GENERAL SPECIFICATION

CORROSION

GS EP COR 350

External protection of offshore and coastal structures and equipment by painting

11	09/2013	General review - Paint system review - Salt contamination
10	10/2012	General review - Paint system review
09	01/2012	Paint system review in accordance with “REACH” legislation
08	01/2011	New paint Supplier - Change of policy for 316 & 316L in § 3.2.2 - Supplementary requirements to ISO 20340 removed from § 4.3
00	02/2001	First issue
Rev.	Date	Purpose of the revision

Owning entity: DEV/TEC	Managing entity: DEV/TEC/COR

Contents

1. Scope

This General Specification defines the technical requirements for the execution of painting works of new built offshore or coastal structures and equipment. The specification is based on the use of high durability painting systems for facilities whose design life is anticipated to be more than **15 years**.

This specification does not cover painting systems for temporary equipment or equipment with design life less than 10 years, and for which alternative painting systems shall be submitted to Company for approval.

2. Reference documents

The reference documents listed below form an integral part of this General Specification.

External Documents

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published at the effective date of this document.

Reference	Title
ACQPA	"Association pour la Certification et la Qualification en Peinture Anticorrosion". Painting systems certified by ACQPA. www.acqpa.com
ASTM D 4752	Standard test method for measuring MEK resistance of ethyl silicate (inorganic) Zinc-rich primer by solvent rub
ASTM D 4940	Standard test method for conductimetric analysis of water soluble ionic contamination of blasting abrasives
ISO 12944 (Parts 1; 2; 3; 4; 7; 8)	Paints and varnishes - Corrosion protection of steel structures by paint systems - Parts 1; 2; 3; 4; 7; 8
ISO 16276 (Parts 1; 2)	Corrosion protection of steel structures by protective paint systems - Assessment of, and acceptance criteria for, the adhesion/cohesion (fracture strength) of a coating - Parts 1; 2
ISO 19840	Paints and varnishes corrosion protection of steel structures by protective paint systems. Measurement of, and acceptance criteria for the thickness of dry films on rough surfaces
ISO 20340	Paints and varnishes - Performance requirements for protective paint systems for offshore and related structures
ISO 4628 (Parts 1; 2; 3; 4; 5; 6)	Evaluation of paint and varnish defects. Designation of intensity, quantity and size of common types of defect - Parts 1; 2; 3; 4; 5; 6
ISO 8501 (Parts 1; 2; 3)	Preparation of steel substrates before application of paints and related products. Visual assessment of surface cleanliness - Parts 1; 2; 3

Reference	Title
ISO 8502 (Parts 1; 2; 3; 4; 6; 9)	Preparation of steel substrates before application of paints and related products. Tests for the assessment of surface cleanliness - Parts 1; 2; 3; 4; 6; 9
ISO 8503 (Parts 1; 2; 3; 4)	Preparation of steel substrates before application of paints and related products. Surface profile of abrasive blast-cleaned steel - Parts 1; 2; 3; 4
ISO 8504 (Parts 1; 2; 3)	Preparation of steel substrates before application of paints and related products. Methods for surface preparation - Parts 1; 2; 3
RAL 840 HR	Colors standard

Total General Specifications

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published in the applicable yearly collection.

Reference	Title
GS EP COR 355	External protection of piping and equipment by thermal spray coating

3. Surfaces to be painted

All surfaces shall be painted using the relevant specified system, except when otherwise stipulated hereafter.

3.1 Items not to be painted

Unless otherwise specified, the following surfaces shall not be painted:

- Galvanised steel gratings
- Concrete structures
- Plastic and plastic coated materials provided their resistance to UV has been demonstrated, and colour coding is not necessary
- Non ferrous materials such as 90-10 and 70-30 copper nickel alloys, monel, aluminium bronze, and nickel alloys when not thermally insulated
- Machined surfaces.

3.2 Case of stainless steels

Stainless steels shall be painted when requested in the present specification. Only piping, pipelines and vessels or other pressure containing equipment are concerned.

3.2.1 Under thermal insulation

For temperatures ranging from 25 to 150°C (maximum operating temperature), system P05 second shall be used, whatever the stainless steel type.

Below 25°C, system P05 shall be applied whatever the stainless steel type.

3.2.2 Without thermal insulation

The following shall apply:

Stainless steel type	General case	Paint system
AISI 304, 304L and 321	Painted in all cases	P05 for T < 80°C P05 second for 80°C < T < 150°C
AISI 316 and 316L	Painted for all process piping (> 2") and equipment Painted only if T > 50°C for other equipment	P05 for T < 80°C P05 second for 80°C < T < 150°C
AISI 904, duplex, superduplex	Painted for T > 100°C	P05 second for T < 150°C
All stainless steels shall be protected from iron contamination (projections from power tooling & welding of neighbouring carbon steels) when construction works are likely to continue after pickling and passivating. **If Contractor cannot demonstrate that he can adequately protect stainless steels, then all stainless steels shall be painted.**		

In all cases, and if necessary, system P13 shall be applied for T > 150°C. TSA (Thermally Sprayed Aluminium) according to GS EP COR 355 can also be used as an alternative.

Zinc containing paints are prohibited on stainless steels.

All stainless steels shall be painted on areas in contact with carbon steel piping supports.

3.3 Painting of fastenings

For bolting, the following applies:

- Stainless steel: Not painted
- Cadmium or Zinc-Plated Bichromated Carbon steel substrate or coated with Xylan 1424: Primer of system P06 (30 microns of epoxy) applied before assembly and the remaining layers (intermediate and finish coat) applied after installation.

For dudgeons, painting (system P06) will be applied after installation.

4. Painting systems

Painting systems are defined according to the following parameters:

- Type of substrate
- Atmosphere or environment
- Minimum and maximum Operating temperatures.

4.1 Reference code for painting systems for offshore and coastal areas

4.1.1 Coding system

Part 1: Atmosphere or environment

Atmosphere or environment	Category of corrosivity
Marine atmosphere - MA	C5-M
Buried - EN	EN
Immersed - IM	IM - 2

Part 2: Substrate

AF	Ferritic (carbon) steel or cast iron
AI	Austenitic stainless steels and special alloys
AG	Galvanized steels
AB	Cadmium-plated bichromated steels
PL	Plastics
BE	Concretes and similar products

Part 3: Operating temperatures

SNNN/SNNN: two-zone code containing the symbol + or - and three digits (NNN) indicating the minimum and maximum Operating temperatures respectively.

4.1.2 Identification of painting systems

Systems are identified as follows:

MA	AF	+121/+300	XX
Part 1	Part 2	Part 3	System number

4.2 Approved systems

The painting systems approved by Company are given in Appendix 3. It is emphasised that these painting systems, where relevant, have been subject to certification by ACQPA and/or another independent laboratory, according to Company policy and have therefore been subject to extensive corrosion testing.

For painting systems which cannot be certified through the ACQPA procedures (especially high temperature painting systems), the approved panting systems are the result of Company experience and operational feedback.

For Suppliers already approved as per Appendix 1, new systems can be submitted for approval to Company at any time and at Suppliers expenses. In that case, a full qualification programme shall be submitted to Company for approval together with the name of the third party and independent laboratory which is proposed to perform the test programme. Company reserves the right to amend the qualification programme proposed and to witness testing at any stage. Long term corrosion protection performance shall be assessed according to ISO 20340 with 3mm maximum corrosion from scribe line for all paint systems to be qualified for C5M atmospheres. Other testing may be required depending on the specific industrial application.

Each year, approved paint Supplier proposing the painting systems for the new revision of the present specification. A meeting will be held between Supplier and Company in order to discuss new proposals and to finalise the list of approved painting systems for the coming year. Following this, Supplier will then issue a statement certifying that no alternative painting system (already qualified or not) than these agreed during the meeting will be submitted for Company projects or maintenance works unless previously discussed with, and duly authorised by, TEC/COR according to the requirements outlined in the next section of the present specification.

Supplier's painting systems will not be included in the present specification unless such statement has been issued.

4.3 Approval of alternative painting systems

For **Suppliers already approved** as per Appendix 1, new systems can be submitted for approval to Company at any time and at Suppliers expenses. In that case, a full qualification programme shall be submitted to Company, with sufficient time to allow for the testing to be carried out, for approval together with the name of the third party and independent laboratory which is proposed to perform the test programme. Company reserves the right to amend the qualification programme proposed and to witness testing at any stage. Accelerated corrosion testing shall be carried out according to the latest version of ISO 20340 with 3 mm maximum corrosion from scribe line for all paint systems to be qualified for C5M atmospheres. Other testing may be required depending on the specific industrial application.

In parallel, Contractor shall present a full contingency plan describing all the painting systems to be used, should qualification tests fail. Qualification of alternative systems will not be considered by Company unless the contingency plan is submitted.

In Any case, if Contractor wishes to use any painting system which is not listed in the present General Specification, a formal derogation shall be requested from TEC/COR, outlining the reasons for a new painting system to be used, as well as the steps to be taken, including planning, to qualify the alternative system. If Contractor eventually fails to fulfil its qualification

programme in time, then the proposed painting system will be refused by Company without any further discussion, and the contingency plan shall be used.

4.4 Substitution rule

When selecting a painting system, a system designed to withstand environments with higher corrosivity shall always be applicable to lower corrosivity environments.

4.5 Colour coding

Colour coding shall be according to the schedule defined for the project. Generally, colours will be chosen to match those of installations already present in the same block or country.

If the project has no specific requirements, the colour coding shall be according to Appendix 4.

In any case, the painting works carried out by Contractor shall include all colour coding and marking required for service identification.

5. Certification of personnel

5.1 Operators

Operators shall be individually certified by an approved organization (ACQPA, FROSIO, etc.).

5.2 Inspectors

Inspectors shall be individually certified by an approved organization (ACQPA, FROSIO, NACE International minimum level 3 with peer review, etc.).

6. Technical content of tenders

Tenders shall include the following information:

- Proposed paint systems for each category/location of item to be painted
- Product data sheets
- Proposed qualification program if any
- List of derogations to the present General Specification, if any. Derogations will not be granted for painting systems after Contract award
- Terms and conditions of guarantee
- A statement showing that all parties involved (Contractor, Supplier, and Applicator) will be carrying out the work according to the present specification, or if relevant, to the project particular specification, including derogations duly agreed by TEC/COR before Contract award. This statement shall also show that the guarantee is jointly underwritten by all parties and specify the durations and performance levels of the guarantee. This statement can consist in either a certificate of homologation by OHGPI (Organisme d'Homologation des Garanties en Peinture Industrielles) or a letter signed by the head office of each party involved.
- Maximum thickness tolerable for each coat and for the each full painting system

- Surface preparation and painting procedures
- Inspection test plan with acceptance criteria and frequency of inspection
- A list of inspection and painting equipment to be used
- Colours to be used for each item of equipment and for the different coats, in accordance with the colour chart chosen for the project by Company
- Methods of protection of items to be painted against adverse weather conditions
- Certificates (ACQPA, FROSIO, NACE, or equivalent) of Operators and Inspectors.

7. Surface preparation

7.1 Design and preparation before blasting of surfaces to be painted

All structures and equipment shall be designed according to ISO 12944 international standard for high durability painting systems.

All sharp edges shall be rounded (minimum radius > 2 mm).
Preparation grades of welds, edges and other areas with surface imperfections shall be grade P3.

The design of the item to be painted shall be such that it creates no interstice and inaccessible area.

All oil or grease shall be removed by washing the item to be painted with appropriate solvents or any other suitable means before beginning of blast-cleaning operations. This includes bolt holes in piping assemblies.

