING

- Stripe-coating of edges/welds; reinforcement at tank joints and penetrations.
- Holiday (spark) test linings for pinhole-free continuity where specified.

## 11. QUALITY-CONTROL CHECKPOINTS

- Verify blast cleanliness, profile and time-to-coat (steel).
- Check wet-film and cured DFT against the specification.
- Holiday-test linings and record.
- Log temperature, humidity and dew point.

## 12. DO'S & DON'TS

### Do

- Blast steel to the specified standard and coat promptly.
- Stripe-coat edges, welds and bolts.
- Achieve and verify the specified DFT.
- Follow the selected material's data sheet.

### Don't

- Don't coat over flash-rust or soluble salts.
- Don't apply below dew-point margin.
- Don't exceed the maximum overcoat interval.
- Don't put linings into service before full cure.

## 13. CLEANING & MAINTENANCE

- Inspect coatings periodically for damage and undercutting corrosion.
- Touch up damage with the compatible system promptly.
- For linings, follow the process owner's inspection schedule.

## 14. HEALTH, SAFETY & ENVIRONMENT

- Abrasive blasting and spray application require respiratory protection, ventilation and containment.
- Follow the selected material's SDS — many protective coatings are solvent-based / isocyanate-cured.
- Enforce confined-space entry controls for tank interiors.

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*Disclaimer: this interim Application Data Sheet describes POLYZEN's typical application methodology for this class of system and is provided in good faith. It is a brand-flexible application guide; exact mix ratios, consumption, film thickness and cure times are governed by the selected material's data sheet. All parameters are typical/indicative and are confirmed in the project-specific Method Statement. POLYZEN reserves the right to revise this document; the latest version supersedes all previous.*