



The **HANSEATISCHE FARBEN- UND LACKFABRIK** develops and produces under the name **HARMALUX** top-quality specialty coats for industrial purposes for about 75 years (established 1935 in Hamburg).

Our highly qualified staff does enable us to develop individual and **custom-tailored coating systems** for the industry. Our customers get high quality coating systems for modern and environmentally aware application processes through permanent development of our products regarding quality, cost effectiveness and environmental aspects. Our research and development optimises these objectives by using selected and high performed raw materials in latest formulations.

**HARMALUX-Coating systems** shield objects from climatic or mechanical influences and contribute to an important part of the conservation of value and resources, of energy efficiency and therewith of environmental protection.

Modern coating systems should increase profitability and productivity. Furthermore they should allow environment- and user-friendly processes. **HARMALUX-Coating systems** from our **eco-series** contain high-solids and a low content of solvents to reduce the paint consumption and to increase the profitability. **HARMALUX-Coating systems** from our **aqua-series** contain marginal solvents, are odourless and thereby especially environment- and user-friendly.

We offer our customers a big spectrum of innovative coating systems for different application tasks.

| Paint system<br><b>HARMALUX</b> | Primer coats   | Top coats  | Effect coats        | Speciality coats  |
|---------------------------------|--|--|---------------------|---|
| Drying                          | Air-drying   |  |                     |   |
|                                 | Chemical cross-linking (2C)  |  |                     |   |
| Solvent                         | Solvent-based, waterborne  |  |                     |   |
| Raw material base               | Alkyd resins, NC resins, Acrylic resins, Speciality resins   |  |                     |   |
|                                 | Polyurethane resins, Acrylic resins, Epoxy resins, Speciality resins (2C)  |  |                     |   |
| Task                            | Corrosion protection, adhesion   | Visual effect, Chemical and mechanical resistance, UV-radiation protection | Decorative surfaces | Primer and top coat in one operation (one-coat systems), marking- and securing function |
| Application markets             | Steel construction, plant construction, apparatus construction, machine tool industry, agricultural machinery, maintenance and repair. |  |                     |   |

Our production line comprises:

High-build paints / High-Solid paints / Micaceous iron ore paints / Anti-corrosive paints / General-purpose primers / NC-paints / One-coat paints / Aluminium Bronzes / Textured paints / Hammer-finish paints / 2C paints / Speciality paints / Synthetic resin -based paints / Marking paints / Securing varnishes / Emulsion paints / Waterborne paints / Clear varnishes / Speciality thinners and cleaners

## Corrosion protection does start with the primer



The primer does serve for corrosion protection and adhesion. It should take care of optimal adhesion on the substrate and should serve as a perfect base for the next under- and top coat. Because of its pigmentation it does play an important part for the corrosion protection.

**HARMALUX-Primer coating systems** offer important advantages for the industrial production, which are fast drying, fast overpaintability and have general application possibilities. Depending on underground and the used surface coating system we offer our customer different primer coats.

| Paint system<br><b>HARMALUX</b>   | Primer coats  |   |
|-----------------------------------|---|---|
| Drying                            | Air drying  | Chemical cross-linking (2C)   |
| Solvent                           | Solvent-based, waterborne   |   |
| Raw material base                 | Alkyd resins<br>NC resins<br>Acrylic resins<br>Speciality resins  | Polyurethane resins<br>Acrylic resins<br>Epoxy resins<br>Speciality resins  |
| Range of properties               | <p>High film thicknesses in one operation. Excellent non sag properties on vertical surfaces (high-build primer).</p> <p>General application possibilities for different substrates like steel, aluminium, zinc, etc.</p> <p>Fast drying – overpaintable with a wide range of one-pack and two-pack top coats.</p> <p>High-Solid anti-corrosive coating systems (<i>eco-series</i>) with low VOC-content. High-build and excellent hiding power.</p> <p>Reactive pigmented rust preventing primers with very good corrosion protection in industrial and maritime areas (corrosiveness category C4 and C5).</p> <p>Free from aromatic solvents and waterborne (<i>aqua-series</i>) for user- and environment-friendly processing.</p> |   |
| Application markets               | Steel construction, plant construction, apparatus construction, machine tool industry, agricultural machinery, maintenance and repair.  |   |
| Product series<br><b>HARMALUX</b> | 100, 500<br>Metal Primer (iron mica, TX)<br>Anti-Corrosive-Primer<br>SR-Undercoat<br>Unicolor M<br>NC-Combi-Metal Primer<br>Dirosta-High-build<br>SR-Primer<br>1C- AC-Primer<br>Korrogrund (wb)   | 300<br>2C-AC-Primer<br>2C-PUR-AC-Primer<br>2C-PUR-Primer<br>2C-Epoxy-Primer<br>2C-Epoxy-Undercoat (iron mica)<br>2C-Epoxy-zinc-rich paint<br>EP-Korroprimer |

## Visual appearance and functionality combined with the correct surface coating



The surface coating is the outer shell of a coated component or building. It is responsible for optical appearances, like colour, gloss, reflection and optical effects, but it is also the first point of contact of all kinds of stress, like abrasion, scratches, stress through chemicals, grease, oil, UV-radiation and aggressive atmosphere.