Weld spatter and remains of temporary welds, deposits or surface defects shall be eliminated by appropriate means; removal by deep grinding is subject to Company approval.

All mating surfaces of equipment subject to outdoor exposure shall be coated with the full coating system prior to assemly (saddles, skirts, base plates, olted components, flanges, etc.).

Contractor shall protect all equipment that is not to be painted or may be affected by the presence of abrasives or paint. Special attention shall be paid to avoid splashes of zinc paint on equipment made of austenitic steels.

7.2 Quality of abrasives

Abrasives shall be sealed in watertight packaging. Any product delivered in defective packaging shall be rejected. Products must be stored sheltered from the elements.

Conductivity of abrasives shall be less than 150.10^{-6} Siemens/cm as per ASTM D 4940.

The use of copper slag or silica sand is **strictly** prohibited.

7.3 Blast cleaning of carbon steel (AF)

All surfaces to be coated shall be blast-cleaned (ISO 8504) according to:

- The grade of cleanliness (ISO 8501 standard)
- The surface profile Ra (ISO 8503 standard: roughness meter with adapted cut-off or visio tactile surface profile comparator) specified for each system in Appendix 3.

After blast-cleaning, all dust must be removed using a vacuum cleaner before application of the paint in order to achieve the maximum dust level 2 acceptable for each paint system (ISO 8502-3).

All blast-cleaned surfaces shall be coated before the deterioration of the "grade of cleanliness". In any case, any surface that has been blast-cleaned shall be coated on the same day.

Before painting works commence, checks for the contamination of the surface by salts shall be carried out (ISO 8502-6 & ISO 8502-9).

The blast cleaning procedure shall be submitted to Company for approval.

7.4 Blast cleaning of carbon steel (AF) on automatic production lines

In addition to the requirements of § 7.3:

- All surfaces shall be blast-cleaned to grade of cleanliness Sa 3 (ISO 8501-1).
- Contractor shall ensure that the grit selected can achieve the required surface profile. This requirement includes determination of grit mix, as well as quantity and frequency of grit renewal. Surface profile shall be checked twice per shift and the results shall be recorded.
- Dust level shall be thoroughly checked (ISO 8502-3).

The blast cleaning procedure shall be submitted to Company for approval.

7.5 Blast cleaning of stainless steels (AI)

Stainless steels shall be segregated, carbon steel supports for storage shall be systematically painted, and lifting equipment shall prevent iron contamination.

Stainless steel surfaces to be coated shall be etched or degreased and blast-cleaned with a non-ferrous and chlorine-free abrasive.

The blast cleaning procedure to be submitted to Company shall include:

- Abrasive composition to obtain a surface roughness of Ra = 10 microns (8 microns acceptable locally)
- Dust level (maximum level 2 maximum according to ISO 8502-3)
- Substrate contamination checks. Ferrous contamination/direct colorimetry method using Prussian blue (potassium ferricyanide) - No surface pollution is acceptable.

7.6 Surface preparation of galvanised steel (AG)

Galvanized steel to be coated shall be cleaned, degreased and sweep blasted (see Appendix 3).

7.7 Preparation of zinc or cadmium plated bichromated surfaces (AB)

Zinc or cadmium-plated bichromated surfaces shall be cleaned and degreased.

8. Paint application

8.1 Procurement and storage

The quantities of paint and thinners required to perform the entire job shall be procured before the work commences, except in cases where the shelf life of the product is less than the anticipated duration of the work.

Thinners, solvents, etc. shall be stored in a suitably ventilated fireproofed building, separate from other painting consumables.

The products shall be delivered in their original sealed packaging and stored in such conditions as to avoid their degradation (controlled temperature, etc.). The packaging shall be clearly marked with the product description, the batch number, the fabrication date and the expiry date.

The shelf life from the fabrication dates are:

- For zinc ethyl silicate: 6 months
- For other products: 1 year
- Specific cases: according to Manufacturer's recommendation with Company approval.

8.2 Samples for QA/QC purposes

From each batch of products used during the work, the Contractor shall take two samples to be made available to Company.

8.3 Qualification of application procedure for each system

One month before work commences, all the selected systems shall be applied on samples representative of the structure to be painted. The products used shall be sampled from the same batches than these intended for the works.

The system shall be applied in the presence of the Supplier of the paint and the Company representative, in climatic conditions that are as similar as possible to worst case conditions that can be foreseen during the work on the construction site. Application shall be performed by the painting specialist who will be responsible for application during the work, using the same equipment that will be used during the work.

When the painting systems are fully cured, visual inspection and adhesion testing shall be carried out to confirm that the performance of the painting systems meet those specified for each system in Appendix 3.

8.4 Kick off meeting

A technical kick off meeting shall be organized by the Contractor in the presence of Company specialists (TEC/COR) and Supplier to review all the details regarding the work, application procedures, and inspection test plan. All the documentation shall be submitted to Company for review at least two (2) weeks prior to this meeting.

Supplier shall provide Contractor with technical assistance. All recommendations made by Supplier other then these outlined in datasheets or in the present specification shall be supported by a written statement from Supplier head office.

8.5 Application

8.5.1 General

Paint shall always be applied to surfaces that are dry, clean and degreased, for both coating on substrate and previous coat.

Painting works shall not proceed if:

- Temperature of the substrate is less than 3°C above the dew point
- The relative humidity is more than 85% RH (90% RH for inorganic zinc silicates)
- The weather is rainy or foggy, except under shelter, and subject to verification of the atmospheric conditions
- The minimum or maximum temperature of the ambient atmosphere and the substrate are out with the limits given in the product data sheets (usually 10°C for epoxy based paint and 5°C for acryl-polyurethane topcoat.

Contractor shall keep a daily record of the dew point, relative humidity, ambient atmosphere and substrate temperatures (all measured before the work commences and twice per shift and when ambient conditions are obviously changing) to ensure that conditions are acceptable. These records shall be kept and made available to Company.

Application shall be by airless spray.

Stripe coats shall be applied by brush to all angles, corners, sharp edges, bolt or rivet heads, etc. with the same product than this to be applied on the surface to be painted. Exception is inorganic zinc silicates where only post touch shall be applied using the repair system primer i.e. zinc rich epoxy.

Different colours shall be used for all successive coats of the paint system. The finishing coat of the required colour shall be sufficiently opaque to cover the shade of the undercoat.

The thickness of each coat, including frequency and tolerance shall be checked by the Contractor according to ISO 19840. The values shall be recorded and made available to Company.

8.5.2 Zinc ethyl silicate

During application, the product shall be stirred at all times.

If relative humidity is below 65%, the painted surface shall be sprayed with fresh water for at least two hours after application to enhance curing.

Before the subsequent coat is applied, this primer shall be subjected to a MEK test as per ASTM D 4752 to ensure that hydrolysis is complete. If complete hydrolysis is not obtained within eight days of application, the coating shall be completely removed and re-applied.

8.5.3 Zinc or cadmium-plated bichromated bolting

All surfaces of the bolting assemblies, including threads shall be coated. The topcoat shall be applied after assembly is completed.

8.5.4 Painting of fastenings

For bolting, the following applies:

- Stainless steel: Not painted
- Carbon steel: Primer of system P06 (30 microns of epoxy) applied before installation and the remaining layers (intermediate and finish coat) applied after installation.

For dudgeons, painting (system P06) will be done after installation.

8.6 Repairs

Any defect shall be repaired before the application of further coats. Subject to the agreement of Company, and after determining the type and size of the defects, the following methods of repair shall be applied:

8.6.1 Major defects

The paint shall be removed completely by abrasive blast-cleaning and the entire system shall be re-applied.

8.6.2 Minor defects (localized appearance, mechanical damage, scratches, etc.)

Subject to the agreement of the Supplier of the product, the system shall be removed by localized blast-cleaning, the edges of the sound coating shall be feathered back about 50 mm, and the repair system shall be applied.

9. Checks, inspection and acceptance

9.1 Checks

Throughout the duration of the work, Contractor's Quality Control department shall check the following points and record the results in its daily quality control report.

- Construction quality:
  - Rounding of corners, sharp edges to 2 mm radius minimum
  - Form, quality and continuity of welds.
- Surface preparation quality:
  - Grade of cleanliness: Sa 3 according to ISO 8501
  - Cleanliness: no grease or oil, dust level 2 maximum according to ISO 8502-3
  - Anchoring profile: G medium according to ISO 8503.
- Contamination including chlorides: according to ISO 8502-6 and 9, 30 mg/m² maximum **except for immersed areas where 20 mg/m² maximum is required.**.
- Climatic conditions for application all measured before the work commences and twice per shift and when the ambient conditions are obviously changing): temperature of substrate at least 3°C above dew point, maximum humidity 85% RH (90% for inorganic zinc silicates), ambient temperature (> 10°C for epoxy, > 5°C for polyurethane), weather conditions.

- State of curing of primer and of each coat.
- For inorganic zinc silicate: record of spraying with fresh water to enhance hydrolysis (if relevant) and results of MEK test: Level 5 according to ASTM D 4752.
- Interval between coats (in accordance with Supplier product datasheets).
- Wet film thickness for each coat immediately after application.
- Number of coats, DFT of each coat and of the final system according to ISO 19840.
- Appearance and colour.
- Adherence

  The tests shall be carried out only when the system is completely dry and fully cured.

  - Systems with DFT less than 200 μm: cross-cut test class 0 according to ISO 16276-2
  - Systems with DFT above 200 μm: pull-off test according to ISO 16276-1: Unless specified in the system sheet in Appendix 3, the minimum values acceptable are 3 MPa for checks made with mechanical equipment (type Ersad, Satec, or equivalent) and 5 MPa for checks made with hydraulic equipment (Type PAT or equivalent). The equipment must be fitted with a gauge indicating the pulling force.

  The adhesion tests shall be performed with cyano-acrylate glue as LOCTITE 496 or equivalent.
- Visual inspection results: no defects such as "orange peel", cracking, bubbling, pinholes, runs and sags, blistering, etc.

9.2 Inspection test plan

An inspection test plan including all the points in section 9.1 shall be prepared and submitted to Company. The Inspection Test Plan shall clearly indicate frequency of testing for each check.

9.3 Company inspection

Company Inspector shall have free access to storage areas, workshops, yards where the works will be performed. Contractor shall also provide Company Inspector with all office facilities necessary for the execution of his work (telephone, fax, handling equipment, measuring instruments with valid calibration certificates, etc.).

Upon arrival of Company Inspector on site, Contractor shall supply him with all relevant documentation regarding the works to be carried out.

9.4 Provisional acceptance

For provisional acceptance, Company shall check that all inspections set out in section 9.1 have been carried out and that all results are satisfactory.

9.5 Guarantee

The Work shall be covered by a specific guarantee given by Contractor to complete Guarantees and warranties defined in the Engineering, Procurement, Supply, Construction and Commissioning Contract (EPSCC 1113 - Article 20 “GUARANTEES AND WARRANTIES”)

Contractor guarantees that the Work shall be covered by performance warranties in accordance with the following requirements of the Contract:

- The maximum degree of rust shall be Ri2 according to ISO 4628
- The maximum degree of cracking, blistering, or flaking shall be 3S3 according to ISO 4628.

Guarantee shall be provided for the duration defined for each paint system in Appendix 3.

Beginning of Warranty Period as defined for each paint system in Appendix 3 starts from the effective date of the PROVISIONAL ACCEPTANCE CERTIFICATE for painting works.

9.6 Final acceptance

At the end of the Warranty Period a joint inspection of Work by Company and Contractor shall be carried out before issuance of the FINAL ACCEPTANCE CERTIFICATE for painting works to determine if any claims are raised.

