

SBC

COATING SYSTEM SELECTION GUIDE

(CATEPOX® Heat- and Wear-Resistant Coating)

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1. PURPOSE

This Coating System Selection Guide provides recommendations for selecting the most appropriate application system for **CATEPOX® Heat- and Wear-Resistant Coating** under various industrial service conditions.

The purpose of this guide is to ensure that the selected coating system meets the required corrosion protection, mechanical resistance, chemical resistance and expected service life for the intended application.

2. SCOPE

This guide applies to coating system selection for:

- Steel structures;
 - Industrial equipment;
 - Pipelines;
 - Storage tanks;
 - Mechanical and process equipment;
 - Other metallic substrates requiring corrosion protection.
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3. SELECTION CRITERIA

The following factors shall be considered when selecting a coating system:

- Type and condition of the substrate;
- Surface preparation method;
- Corrosivity category of the environment;
- Mechanical loading and abrasion;
- Chemical exposure;
- Operating temperature;
- Ultraviolet (UV) exposure;

- Required service life;
- Accessibility for future maintenance.

The coating system shall always be selected according to the specific service conditions and project requirements.

4. RECOMMENDED APPLICATIONS

Service Environment	Suitability
Indoor industrial facilities	✓
Outdoor steel structures	✓
Chemical processing plants	✓
Mechanical equipment	✓
Storage tanks	✓
Pipelines	✓
Areas exposed to high mechanical wear	✓

5. SURFACE PREPARATION REQUIREMENTS

Proper surface preparation is essential for achieving optimum coating performance.

The substrate shall be:

- Free from dirt, grease and contaminants;
- Free from loose rust and deteriorated coatings;
- Prepared to the specified surface profile;
- Dry and clean prior to coating application;
- Prepared in accordance with the Technical Data Sheet and Application Guide.

6. COATING SYSTEM CONFIGURATION

The coating system shall be designed according to the project specification and intended service conditions.

The following shall be considered:

- Primer requirements (where applicable);
- Intermediate coat(s), if specified;

- CATEPOX® topcoat application;
 - Total Dry Film Thickness (DFT);
 - Required service life and maintenance intervals.
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7. ENVIRONMENTAL CONDITIONS

During application, the following conditions shall be maintained:

- Suitable ambient temperature;
- Suitable substrate temperature;
- Relative humidity within specified limits;
- Substrate temperature maintained above the dew point;
- Adequate ventilation throughout application and curing.

Environmental conditions shall comply with the Technical Data Sheet.

8. MAINTENANCE CONSIDERATIONS

To maximise coating performance and service life, the following is recommended:

- Routine visual inspections;
 - Periodic cleaning;
 - Immediate repair of damaged areas;
 - Maintenance records for all inspections and repairs;
 - Periodic assessment of coating condition throughout its service life.
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9. RELATED DOCUMENTS

- Technical Data Sheet (TDS)
 - Application Guide
 - Maintenance Guide
 - Repair Procedure
 - System Specification
 - Inspection and Acceptance Checklist
 - Quality Control Plan
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10. DOCUMENT CONTROL

This Coating System Selection Guide forms part of the SBC document management system.

The document shall be reviewed whenever:

- A new product version is introduced;
- A new coating system configuration is developed;
- Applicable legislation or technical standards are revised;
- Or at least once every three years as part of the regular document review process.