**HARMALUX-Top coating systems** protect and beautify surfaces for a long time. Therefore our surface coating systems meet high visual and functional demands. We support our customer with his choice of the sufficient coating system.

| Paint system<br><b>HARMALUX</b>   | Top coats   |   |
|-----------------------------------|---|---|
| Drying                            | Air drying  | Chemical cross-linking (2C)   |
| Solvent                           | Solvent-based, waterborne   |   |
| Raw material base                 | Alkyd resins<br>NC resins<br>Acrylic resins<br>Speciality resins  | Polyurethane resins<br>Acrylic resins<br>Epoxy resins<br>Speciality resins  |
| Range of properties               | <p>Wide choice of standard colour range (e.g. RAL, NCS, BS, DB) and other individual colourings in different gloss grades.</p> <p>High mechanical and chemical resistance (alkalis, acids, oils, solvents).<br/>Easy to clean.</p> <p>Excellent weathering fastness, gloss and colour retention for high economic efficiency.</p> <p>Saving of material and working time due to maximum hiding power.</p> <p>Easy to use and fast drying for efficient application processes.</p> <p>Free from aromatic solvents and waterborne (<i>aqua-series</i>) for user- and environment-friendly processing.</p> |   |
| Application markets               | Steel construction, plant construction, apparatus construction, machine tool industry, agricultural machinery, maintenance and repair.  |   |
| Product series<br><b>HARMALUX</b> | 200, 600<br>SR-Enamel<br>SR-Acrylic-Paint<br>SR-Acrylic-Clear-Coat<br>Corrugated-Metal-Paint<br>Industrial-Enamel RAPID<br>NC-Combi Paint<br>Unicolor G<br>Gear-Paint<br>Chassis-Paint<br>Top-coat (wb)<br>Floor-Paint (wb)<br>Clear-Coat (wb)  | 400<br>2C-AC-Top-coat<br>2C-AC-Clear-coat<br>2C-PUR-AC-Top-coat<br>2C-PUR-AC-Clear-coat<br>2C-PUR-Top-coat<br>2C-PUR-Clear-Coat<br>2C-Epoxy-Top-coat<br>2C-Epoxy-Clear-Coat |

## Effect coats offer decorative protection of industrial goods



Effect coats are used to design creative surfaces, e.g. hammer finish and textured coats resulting in optically attractive and insensitive surfaces. By the use of aluminium and micaceous iron ore in metallic paints you get a high protection effect (barrier effect, heat resistance).

**HARMALUX-Effect coating systems** are easy to apply even to complicated parts to get best paint film qualities.

Depending on the requiring profile we offer our customers different effect coats for the design of decorative surfaces.

| Paint system<br><b>HARMALUX</b>   | Effect coats   |  |
|-----------------------------------|--|--|
| Drying                            | Air drying   | Chemical cross-linking (2C)  |
| Solvent                           | Solvent-based, waterborne  |  |
| Raw material base                 | Alkyd resins<br>NC resins<br>Acrylic resins<br>Speciality resins   | Polyurethane resins<br>Acrylic resins<br>Speciality resins                               |
| Range of properties               | Design of decorative surfaces with hammer finish-, textured-, metallic and mica-effect.<br><br>High protection and heat resistance.<br><br>Reduction of timewasting pretreatments such as filling and sanding.<br><br>Quick initial and through drying for efficient application processes.<br><br>Impact resistant and scratchproof surfaces for robust use<br><br>Free from aromatic solvents and waterborne ( <i>aqua-series</i> ) for user- and environment-friendly processing. |  |
| Application markets               | Steel construction, plant construction, apparatus construction, machine tool industry, agricultural machinery, maintenance and repair.   |  |
| Product series<br><b>HARMALUX</b> | 600, 900<br>Aluminium-Bronze<br>Unicolor Z - Iron mica<br>Unicolor Z - Alumetallic<br>Unicolor Z - metallic<br>Hammer-Finish-Paint<br>Metallic-Paint (wb)  | 400, 900<br>2C-AC-Textured-coat<br>2C-Hammer-Finish-Paint<br>2C-Metallic-One-coat-Finish |

## Specific functions are accomplished with speciality coats



Speciality coats should cover special functions, which could be applied to surfaces, protective functions, substrate or the processing procedures, e.g. one-coat paints combining the properties of primers and top coats and do save time and material.

**HARMALUX-Speciality coating systems** provide economical and individual solutions for all kinds of application cases.

In consideration of profitability and productivity, we produce high-performing and custom-tailored coating systems for our customers.

| Paint system<br><b>HARMALUX</b>   | Speciality coats   |  |
|-----------------------------------|--|--|
| Drying                            | Air drying   | Chemical cross-linking (2C)  |
| Solvent                           | Solvent-based, waterborne  |  |
| Raw material base                 | Alkyd resins<br>Acrylic resins<br>Speciality resins  | Polyurethane resins<br>Acrylic resins<br>Epoxy resins<br>Speciality resins                         |
| Range of properties               | Primer and top coat in one.<br>One-coat application for economic efficiency<br><br>High solid - low VOC content (= less solvent emissions).<br><br>Marking and securing functions.<br><br>Highly flexible, high mechanical and impact resistance. Self-healing-effect due to recovery.<br><br>Protection and preservation of objects with high exposure to moisture.<br><br>Free from aromatic solvents and waterborne ( <i>aqua-series</i> ) for user- and environment-friendly processing. |  |
| Application markets               | Steel construction, plant construction, apparatus construction, machine tool industry, agricultural machinery, maintenance and repair.   |  |
| Product series<br><b>HARMALUX</b> | 600, 900<br>Unicolor Z<br>AC-Finish<br>Road-Marking-Paint<br>Securing-Varnish „Metallophil“<br>One-coat Varnish (wb)   | 400, 900<br>2C-Elastopaq<br>2C-Solipox VH<br>2C-AC-One-coat-Finish<br>2C-Epoxy-Top-coat (one-coat) |