10. Technical file

Contractor shall hand over a technical file to Company at the end of the works which shall include:

- All inspection reports
- Provisional acceptance reports
- Guarantee certificates
- Insurance certificates for the guarantee.

Bibliography

Reference	Title of the publication
ISO 9223	Corrosion of metals and alloys. Atmospheres' corrosivity. Classification

Appendix 1 List of approved Suppliers

Supplier	Code	Phone No.	Fax No.	Remarks
CARBOLINE	**C**	+33 1 60 06 55 66	+33 1 60 06 55 70	Carboline.France @stoncor.com
CHUGOKU	**Ch**	+31 167 526 100	+31 167 522 059	X.hagenaars@cmpeurope.eu
HEMPEL	**H**	+33 3 44 08 28 90	+33 3 44 08 28 99	jmb@hempel.com dbo@hempel.com
INTERNATIONAL COATINGS	**I**	+33 2 35 22 13 72	+33 2 35 22 13 78	adrien.bentejac@akzonobel.com
JOTUN	**J**	+33 1 45 19 38 87	+33 1 45 19 38 94	Xavier.dubois@jotun.com
PPG	**P**	+33 1 70 03 11 11	+33 1 70 03 11 06	Pascal.digonnet@ppg.com

Appendix 2 List of systems

Important warning:

- **Intervals between coats are given for 20°C and a relative humidity of 60%**
- **For inorganic zinc silicates, interval considers water spray for 2 hours after application if RH below 65%**
- **Systems have been certified by ACQPA where relevant (website www.acqpa.com)**
- **Temperatures indicated are minimum /maximum operating temperatures**
- **Painting system with minimum level of solvent shall be preferred**
- **Lead chromates in paint are strictly forbidden.**

Decks			
Item	**Code**	**System**	**Remarks**
Structures	MA AF -040/+080	P01 P01 2nd	**According to the fabrication methodology**
Floors	MA AF -040/+080	P02	
Helideck, escape routes of oil producing facilities	MA AF -040/+080	P03 or P03 2nd	
Fire-proofed surfaces Intumescent epoxy	MA AF -040/+080	P04 P04 2nd	**The painting system, painting application and overcoating conditions shall be approved by PFP supplier**
Galvanized surfaces	MA AG -040/+080	P05	All galvanized surfaces, **EXCEPT** gratings, stairs and associated galvanized fasteners
304, 321 SS T < 80°C	MA AI -040/+080	P05	
Other stainless steels	MA AI -040/+080	P05 2nd	
Cd/bi Cr and Zn/bi Cr surfaces	MA AB -040/+080	P06	Above 80°C, use same system as adjacent surfaces
High temperature	MA AF +121/+400	P11	Flare type structures

Appendix 2

Jackets			
Item	**Code**	**System**	**Remarks**
Zone: 1 (Splash zone)	MA AF -040/+080	P07 P07^{2nd} (Note 1)	Between the crest level of the 100 years wave superimposed on the maximum surge height plus the normal Mean High Water Springs (MHWS) and 3 m below the Lowest Astronomical Tide (LAT) or the annual swell, whichever is the greater I tubes and J tubes of umbilicals and electrical cables Sump caissons (external)
Zone: 2 (Immersed zone) (Note 2)	MA AF -040/+080	P08	Area from the bottom of the jacket (including buried part) to 2 m above the stability floor. Boat-landing, Bumpers Sump caissons (internal) Casings of seawater lift pumps Subsea equipment (wellheads, manifolds, etc.). Top coat shall be light colour
Zone: 3 (Emerged zone)	MA AF -040/+080	P09 or P09^{2nd}	Area between the crest level of the 50 years wave superimposed on the maximum surge height plus the normal Mean High Water Springs (MHWS) and the top of the structure

Note 1: If above 80°C, the splash zone of flare structure shall be cladded with Inconel 625 or Monel K500 or equivalent.

Note 2: Immersed zone is protected against corrosion by combination of painting and cathodic protection.

Appendix 2

Pressure vessels, piping, and exterior of storage tanks			
Item	**Code**	**System**	**Remarks**
Carbon steels, uninsulated			
t ≤ 80°C	MA AF -040/+080	P01 P01 2nd	Extended 1.5 m down inside floating roof tanks
81 ≤ t ≤ 120°C	MA AF +081/+120	P10	Including adjacent surfaces
121 ≤ t ≤ 400°C	MA AF +121/+400	P11	Including adjacent surfaces
Carbon steels, insulated			
t < 89°C	MA AF -040/+089	P12	
90 ≤ t ≤ 200°C	MA AF +090/+200	P13	
Other			
Vessels base structure	MA AF -040/+080	P01 P01 2nd	
Galvanised surfaces	MA AG -040/+080	P05	All galvanized surfaces, **EXCEPT** gratings, stairs and associated galvanized fasteners
304, 321 SS, T < 80°C	MA AI -040/+080	P05	
Other stainless steels	MA AI -040/+080	P05 2nd	Including 304, 321 SS 80°C < T < 120°C
Cd/bi Cr or Zn/bi Cr surfaces	MA AB -040/+080	P06	Above 80°C, use same system as adjacent surfaces

Machines			
Item	**Code**	**System**	**Remarks**
T < 80°C	MA-AF-040/+080	P14	Machinery Supplier system if approved by Company

Rooms			
Item	**Code**	**System**	**Remarks**
Opened workshops	MA AF -040/+080	P15	Bulkheads, ceilings
Air conditioned	MA AF -040/+080	P16	Walls, ceilings
Floors	MA AF -040/+080	P02 or P02 2nd	
Floors under concrete	MA AF -040/+080	P15 or P15 2nd	

Appendix 3 Suppliers' systems

Coding for type of paint:

Binders	Codes	Remarks
Zinc ethyl silicate	ESI	
Rich Zinc epoxy	EPRZ	[Zn] > 80%
Epoxy	EP	
Phenolic Epoxy	EPPH	
Modified Epoxy	EPM	
Ester Epoxy	EPES	
Glass flake Epoxy	EPGF	
Polyurethane	PUR	
Silicone	SI	
Vinyl-ester	VY	
Novolac Epoxy	EPN	

Appendix 3

System No. **P 01 C**

Coating **Deck and Equipment**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	unlimited
Finish coat	PUR	Carbothane 134 series	50 microns	57	80	24 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EP	Carboguard 893SG	40 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	unlimited
Finish coat	PUR	Carbothane 134 series	50 microns	57	80	24 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 01 C second**

Coating **Deck and Equipment**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Intermediate	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Finish coat	PUR	Carbothane 134 series	50 microns	57	80	24 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Intermediate	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Finish coat	PUR	Carbothane 134 series	50 microns	57	80	24 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 02 C**

Coating **Floors**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPGF	Carboguard 1209	250 microns	88	85	4 hours	16 hours
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EP	Carboguard 893SG	40 microns	62	85	7 hours	unlimited
Intermediate	EPGF	Carboguard 1209	250 microns	88	85	4 hours	16 hours
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 02 C second**

Coating **Floors**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Intermediate	EPGF	Carboguard 1209	250 microns	88	85	4 hours	16 hours
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Intermediate	EPGF	Carboguard 1209	250 microns	88	85	4 hours	16 hours
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 03 C**

Coating **Helideck**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPGF	Carboguard 1209 with fillers 47	500 microns	93	85	4 hours	16 hours
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EP	Carboguard 893SG	40 microns	62	85	7 hours	unlimited
Intermediate	EPGF	Carboguard 1209 with fillers 47	500 microns	93	85	4 hours	16 hours
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 03 C second**

Coating **Helideck**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Intermediate	EPGF	Carboguard 1209 with fillers 47	500 microns	93	85	4 hours	16 hours
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Intermediate	EPGF	Carboguard 1209 with fillers 47	500 microns	93	85	4 hours	16 hours
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 04 C**

Coating **Fire-Proofed Surfaces; Concrete type PFP**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carbomastic 15	150 microns	90	95	48 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carbomastic 15	150 microns	90	95	48 hours	unlimited
Finish coat							

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 04 C second**

Coating **Fire-Proofed Surfaces; Intumescent epoxy**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	95	3 hours	unlimited
Tie-coat	EP	Carboguard 893SG	40 microns	62	85	7 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Carbothane 134 series	50 microns	57	80	24 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	95	3 hours	unlimited
Tie-coat	EP	Carboguard 893SG	40 microns	62	85	7 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Carbothane 134 series	50 microns	57	80	24 hours	unlimited

4. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 05 C**

Coating **Galvanized Surfaces**

Supplier **CARBOLINE**

1. Surface preparation

Sweep blasting with fine abrasives

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	Unlimited
Finish coat	PUR	Carbothane 134 series	50 microns	57	80	24 hours	Unlimited

3. Repair system

Sweep blasting with fine abrasives

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	Unlimited
Finish coat	PUR	Carbothane 134 series	50 microns	57	80	24 hours	Unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 MPa (mechanical tester)

Appendix 3

System No. **P 05 C second**

Coating **Stainless steel as 316L, 904, duplex…**

Supplier **CARBOLINE**

1. Surface preparation

Roughness Grit - coarse(C) (ISO 8503-2)

Dust level level 2 maximum (ISO 8502-3)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	VY	Plasite 4100	500 microns	96	85	10 hours	7 days
Intermediate	VY	Plasite 4100	500 microns	96	85	10 hours	7 days
Finish coat							

3. Repair system

Roughness Grit - coarse(C) (ISO 8503-2)

Dust level level 2 maximum (ISO 8502-3)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	VY	Plasite 4100	500 microns	96	85	10 hours	7 days
Intermediate	VY	Plasite 4100	500 microns	96	85	10 hours	7 days
Finish coat							

4. Remarks

Only on thermally insulated piping or to prevent corrosion risk in interstices

Operating temperature resistance: less than 120°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 06 C**

Coating **Cadmium or Zinc-Plated Bichromated Surfaces or Xylan 1424**

Supplier **CARBOLINE**

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	unlimited
Finish coat	PUR	Carbothane 134 series	50 microns	57	80	24 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	unlimited
Finish coat	PUR	Carbothane 134 series	50 microns	57	80	24 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements

Appendix 3

System No. **P 07 C**

Coating **Jacket Zone 1**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	Unlimited
Tie-coat	EP	Carboguard 893SG	40 microns	62	85	7 hours	Unlimited
Intermediate	EPGF	Carboguard 1209	375 microns	88.5	85	16 hours	14 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	Unlimited
Tie-coat							
Intermediate	EPGF	Carboguard 1209	425 microns	88.5	85	16 hours	14 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 07 C Second**

Coating **Jacket Zone 1**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPGF	Carboguard 1209	300 microns	88,5	85	16 hours	14 days
Intermediate	EPGF	Carboguard 1209	300 microns	88,5	85	16 hours	14 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPGF	Carboguard 1209	300 microns	88,5	85	16 hours	14 days
Intermediate	EPGF	Carboguard 1209	300 microns	88,5	85	16 hours	14 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 MPa (mechanical tester)

Appendix 3

System No. **P 08 C**

Coating **Jacket Zone 2, Subsea equipment**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Carboguard 1209	200 microns	88,5	85	16 hours	14 days
Tie-coat							
Intermediate	EPGF	Carboguard 1209	200 microns	88,5	85	16 hours	14 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Carboguard 1209	200 microns	88,5	85	16 hours	14 days
Tie-coat							
Intermediate	EPGF	Carboguard 1209	200 microns	88,5	85	16 hours	14 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 09 C**

Coating **Jacket Zone 3**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	Unlimited
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carboguard 893	200 microns	77	85	10 hours	Unlimited
Finish coat	PUR	Carbothane 134 series	50 microns	57	80	24 hours	Unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	Unlimited
Tie-coat	EP						
Intermediate	EPM	Carboguard 893	250 microns	77	85	10 hours	unlimited
Finish coat	PUR	Carbothane 134 series	40 microns	57	80	24 hours	unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 09 C second**

Coating **Jacket Zone 3**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Intermediate	EPM	Carboguard 893	200 microns	77	85	10 hours	unlimited
Finish coat	PUR	Carbothane 134 series	50 microns	57	80	24 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Intermediate	EPM	Carboguard 893	200 microns	77	85	10 hours	unlimited
Finish coat	PUR	Carbothane 134 series	40 microns	57	80	24 hours	unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 10 C**

Coating **Surfaces Subject to High Temperatures**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPPH	Thermaline 400 Primer	120 microns	65	85	24 hours	6 days
Tie-coat							
Intermediate	EPPH	Thermaline 400 Finish coat	120 microns	63	85	24 hours	6 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPPH	Thermaline 400 Primer	120 microns	65	85	24 hours	6 days
Tie-coat							
Intermediate	EPPH	Thermaline 400 Finish coat	120 microns	63	85	24 hours	6 days
Finish coat							

4. Remarks

Polychromy possible up to 100°C (Carbothane PU 134 series)

Operating temperature resistance: less than 200°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 11 C**

Coating **Surfaces Subject to High Temperatures**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	unlimited
Tie-coat							
Intermediate	SI	Thermaline 4700	20 microns	48	90	4 hours	unlimited
Finish coat	SI	Thermaline 4700	20 microns	48	90	4 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat							
Intermediate	SI	Thermaline 4700	20 microns	48	90	4 hours	unlimited
Finish coat	SI	Thermaline 4700	20 microns	48	90	4 hours	unlimited

4. Remarks

Operating temperature resistance: less than 400°C
Specific guarantee requirements: 1 year

Appendix 3

System No. **P 12 C**

Coating **Insulated Surfaces**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPPH	Thermaline 400 Primer	150 microns	65	85	24 hours	6 days
Tie-coat							
Intermediate	EPPH	Thermaline 400 Finish coat	150microns	63	85	24 hours	6 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPPH	Thermaline 400 Primer	150 microns	65	85	24 hours	6 days
Tie-coat							
Intermediate	EPPH	Thermaline 400 Finish coat	150microns	63	85	24 hours	6 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 160°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 13 C**

Coating **Insulated Surfaces**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPES	Primer 200 red-brown	60 microns	41	85	30 minutes	Unlimited
Intermediate	EPES	Finish coat 200 Alu	60 microns	37	85	6 hours	Unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPES	Primer 200 red-brown	60 microns	41	85	30 minutes	Unlimited
Intermediate	EPES	Finish coat 200 Alu	60 microns	37	85	6 hours	Unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 250°C
Specific guarantee requirements: 1 year

Appendix 3

System No. **P 14 C**

Coating **Machines**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	Unlimited
Tie-coat							
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	Unlimited
Finish coat	PUR	Carbothane 134 series	40 microns	57	80	24 hours	Unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	Unlimited
Tie-coat							
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	Unlimited
Finish coat	PUR	Carbothane 134 series	40 microns	57	80	24 hours	Unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 15 C**

Coating **Open Rooms/Workshops, Sub-Concrete Floors**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Carbozinc 11	60 microns	61.5	95	24 hours	Unlimited
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	Unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EP	Carboguard 893SG	30 microns	62	85	7 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 15 C second**

Coating **Open Rooms/Workshops, Sub-Concrete Floors**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Carbozinc 858	60 microns	64	85	4 hours	unlimited
Tie-coat	EPM	Carboguard 893	100 microns	77	85	10 hours	unlimited
Intermediate	EPM	Carboguard 893	150 microns	77	85	10 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 16 C**

Coating **Air Conditioned Rooms**

Supplier **CARBOLINE**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	ESI	Carbozinc 11	60 microns	61.5	95	-	-

3. Repair system

Grade of cleanliness

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Intermediate							
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Appendix 3

System No. **P 01 Ch**

Coating **Deck and Equipment**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galbon S-HB	60 microns	60	90	24 hours	unlimited
Tie-coat	EP	Bannoh 500	30 microns	63	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 500	40 microns	63	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 01 Ch second**

Coating **Deck and Equipment**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 02 Ch**

Coating **Floors**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galbon S-HB	60 microns	60	90	24 hours	unlimited
Tie-coat	EP	Bannoh 500	30 microns	63	85	10 hours	unlimited
Intermediate	EPGF	Permax NO 3300	250 microns	80	85	12 hours	7 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 500	40 microns	63	85	10 hours	unlimited
Intermediate	EPGF	Permax NO 3300	250 microns	80	85	12 hours	7 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 02 Ch 2nd**

Coating **Floors**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Intermediate	EPGF	Permax NO 3300	250 microns	80	85	12 hours	7 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Intermediate	EPGF	Permax NO 3300	250 microns	80	85	12 hours	7 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 03 Ch**

Coating **Helideck**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galbon S-HB	60 microns	60	90	24 hours	unlimited
Tie-coat	EP	Bannoh 500	30 microns	63	85	10 hours	unlimited
Intermediate	EPGF	Permax NO 3300	500 microns	80	85	12 hours	7 days
Finish coat	PUR						

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 500	40 microns	63	85	10 hours	unlimited
Intermediate	EPGF	Permax NO 3300	500 microns	80	85	12 hours	7 days
Finish coat	PUR						

4. Remarks

Finish coat for marking

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 03 Ch 2nd**

Coating **Helideck**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Intermediate	EPGF	Permax NO 3300	500 microns	80	85	12 hours	7 days
Finish coat	PUR						

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	53	85	16 hours	unlimited
Tie-coat	EPM	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Intermediate	EPGF	Permax NO 3300	500 microns	80	85	12 hours	7 days
Finish coat	PUR						

4. Remarks

Finish coat for marking

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 04 Ch**

Coating **Fire-Proofed Surfaces; concrete type PFP**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galbon S-HB	60 microns	60	90	24 hours	unlimited
Tie-coat	EP	Bannoh 500	30 microns	63	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 500	40 microns	63	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat							

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 04 Ch 2nd**

Coating **Fire-Proofed Surfaces: Intumescent epoxy**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galbon S-HB	60 microns	60	90	24 hours	unlimited
Tie-coat	EP	Bannoh 500	30 microns	63	85	10 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 500	40 microns	63	85	10 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

4. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 05 Ch**

Coating **Galvanized Surfaces**

Supplier **CHUGOKU**

1. Surface preparation

Sweep blasting with fine abrasives

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Galvanite NO 400 primer	30 microns	47	85	14 hours	7 days
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

3. Repair system

Sweep blasting with fine abrasives

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Galvanite NO 400 primer	30 microns	47	85	14 hours	7 days
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 MPa (mechanical tester)

Appendix 3

System No. **P 05 Ch second**

Coating **Stainless steel as 316L, 904, duplex…**

Supplier **CHUGOKU**

1. Surface preparation

Roughness Grit - coarse(C) (ISO 8503-2)

Dust level level 2 maximum (ISO 8502-3)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	VY	Permax NO 1000HB	500 microns	82	85	24 hours	5 days
Intermediate	VY	Permax NO 1000HB	500 microns	82	85	24 hours	5 days
Finish coat							

3. Repair system

Roughness Grit - coarse(C) (ISO 8503-2)

Dust level level 2 maximum (ISO 8502-3)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	VY	Permax NO 1000HB	500 microns	82	85	24 hours	5 days
Intermediate	VY	Permax NO 1000HB	500 microns	82	85	24 hours	5 days
Finish coat							

4. Remarks

Only on thermally insulated piping or to prevent corrosion risk in interstices

Operating temperature resistance: less than 120°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 06 Ch**

Coating **Cadmium or Zinc-Plated Bichromated Surfaces or Xylan 1424**

Supplier **CHUGOKU**

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Bannoh 500	30 microns	63	85	10 hours	Unlimited
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Bannoh 500	30 microns	63	85	10 hours	Unlimited
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	Unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	Unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements

Appendix 3

System No. **P 07 Ch**

Coating **Jacket Zone 1**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galbon S-HB	60 microns	60	90	24 hours	unlimited
Tie-coat	EP	Bannoh 500	30 microns	63	85	10 hours	unlimited
Intermediate	EPGF	Permax NO 3300	375 microns	80	85	12 hours	7 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat							
Intermediate	EPGF	Permax NO 3300	425 microns	80	85	12 hours	7 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 07 Ch Second**

Coating **Jacket Zone 1**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPGF	Permax NO 3300	300 microns	80	85	12 hours	7 days
Intermediate	EPGF	Permax NO 3300	300 microns	80	85	12 hours	7 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPGF	Permax NO 3300	300 microns	80	85	12 hours	7 days
Intermediate	EPGF	Permax NO 3300	300 microns	80	85	12 hours	7 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 08 Ch**

Coating **Jacket Zone 2, Subsea equipment**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Permax NO 3300	200 microns	80	85	12 hours	7 days
Tie-coat							
Intermediate	EPGF	Permax NO 3300	200 microns	91	85	24 hours	3 months
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Permax NO 3300	200 microns	80	85	12 hours	7 days
Tie-coat							
Intermediate	EPGF	Permax NO 3300	200 microns	80	85	12 hours	7 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 09 Ch**

Coating **Jacket Zone 3**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galbon S-HB	60 microns	60	90	24 hours	unlimited
Tie-coat	EP	Bannoh 500	30 microns	63	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	200 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat							
Intermediate	EP	Bannoh 2000	250 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 09 Ch second**

Coating **Jacket Zone 3**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	200 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	200 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 10 Ch**

Coating **Surfaces Subject to High Temperatures**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPPH	Epicon T-800HS-GF	120 microns	75	85	16 hours	5 days
Tie-coat							
Intermediate	EPPH	Epicon T-800HS-GF	120 microns	75	85	16 hours	5 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPPH	Epicon T-800HS-GF	120 microns	75	85	16 hours	5 days
Tie-coat							
Intermediate	EPPH	Epicon T-800HS-GF	120 microns	75	85	16 hours	5 days
Finish coat							

4. Remarks

Polychromy possible up to 100°C (Unymarine HS)

Operating temperature resistance: less than 120°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 11 Ch**

Coating **Surfaces Subject to High Temperatures**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galbon S-HB	60 microns	60	90	24 hours	unlimited
Tie-coat	SI	Silicon HR Silver	20 microns	25	85	16 hours	unlimited
Intermediate	SI	Silicon HR Silver	20 microns	25	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	SI	Silicon HR Silver	20 microns	25	85	16 hours	unlimited
Intermediate	SI	Silicon HR Silver	20 microns	25	85	16 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 400°C
Specific guarantee requirements: 1 year

Appendix 3

System No. **P 12 Ch**

Coating **Insulated Surfaces**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Bannoh 4000	150 microns	80	85	10 hours	unlimited
Intermediate	EP	Bannoh 4000	150 microns	80	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Bannoh 4000	150 microns	80	85	10 hours	unlimited
Intermediate	EP	Bannoh 4000	150 microns	80	85	10 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 13 Ch**

Coating **Insulated Surfaces**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPPH	Epicon T-800HS-GF	100 microns	75	85	16 hours	5 days
Tie-coat							
Intermediate	EPPH	Epicon T-800HS-GF	100 microns	75	85	16 hours	5 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPPH	Epicon T-800HS-GF	100 microns	75	85	16 hours	5 days
Tie-coat							
Intermediate	EPPH	Epicon T-800HS-GF	100 microns	75	85	16 hours	5 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 200°C
Specific guarantee requirements: 1 year
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 14 Ch**

Coating **Machines**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat							
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat							
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat	PUR	Unymarine HS	50 microns	57	85	8 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 15 Ch**

Coating **Open Rooms/Workshops, Sub-Concrete Floors**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galbon S-HB	60 microns	60	90	24 hours	unlimited
Tie-coat	EP	Bannoh 500	30 microns	63	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 500	40 microns	51	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 15 Ch second**

Coating **Open Rooms/Workshops, Sub-Concrete Floors**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Epicon Zinc HB-2 SH	60 microns	58	85	16 hours	unlimited
Tie-coat	EP	Bannoh 2000	100 microns	80	85	10 hours	unlimited
Intermediate	EP	Bannoh 2000	150 microns	80	85	10 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: **5 years**
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 16 Ch**

Coating **Air Conditioned Rooms**

Supplier **CHUGOKU**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	ESI	Galbon S-HB	60 microns	60	90	-	-

3. Repair system

Grade of cleanliness

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Appendix 3

System No. **P 01 H**

Coating **Deck and Equipment**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	36 hours	unlimited
Tie-coat	EPM	Hempadur 1557	30 microns	54	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 1557	40 microns	54	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 01 H second**

Coating **Deck and Equipment**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat	EPM	Hempadur 4588	100 microns	80	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	100 microns	80	85	6 hours	Unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	Unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat	EPM	Hempadur 4588	100 microns	80	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	100 microns	80	85	6 hours	Unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	Unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 02 H**

Coating **Floors**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	6 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	30 microns	54	85	6 hours	Unlimited
Intermediate	EPM	Hempadur multi-strengh 4554	250 microns	85	85	6 hours	30 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	40 microns	54	85	6 hours	Unlimited
Intermediate	EPM	Hempadur multi-strengh 4554	250 microns	85	85	6 hours	30 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 02 H second**

Coating **Floors**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat	EPM	Hempadur 4588	100 microns	80	85	6 hours	Unlimited
Intermediate	EPM	Hempadur multi-strengh 4554	250 microns	85	85	6 hours	30 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat	EPM	Hempadur 4588	100 microns	80	85	6 hours	Unlimited
Intermediate	EPM	Hempadur multi-strengh 4554	250 microns	85	85	6 hours	30 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 03 H**

Coating **Helideck**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	6 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	30 microns	54	85	6 hours	Unlimited
Intermediate	EPGF	Hempadur multistrength GF 3587	500 microns	87	85	4 hours	7 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat							
Intermediate	EPGF	Hempadur multistrength GF 3587	540 microns	87	85	4 hours	7 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 03 H second**

Coating **Helideck**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat	EPM	Hempadur 4588	100 microns	80	85	6 hours	Unlimited
Intermediate	EPGF	Hempadur multistrength GF 3587	500 microns	87	85	4 hours	7 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat	EPM	Hempadur 4588	100 microns	80	85	6 hours	Unlimited
Intermediate	EPGF	Hempadur multistrength GF 3587	500 microns	87	85	4 hours	7 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 04 H**

Coating **Fire-Proofed Surfaces; Concrete type PFP.**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	6 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	30 microns	54	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	Unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	40 microns	54	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	Unlimited
Finish coat							

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 04 H 2nd**

Coating **Fire-Proofed Surfaces; Intumescent epoxy PFP**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	6 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	30 microns	54	85	6 hours	Unlimited
Intermediate							
Finish coat (above PFP)	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	Unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	40 microns	54	85	6 hours	Unlimited
Intermediate							
Finish coat (above PFP)	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	Unlimited

4. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 05 H**

Coating **Galvanized Surfaces**

Supplier **HEMPEL**

1. Surface preparation

Sweep blasting with fine abrasives

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPM	Hempadur 1555	30 microns	55	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	Unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	Unlimited

3. Repair system

Sweep blasting with fine abrasives

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPM	Hempadur 1555	30 microns	55	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	Unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	Unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 MPa (mechanical tester)

Appendix 3

System No. **P 05 H second**

Coating **Stainless steel as 316L, 904, duplex…**

Supplier **HEMPEL**

1. Surface preparation

Roughness Grit - coarse(C) (ISO 8503-2)

Dust level level 2 maximum (ISO 8502-3)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	VY	Hempel's Vinyl ester GF 3591	500 microns	90	80	5 hours	2 days
Intermediate	VY	Hempel's Vinyl ester GF 3591	500 microns	90	80	5 hours	2 days
Finish coat							

3. Repair system

Roughness Grit - coarse(C) (ISO 8503-2)

Dust level level 2 maximum (ISO 8502-3)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	VY	Hempel's Vinyl ester GF 3591	500 microns	90	80	5 hours	2 days
Intermediate	VY	Hempel's Vinyl ester GF 3591	500 microns	90	80	5 hours	2 days
Finish coat							

4. Remarks

Only on thermally insulated piping or to prevent corrosion risk in interstices.

Operating temperature resistance: less than 90°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 06 H**

Coating **Cadmium or Zinc-Plated Bichromated Surfaces or Xylan 1424**

Supplier **HEMPEL**

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPM	Hempadur 1555	30 microns	55	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	Unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	Unlimited

3. Repair system

Degreasing

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPM	Hempadur 1555	30 microns	55	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	Unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	Unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements

Appendix 3

System No. **P 07 H**

Coating **Jacket Zone 1**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	6 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	30 microns	54	85	6 hours	Unlimited
Intermediate	EPM	Hempadur multistrength 4554	375 microns	85	85	16 hours	5 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat							
Intermediate	EPM	Hempadur multistrength 4554	425 microns	85	85	16 hours	5 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 07 H Second**

Coating **Jacket Zone 1**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat							
Intermediate	EPM	Hempadur multi-strengh 3587	300 microns	87	85	6 hours	30 days
Finish coat	EPM	Hempadur multi-strengh 3587	300 microns	87	85	6 hours	30 days

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat							
Intermediate	EPM	Hempadur multi-strengh 3587	300 microns	87	85	6 hours	30 days
Finish coat	EPM	Hempadur multi-strengh 3587	300 microns	87	85	6 hours	30 days

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 MPa (mechanical tester)

Appendix 3

System No. **P 08 H**

Coating **Jacket Zone 2, Subsea equipment**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Hempadur multistrength GF 3587	200 microns	87	85	4 hours	7 days
Tie-coat							
Intermediate	EPGF	Hempadur multistrength GF 3587	200 microns	87	85	4 hours	7 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Hempadur multistrength GF 3587	200 microns	87	85	4 hours	7 days
Tie-coat							
Intermediate	EPGF	Hempadur multistrength GF 3587	200 microns	87	85	4 hours	7 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 09 H**

Coating **Jacket Zone 3**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	36 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	30 microns	54	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	200microns	80	85	6 hours	Unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	Unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat							
Intermediate	EPM	Hempadur 4588	250 microns	80	85	6 hours	Unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	50	85	16 hours	Unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 09 H second**

Coating **Jacket Zone 3**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4588	100 microns	80	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	200microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4588	100 microns	80	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	200 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane HS 5561	50 microns	65	85	16 hours	unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 10 H**

Coating **Surfaces Subject to High Temperatures**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPM	Hempadur 4588	120 microns	80	85	6 hours	unlimited
Tie-coat							
Intermediate	EPM	Hempadur 4588	120 microns	80	85	6 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPM	Hempadur 4588	120 microns	80	85	6 hours	unlimited
Tie-coat							
Intermediate	EPM	Hempadur 4588	120 microns	80	85	6 hours	unlimited
Finish coat							

4. Remarks

Polychromy possible up to 100°C

Operating temperature resistance: less than 120°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 11 H**

Coating **Surfaces Subject to High Temperatures**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	95	24 hours	1 year
Tie-coat							
Intermediate	SI	Silicone ALU 5691	25 microns	31	85	24 hours	unlimited
Finish coat	SI	Silicone ALU 5691	25 microns	31	85	24 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	SI	Hempel's silicone 1690	40 microns	53	85	9 hours	unlimited
Tie-coat							
Intermediate	SI	Silicone ALU 5691	25 microns	31	85	24 hours	unlimited
Finish coat	SI	Silicone ALU 5691	25 microns	31	85	24 hours	unlimited

4. Remarks

Operating temperature resistance: less than 400°C
Specific guarantee requirements: 1 year

Appendix 3

System No. **P 12 H**

Coating **Insulated Surfaces**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPPH	Hempadur 8567	150 microns	68	85	12 hours	21 days
Tie-coat							
Intermediate	EPPH	Hempadur 8567	150 microns	68	85	12 hours	21 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPPH	Hempadur 8567	150 microns	68	85	12 hours	21 days
Tie-coat							
Intermediate	EPPH	Hempadur 8567	150 microns	68	85	12 hours	21 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 13 H**

Coating **Insulated Surfaces**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPPH	Hempadur 8567	100 microns	68	85	12 hours	21 days
Intermediate	EPPH	Hempadur 8567	100 microns	68	85	12 hours	21 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPPH	Hempadur 8567	100 microns	68	85	12 hours	21 days
Intermediate	EPPH	Hempadur 8567	100 microns	68	85	12 hours	21 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 200°C
Specific guarantee requirements: 1 year
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 14 H**

Coating **Machines**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	unlimited
Tie-coat							
Intermediate	EPM	Hempadur 4588 MIO	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane HS 5561	40 microns	65	85	16 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	unlimited
Tie-coat							
Intermediate	EPM	Hempadur 4588 MIO	150 microns	80	85	6 hours	unlimited
Finish coat	PUR	Hempathane HS 5561	40 microns	65	85	16 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 15 H**

Coating **Open Rooms/Workshops, Sub-Concrete Floors**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Galvosil 1570	60 microns	64	90	36 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	30 microns	54	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	Unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	Unlimited
Tie-coat	EPM	Hempadur 1557	40 microns	54	85	6 hours	Unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	Unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 15 H second**

Coating **Open Rooms/Workshops, Sub-Concrete Floors**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4588	100 microns	80	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Hempadur zinc 1736	60 microns	65	85	6 hours	unlimited
Tie-coat	EPM	Hempadur 4588	100 microns	80	85	6 hours	unlimited
Intermediate	EPM	Hempadur 4588	150 microns	80	85	6 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 16 H**

Coating **Air Conditioned Rooms**

Supplier **HEMPEL**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	ESI	Galvosil 1570	60 microns	64	90	-	-

3. Repair system

Grade of cleanliness

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Appendix 3

System No. **P 01 I**

Coating **Deck and Equipment**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	40 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 01 I second**

Coating **Deck and Equipment**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 475 HS	100 microns	80	85	16 hours	unlimited
Intermediate	EP	Intergard 475 HS	100 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 475 HS	100 microns	80	85	16 hours	unlimited
Intermediate	EP	Intergard 475 HS	100 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 02 I**

Coating **Floors**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EPGF	Interzone 505	250 microns	90	85	6 hours	4 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	40 microns	47	85	24 hours	unlimited
Intermediate	EPGF	Interzone 505	250 microns	90	85	6 hours	4 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 02 I second**

Coating **Floors**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 475 HS	100 microns	80	85	16 hours	unlimited
Intermediate	EPGF	Interzone 505	250 microns	90	85	6 hours	4 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 475 HS	100 microns	80	85	16 hours	unlimited
Intermediate	EPGF	Interzone 505	250 microns	90	85	6 hours	4 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 03 I**

Coating **Helideck**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Interzone 505	300 microns	90	85	6 hours	4 days
Tie-coat							
Intermediate	EPGF	Interzone 505	300 microns	90	85	6 hours	4 days
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Interzone 505	300 microns	90	85	6 hours	4 days
Tie-coat							
Intermediate	EPGF	Interzone 505	300 microns	90	85	6 hours	4 days
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Incorporate GMA 132 aggregates for non-slip system.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 MPa (mechanical tester)

Appendix 3

System No. **P 04 I**

Coating **Fire-Proofed Surfaces; Concrete type PFP**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	40 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat							

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 04 I 2nd**

Coating **Fire-Proofed Surfaces; Intumescent epoxy PFP**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EP						
Finish coat (above PFP)	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 05 I**

Coating **Galvanized Surfaces**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Sweep blasting with fine abrasives

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Sweep blasting with fine abrasives

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 MPa (mechanical tester)

Appendix 3

System No. **P 05 I second**

Coating **Stainless steel as 316L, 904, duplex…**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Roughness Grit - coarse(C) (ISO 8503-2)

Dust level level 2 maximum (ISO 8502-3)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	VY	Interline 955	500 microns	85	80	5 hours	2 days
Intermediate	VY	Interline 955	500 microns	85	80	5 hours	2 days
Finish coat							

3. Repair system

Roughness Grit - coarse(C) (ISO 8503-2)

Dust level level 2 maximum (ISO 8502-3)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	VY	Interline 955	500 microns	85	80	5 hours	2 days
Intermediate	VY	Interline 955	500 microns	85	80	5 hours	2 days
Finish coat							

4. Remarks

Only on thermally insulated piping or to prevent corrosion risk in interstices.

Operating temperature resistance: less than 90°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 06 I**

Coating **Cadmium or Zinc-Plated Bichromated Surfaces or Xylan 1424**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements

Appendix 3

System No. **P 07 I**

Coating **Jacket Zone 1**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	Unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	Unlimited
Intermediate	EPGF	Interzone 505	375 microns	90	85	6 hours	4 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	Unlimited
Tie-coat							
Intermediate	EPGF	Interzone 505	425 microns	90	85	6 hours	4 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 07 I Second**

Coating **Jacket Zone 1**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Interzone 505	300 microns	90	85	6 hours	4 days
Tie-coat							
Intermediate	EPGF	Interzone 505	300 microns	90	85	6 hours	4 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Interzone 505	300 microns	90	85	6 hours	4 days
Tie-coat							
Intermediate	EPGF	Interzone 505	300 microns	90	85	6 hours	4 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 MPa (mechanical tester)

Appendix 3

System No. **P 08 I**

Coating **Jacket Zone 2, Subsea equipment**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Interzone 505	200 microns	90	85	6 hours	4 days
Tie-coat							
Intermediate	EPGF	Interzone 505	200 microns	90	85	6 hours	4 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Interzone 505	200 microns	90	85	6 hours	4 days
Tie-coat							
Intermediate	EPGF	Interzone 505	200 microns	90	85	6 hours	4 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 09 I**

Coating **Jacket Zone 3**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	Unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	Unlimited
Intermediate	EPGF	Interzone 505	200 microns	90	85	6 hours	4 days
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	Unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	Unlimited
Tie-coat							
Intermediate	EPGF	Interzone 505	250 microns	90	85	6 hours	4 days
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	Unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 09 I second**

Coating **Jacket Zone 3**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	Unlimited
Tie-coat	EP	Intergard 475 HS	100 microns	80	85	16 hours	Unlimited
Intermediate	EPGF	Interzone 505	200 microns	90	85	6 hours	4 days
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	Unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	Unlimited
Tie-coat	EP	Intergard 475 HS	100 microns	80	85	16 hours	Unlimited
Intermediate	EPGF	Interzone 505	250 microns	90	85	6 hours	4 days
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	Unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 10 I**

Coating **Surfaces Subject to High Temperatures**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPM	Interseal 670 HS	120 microns	82	85	8 hours	4 weeks
Tie-coat							
Intermediate	EPM	Interseal 670 HS	120 microns	82	85	8 hours	4 weeks
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPM	Interseal 670 HS	120 microns	82	85	8 hours	4 weeks
Tie-coat							
Intermediate	EPM	Interseal 670 HS	120 microns	82	85	8 hours	4 weeks
Finish coat							

4. Remarks

Polychromy possible up to 100°C (Interthane 990)

Operating temperature resistance: less than 120°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 11 I**

Coating **Surfaces Subject to High Temperatures**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	SI	Intertherm 50	20 microns	45	85	12 hours	unlimited
Intermediate	SI	Intertherm 50	20 microns	45	85	12 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	SI	Intertherm 50	20 microns	45	85	12 hours	unlimited
Intermediate	SI	Intertherm 50	20 microns	45	85	12 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 400°C
Specific guarantee requirements: 1 year

Appendix 3

System No. **P 12 I**

Coating **Insulated Surfaces**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPM	Interplus 256 aluminium grey	150 microns	83	85	18 hours	unlimited
Tie-coat							
Intermediate	EPM	Interplus 256 aluminium grey	150 microns	83	85	18 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPM	Interplus 256 aluminium grey	150 microns	83	85	18 hours	unlimited
Tie-coat							
Intermediate	EPM	Interplus 256 aluminium grey	150 microns	83	85	18 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 13 I**

Coating **Insulated Surfaces**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPN	Intertherm 228 HS	100 microns	70	85	16 hours	3 days
Tie-coat							
Intermediate	EPN	Intertherm 228 HS	100 microns	70	85	16 hours	3 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPN	Intertherm 228 HS	100 microns	70	85	16 hours	3 days
Tie-coat							
Intermediate	EPN	Intertherm 228 HS	100 microns	70	85	16 hours	3 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 200°C
Specific guarantee requirements: 1 year
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 14 I**

Coating **Machines**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat							
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat							
Intermediate	EP	Intergard 475 HS	150 microns	80	85	16 hours	unlimited
Finish coat	PUR	Interthane 990	50 microns	57	85	10 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 15 I**

Coating **Open Rooms/Workshops, Sub-Concrete Floors**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Interzinc 22	60 microns	63	90	4 hours	unlimited
Tie-coat	EP	Intergard 269	30 microns	47	85	24 hours	unlimited
Intermediate	EPM	Interseal 670 HS	150 microns	82	85	8 hours	4 weeks
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 269	40 microns	47	85	24 hours	unlimited
Intermediate	EPM	Interseal 670 HS	150 microns	82	85	8 hours	4 weeks
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 15 I second**

Coating **Open Rooms/Workshops, Sub-Concrete Floors**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 475 HS	100 microns	80	85	16 hours	unlimited
Intermediate	EPM	Interseal 670 HS	150 microns	82	85	8 hours	4 weeks
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Interzinc 52	60 microns	59	85	4 hours	unlimited
Tie-coat	EP	Intergard 475 HS	100 microns	80	85	16 hours	unlimited
Intermediate	EPM	Interseal 670 HS	150 microns	82	85	8 hours	4 weeks
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 16 I**

Coating **Air Conditioned Rooms**

Supplier **INTERNATIONAL COATINGS**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	ESI	Interzinc 22	60 microns	63	90	-	-

3. Repair system

Grade of cleanliness

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Appendix 3

System No. **P 01 J**

Coating **Deck and Equipment**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Resist 86	60 microns	67	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat	EP	Penguard Tie coat 100	40 microns	42	85	6 hours	unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 01 J second**

Coating **Deck and Equipment**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat	EP	Jotacote universal	100 microns	72	85	4 hours	unlimited
Intermediate	EP	Jotacote universal	100 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat	EP	Jotacote universal	100 microns	72	85	4 hours	unlimited
Intermediate	EP	Jotacote universal	100 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 02 J**

Coating **Floors**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Resist 86	60 microns	67	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	40 microns	42	85	6 hours	unlimited
Intermediate	EPGF	Jotamastic 87 GF	200 microns	80	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat							
Intermediate	EPGF	Jotamastic 87 GF	250 microns	80	85	10 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 02 J second**

Coating **Floors**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat	EP	Jotacote universal	100 microns	72	85	4 hours	unlimited
Intermediate	EPGF	Jotamastic 87 GF	250 microns	80	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat	EP	Jotacote universal	100 microns	72	85	4 hours	unlimited
Intermediate	EPGF	Jotamastic 87 GF	250 microns	80	85	10 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 03 J**

Coating **Helideck**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Ra 13/15 microns

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Marathon	300 microns	80	85	12 hours	3 days
Tie-coat							
Intermediate	EPGF	Marathon	300 microns	80	85	12 hours	3 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Marathon	300 microns	80	85	12 hours	3 days
Tie-coat							
Intermediate	EPGF	Marathon	300 microns	80	85	12 hours	3 days
Finish coat							

4. Remarks

Dust with Jotun antiskid Medium aggregates on the second coat of Marathon while still wet (not polymerized).

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 MPa (mechanical tester)

Appendix 3

System No. **P 04 J**

Coating **Fire-Proofed Surfaces; Concrete type PFP**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Resist 86	60 microns	67	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate Finish coat	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat	EP	Penguard Tie coat 100	40 microns	42	85	6 hours	unlimited
Intermediate Finish coat	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 04 J 2nd**

Coating **Fire-Proofed Surfaces; Intumescent epoxy PFP**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Resist 86	60 microns	67	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate							
Finish coat (above PFP)	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat	EP	Penguard Tie coat 100	40 microns	42	85	6 hours	unlimited
Intermediate							
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

4. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 05 J**

Coating **Galvanized Surfaces**

Supplier **JOTUN**

1. Surface preparation

Sweep blasting with fine abrasives

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

3. Repair system

Sweep blasting with fine abrasives

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 MPa (mechanical tester)

Appendix 3

System No. **P 05 J second**

Coating **Stainless steel as 316L, 904, duplex…**

Supplier **JOTUN**

1. Surface preparation

Roughness Grit - coarse(C) (ISO 8503-2)

Dust level level 2 maximum (ISO 8502-3)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	VY	Chemflake special	500 microns	96	80	4 hours	24 hours
Intermediate	VY	Chemflake special	500 microns	96	80	4 hours	24 hours
Finish coat							

3. Repair system

Roughness Grit - coarse(C) (ISO 8503-2)

Dust level level 2 maximum (ISO 8502-3)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	VY	Chemflake special	500 microns	96	80	4 hours	24 hours
Intermediate	VY	Chemflake special	500 microns	96	80	4 hours	24 hours
Finish coat							

4. Remarks

Only on thermally insulated piping or to prevent corrosion risk in interstices.

Operating temperature resistance: less than 120°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 06 J**

Coating **Cadmium or Zinc-Plated Bichromated Surfaces or Xylan 1424**

Supplier **JOTUN**

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements

Appendix 3

System No. **P 07 J**

Coating **Jacket Zone 1**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Resist 86	60 microns	67	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EPGF	Marathon	375 microns	80	85	12 hours	3 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 min.	unlimited
Tie-coat							
Intermediate	EPGF	Marathon	425 microns	80	85	12 hours	3 days
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 07 J Second**

Coating **Jacket Zone 1**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPGF	Jotamastic 87 GF	300 microns	80	85	10 hours	unlimited
Intermediate	EPGF	Jotamastic 87 GF	300 microns	80	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPGF	Jotamastic 87 GF	300 microns	80	85	10 hours	unlimited
Intermediate	EPGF	Jotamastic 87 GF	300 microns	80	85	10 hours	unlimited
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 MPa (mechanical tester)

Appendix 3

System No. **P 08 J**

Coating **Jacket Zone 2, Subsea equipment**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Jotamastic 87 GF	200 microns	80	85	10 hours	unlimited
Tie-coat							
Intermediate	EPGF	Jotamastic 87 GF	200 microns	80	85	10 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	Jotamastic 87 GF	200 microns	80	85	10 hours	unlimited
Tie-coat							
Intermediate	EPGF	Jotamastic 87 GF	200 microns	80	85	10 hours	unlimited
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 09 J**

Coating **Jacket Zone 3**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Resist 86	60 microns	67	95	12 hours	unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	unlimited
Intermediate	EP	Jotacote universal	200 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat							
Intermediate	EP	Jotacote universal	300 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	40 microns	63	85	7 hours	unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 09 J second**

Coating **Jacket Zone 3**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat	EP	Jotacote universal	100 microns	72	85	4 hours	unlimited
Intermediate	EP	Jotacote universal	200 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat	EP	Jotacote universal	100 microns	72	85	4 hours	unlimited
Intermediate	EP	Jotacote universal	200 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	50 microns	63	85	7 hours	unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 10 J**

Coating **Surfaces Subject to High Temperatures**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EP	Jotacote universal	120 microns	72	85	4 hours	unlimited
Tie-coat							
Intermediate	EP	Jotacote universal	120 microns	72	85	4 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EP	Jotacote universal	120 microns	72	85	4 hours	unlimited
Tie-coat							
Intermediate	EP	Jotacote universal	120 microns	72	85	4 hours	unlimited
Finish coat							

4. Remarks

Polychromy possible up to 100°C (Hardtop XP)

Operating temperature resistance: less than 120°C
Specific guarantee requirements: 3 years only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 11 J**

Coating **Surfaces Subject to High Temperatures**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Resist 86	60 microns	67	95	12 hours	Unlimited
Tie-coat	SI	Solvalitt	20 microns	43	85	4 hours	Unlimited
Intermediate	SI	Solvalitt	20 microns	43	85	4 hours	Unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	SI	Solvalitt	20 microns	43	85	4 hours	Unlimited
Intermediate	SI	Solvalitt	20 microns	43	85	4 hours	Unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 400°C
Specific guarantee requirements: 1 year only

Appendix 3

System No. **P 12 J**

Coating **Insulated Surfaces**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 13 J**

Coating **Insulated Surfaces**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	EPPH	Tankgard storage	200 microns	63	85	10 hours	30 days

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	EPPH	Tankgard storage	200 microns	63	85	10 hours	30 days

4. Remarks

Operating temperature resistance: less than 200°C
Specific guarantee requirements: 1 year only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 14 J**

Coating **Machines**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat							
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	40 microns	63	85	7 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	unlimited
Tie-coat							
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	unlimited
Finish coat	PUR	Hardtop XP	40 microns	63	85	7 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 15 J**

Coating **Open Rooms**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Resist 86	60 microns	67	95	12 hours	Unlimited
Tie-coat	EP	Penguard Tie coat 100	30 microns	42	85	6 hours	Unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	Unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	Unlimited
Tie-coat	EP	Penguard Tie coat 100	40 microns	42	85	6 hours	Unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	Unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 15 J second**

Coating **Open Rooms**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	Unlimited
Tie-coat	EP	Jotacote universal	100 microns	72	85	4 hours	Unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	Unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Barrier 80	60 microns	61	85	90 minutes	Unlimited
Tie-coat	EP	Jotacote universal	100 microns	72	85	4 hours	Unlimited
Intermediate	EP	Jotacote universal	150 microns	72	85	4 hours	Unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 16 J**

Coating **Air Conditioned Rooms**

Supplier **JOTUN**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	ESI	Resist 86	60 microns	67	95	-	-

3. Repair system

Grade of cleanliness

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Appendix 3

System No. **P 01 P**

Coating **Deck and Equipment**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Sigmazinc 158	60 microns	65	95	12 hours	Unlimited
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate	EP	SigmaCover 410	150 microns	80	85	3 hours	unlimited
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	Unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate	EP	SigmaCover 410	150 microns	80	85	3 hours	unlimited
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 01 P second**

Coating **Deck and Equipment**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Intermediate	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Intermediate	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 02 P**

Coating **Floors**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Sigmazinc 158	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate	EPGF	SigmaShield 400	250 microns	91	85	24 hours	3 months
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate	EPGF	SigmaShield 400	250 microns	91	85	24 hours	3 months
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 02 P second**

Coating **Floors**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Intermediate	EPGF	SigmaShield 400	250 microns	91	85	24 hours	3 months
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Intermediate	EPGF	SigmaShield 400	250 microns	91	85	24 hours	3 months
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 03 P**

Coating **Helideck**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Tie-coat	EP	SigmaCover 240	300 microns	87	85	5 hours	6 months
Intermediate	EP	SigmaCover 240	300 microns	87	85	5 hours	3 months
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Tie-coat	EP	SigmaCover 240	300 microns	87	85	5 hours	6 months
Intermediate	EP	SigmaCover 240	300 microns	87	85	5 hours	3 months
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

4. Remarks

- Primer coat optional application to protect surface preparation if necessary.
- Non-slip granular coating.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 MPa (mechanical tester)

Appendix 3

System No. **P 04 P**

Coating **Fire-Proofed Surfaces; Concrete type PFP**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Sigmazinc 158	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate	EP	SigmaCover 410	150 microns	80	85	3 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate	EP	SigmaCover 410	150 microns	80	85	3 hours	unlimited
Finish coat							

4. Remarks

Applicable to concrete type PFP.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 04 P 2nd**

Coating **Fire-Proofed Surfaces; Intumescent epoxy PFP**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate							
Finish coat (above PFP)	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate							
Finish coat (above PFP)	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

4. Remarks

When using intumescent epoxy, primer coat shall be approved by passive fire protection supplier.

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 10 years for overall paint + PFP system
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 05 P**

Coating **Galvanized Surfaces**

Supplier **PPG**

1. Surface preparation

Sweep blasting with fine abrasives

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Sigmaprime 700	100 microns	70	85	4 hours	6 months
Intermediate	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

3. Repair system

Sweep blasting with fine abrasives

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	Sigmaprime 700	100 microns	70	85	4 hours	6 months
Intermediate	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 2 MPa (mechanical tester)

Appendix 3

System No. **P 06 P**

Coating **Cadmium or Zinc-Plated Bichromated Surfaces or Xylan 1424**

Supplier **PPG**

1. Surface preparation

Degreasing

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	SigmaCover 280	30 microns	57	85	8 hours	6 months
Intermediate	EP	SigmaCover 410	150 microns	80	85	8 hours	6 months
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

3. Repair system

Degreasing

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EP	SigmaCover 280	30 microns	57	85	8 hours	6 months
Intermediate	EP	SigmaCover 410	150 microns	80	85	8 hours	6 months
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years - Only cracking blistering, and flaking requirements

Appendix 3

System No. **P 07 P**

Coating **Jacket Zone 1**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Sigmazinc 158	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate	EPGF	SigmaShield 400	375 microns	91	85	24 hours	3 months
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat							
Intermediate	EPGF	SigmaShield 400	425 microns	91	85	24 hours	3 months
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 07 P Second**

Coating **Jacket Zone 1**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPGF	SigmaShield 400	300 microns	91	85	24 hours	3 months
Intermediate	EPGF	SigmaShield 400	300 microns	91	85	24 hours	3 months
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPGF	SigmaShield 400	300 microns	91	85	24 hours	3 months
Intermediate	EPGF	SigmaShield 400	300 microns	91	85	24 hours	3 months
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 6 MPa (mechanical tester)

Appendix 3

System No. **P 08 P**

Coating **Jacket Zone 2, Subsea equipment**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	SigmaShield 400	200 microns	91	85	24 hours	3 months
Tie-coat							
Intermediate	EPGF	SigmaShield 400	200 microns	91	85	24 hours	3 months
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPGF	SigmaShield 400	200 microns	91	85	24 hours	3 months
Tie-coat							
Intermediate	EPGF	SigmaShield 400	200 microns	91	85	24 hours	3 months
Finish coat							

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years, cracking, blistering & flaking requirements only
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 09 P**

Coating **Jacket Zone 3**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Sigmazinc 158	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate	EPGF	SigmaShield 400	200 microns	91	85	24 hours	3 months
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat							
Intermediate	EPGF	SigmaShield 400	250 microns	91	85	24 hours	3 months
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 09 P second**

Coating **Jacket Zone 3**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Intermediate	EP	SigmaCover 410	200 microns	80	85	3 hours	unlimited
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Intermediate	EP	SigmaCover 410	200 microns	80	85	3 hours	unlimited
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

4. Remarks

Zone 1 Splash zone

Zone 2 Immersed zone

Zone 3 Emerged zone

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 5 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 10 P**

Coating **Surfaces Subject to High Temperatures**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPM	SigmaCover 435	120 microns	65	85	3 hours	unlimited
Tie-coat							
Intermediate	EPM	SigmaCover 435	120 microns	65	85	3 hours	Unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPM	SigmaCover 435	120 microns	65	85	3 hours	Unlimited
Tie-coat							
Intermediate	EPM	SigmaCover 435	120 microns	65	85	3 hours	unlimited
Finish coat							

4. Remarks

Polychromy possible up to 100°C (Sigmadur 550)

Operating temperature resistance: less than 120°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 11 P**

Coating **Surfaces Subject to High Temperatures**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Sigmazinc 158	60 microns	65	95	24 hours	unlimited
Tie-coat	SI	Sigmatherm 540	25 microns	45	85	16 hours	unlimited
Intermediate	SI	Sigmatherm 540	25 microns	45	85	16 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	SI	Sigmatherm 540	25 microns	45	85	16 hours	unlimited
Intermediate	SI	Sigmatherm 540	25 microns	45	85	16 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 400°C
Specific guarantee requirements: 1 year

Appendix 3

System No. **P 12 P**

Coating **Insulated Surfaces**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPM	SigmaCover 435	150 microns	65	85	3 hours	unlimited
Tie-coat							
Intermediate	EPM	SigmaCover 435	150 microns	65	85	3 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPM	SigmaCover 435	150 microns	65	85	3 hours	unlimited
Tie-coat							
Intermediate	EPM	SigmaCover 435	150 microns	65	85	3 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 90°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 13 P**

Coating **Insulated Surfaces**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPPH	Sigmatherm 230	100 microns	68	85	8 hours	14 days
Intermediate	EPPH	Sigmatherm 230	100 microns	68	85	8 hours	14 days
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer							
Tie-coat	EPPH	Sigmatherm 230	100 microns	68	85	8 hours	14 days
Intermediate	EPPH	Sigmatherm 230	100 microns	68	85	8 hours	14 days
Finish coat							

4. Remarks

Operating temperature resistance: less than 200°C
Specific guarantee requirements: 1 year
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 14 P**

Coating **Machines**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat							
Intermediate	EP	SigmaCover 410	150 microns	80	85	3 hours	unlimited
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat							
Intermediate	EP	SigmaCover 410	150 microns	80	85	3 hours	unlimited
Finish coat	PUR	Sigmadur 550	50 microns	56	85	6 hours	unlimited

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 15 P**

Coating **Open Rooms/Workshops, Sub-Concrete Floors**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	ESI	Sigmazinc 158	60 microns	65	95	24 hours	unlimited
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate	EP	SigmaCover 410	150 microns	80	85	3 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 522	40 microns	60	85	8 hours	6 months
Intermediate	EP	SigmaCover 410	150 microns	80	85	3 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 3 MPa (mechanical tester)

Appendix 3

System No. **P 15 P second**

Coating **Open Rooms/Workshops, Sub-Concrete Floors**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Intermediate	EP	SigmaCover 410	150 microns	80	85	3 hours	unlimited
Finish coat							

3. Repair system

Grade of cleanliness Sa 2 ½ (ISO 8501-1)

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer	EPRZ	Sigmazinc 109 HS	60 microns	66	85	8 hours	3 months
Tie-coat	EP	SigmaCover 410	100 microns	80	85	3 hours	unlimited
Intermediate	EP	SigmaCover 410	150 microns	80	85	3 hours	unlimited
Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C
Specific guarantee requirements: 3 years
Qualification / acceptance requirements: Minimum mechanical pull-off test value of 4 MPa (mechanical tester)

Appendix 3

System No. **P 16 P**

Coating **Air Conditioned Rooms**

Supplier **PPG**

1. Surface preparation

Grade of cleanliness Sa 3 (ISO 8501-1)

Roughness Grit-medium (G) (ISO 8503-2)

2. Coating system

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat	ESI	Sigmazinc 158	60 microns	65	95	-	-

3. Repair system

Grade of cleanliness

Constitution	Binder	Supplier's reference	Nominal thickness	Volume of solids (%)	RH max. (%)	Interval between coats @ 20°C	
						min.	max.
Primer Tie-coat Intermediate Finish coat							

4. Remarks

Operating temperature resistance: less than 80°C

Appendix 4 Colour coding

1. Colours

Basic colours are, from RAL 840 HR:

- Yellow - RAL 1003
- Black - RAL 9005
- Red - RAL 3001
- Aluminium grey for high temperature.

2. Vessels and Piping identification

This appendix concerns only painted carbon steel marking.

Using stickers on stainless steel is strictly forbidden. In case of specific stainless steel identification procedure shall be submitted to TEC/COR for approval.

2.1 Subject

This part of appendix defines the high durability characteristics of the identification stickers on painted carbon steel vessels and piping of offshore platforms.

2.2 Sticker definitions

2.2.1 Supports concerned

- Carbon steel painted according to the General Specification
- Stainless steel piping
- Monolar - Hypalon family on top sides insulated network.

2.2.2 Service temperature

- -29°C
- +200°C

2.2.3 Stickers sizes

Formats are determined according to pipe diameter.

Piping diameters	Sticker sizes
2” to 4”	300 x 150 mm
6” to 12”	450 x 225 mm
> 14”	600 x 300 mm

2.2.4 Adhesive material

Considering all technical constraint and durability required the selected material is **Scotchmark 7980** or equivalent.

This consists of white polyester film glued with high resistant acrylic adhesive.

Construction (nominal thicknesses of components):

- Polyester: 64 micrometers
- Adhesive: 25 micrometers
- Protection: 170 micrometers.

The support is specifically designed to obtain maximum adhesion of inks to guarantee high durability and resistance.

2.2.5. Printing

The printing is specially adapted to provide high durability.

Two colours are generally used per sticker coated with an anti UV varnish.

The colours are defined according to Pantone or RAL standards.

2.3 Application / vessels and piping identification

The stickers are delivered already cut with separation at the back to facilitate the positioning.

The application is carried out by removing the finest protection in order to position the sticker correctly on support before gluing the final part.

The density of sticker application should be of 3 m and a maximum of 20D intervals and on either side of each valve, elbow, fitting, wall penetration and any other places where identification of fluid is necessary.

2.4 Storage condition

To preserve correctly they should be stored flat in a dry place with moderate temperature (< 40°C).

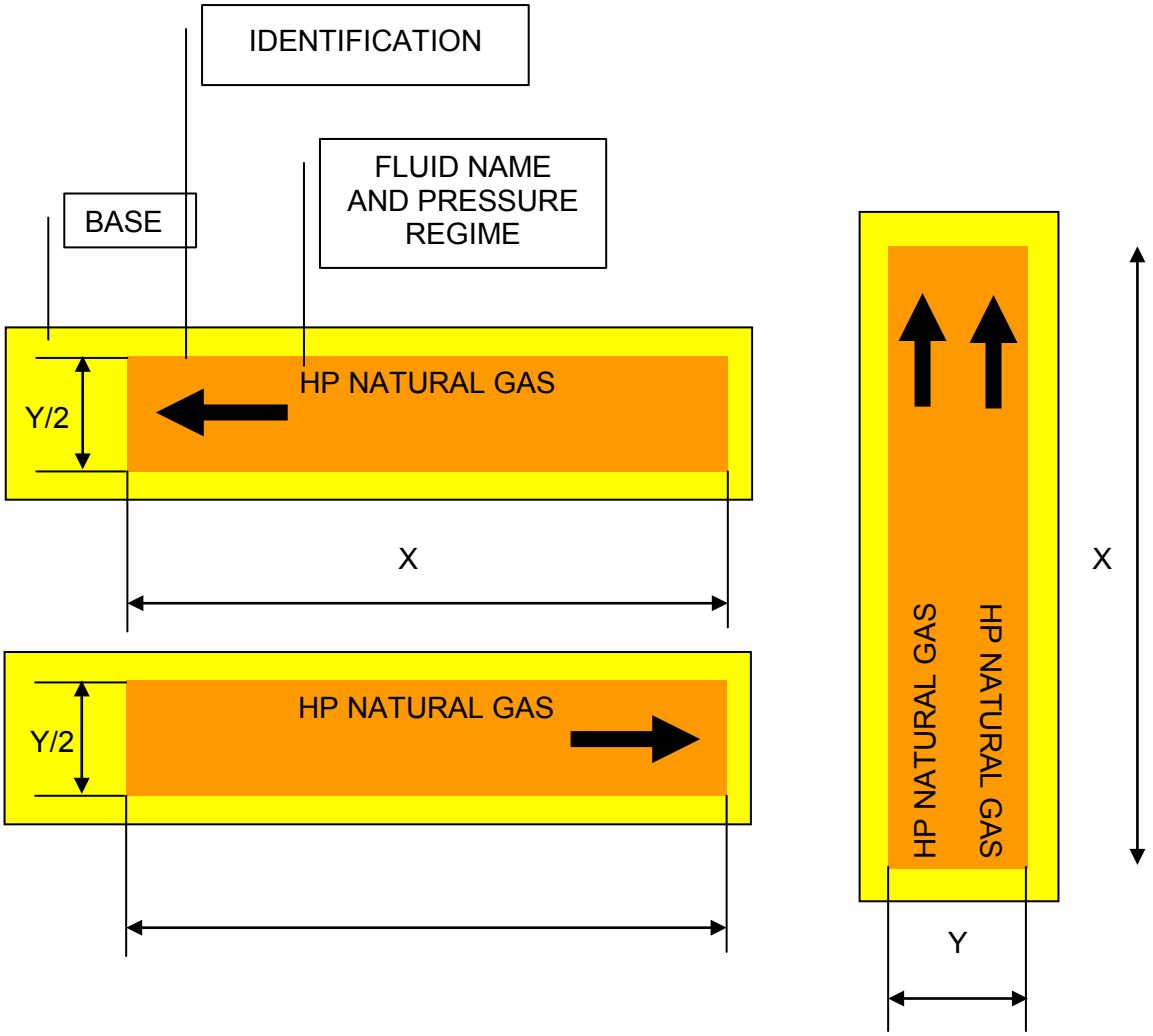
2.5 Checks

Stickers are applied without bubbles with full surface adhesion.

Peeling test conforms to DIN 500014. Minimum adhesion value is 5 MPa.

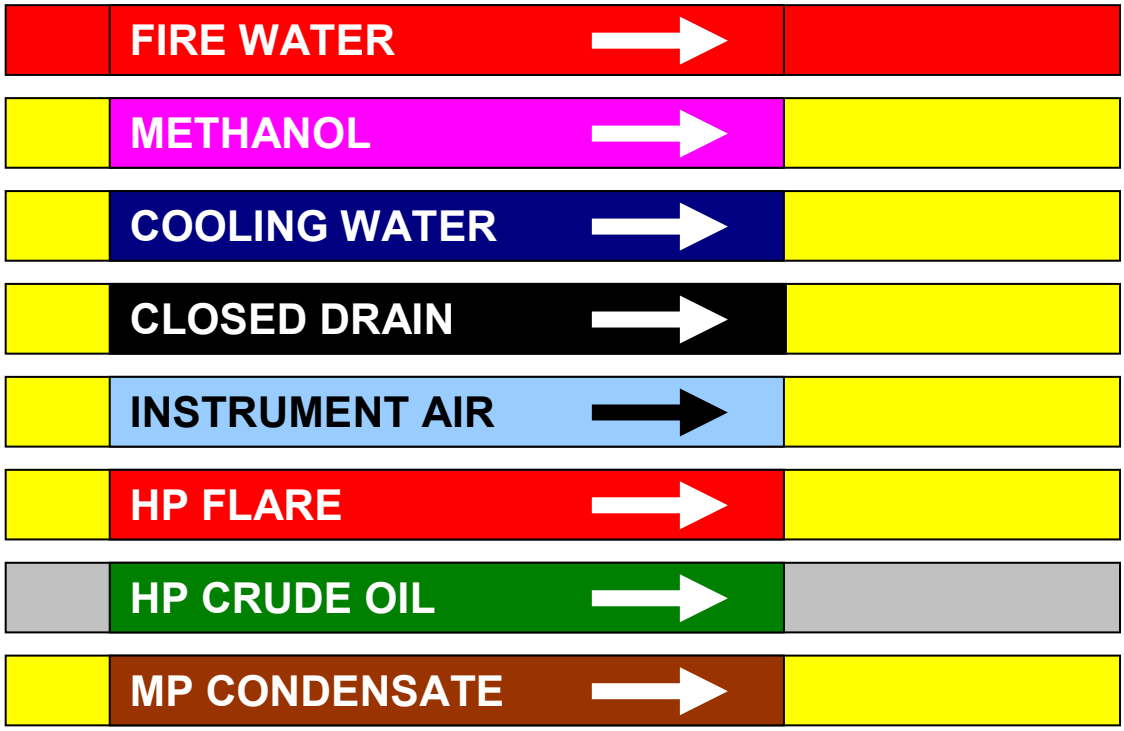
2.6 Examples

2.6.1 Principle



Both type of label should be acceptable.

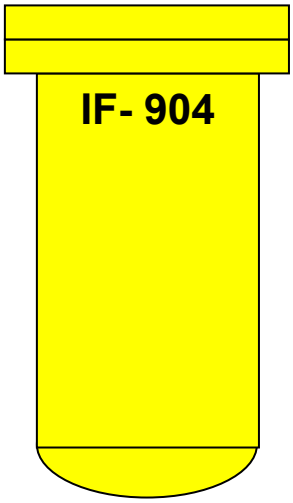
2.6.2 Piping Identification



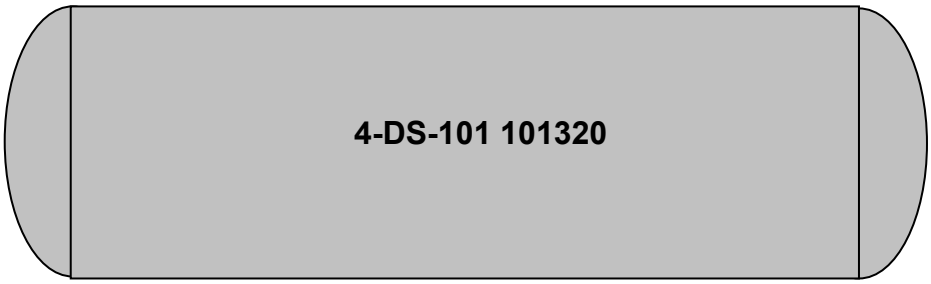
Note: French version is available.

2.6.3 Vessel identification

The tag number of pressure vessels and other process equipment shall be in black on both side of the shell with letters of maximum 300 mm height and minimum 150 mm height visible from all side of the vessel.



Operating temperature under 80°C.



Operating temperature above 80°C.