



Hungarocoat 2021

**New architectural approaches and
Update of corrosion protection check**

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New architectural approach I - Alberdingk® AS 6900

New architectural approach II - Alberdingk® SC 4450

Corrosion protection – The new norm DIN EN ISO 12944-6:2018-06

Update of corrosion protection check with Alberdingk® Metal Portfolio

ALBERDINGK® water-based polymer dispersions



Architectural Coatings





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Update of corrosion protection check with Alberdingk® Metal Portfolio



Features

For versatile paints and plasters with:

- Excellent wet scrub resistance
- Very good pigment binding capability
- Very low VOC-content
- Silicate compatible
- High compatibility with many kinds of millbases !





Comparison of wet scrub loss with various millbases

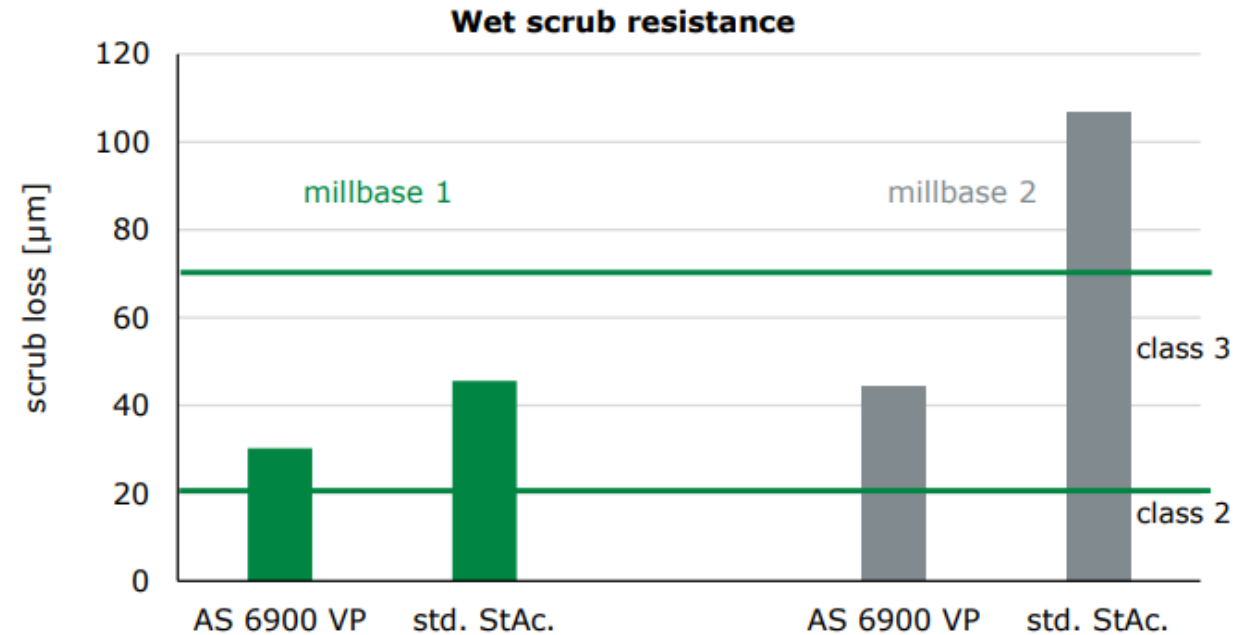
1. Customer millbase 1

Feature	Test Conditions	Test Results	
		Alberdingk® AS 6900 VP	market standard styrene acrylic
Wet scrub resistance*	at 200 scrubs	30.2 µm	45.6 µm

2. Customer millbase 2

Feature	Test Conditions	Test Results	
		Alberdingk® AS 6900 VP	market standard styrene acrylic
Wet scrub resistance*	at 200 scrubs	44.2 µm	106.9 µm

* tested according to ISO EN 13300





FP 6900-01 wall paint

Feature	Test Conditions	Test Results	
		Alberdingk® AS 6900 VP	market standard styrene acrylic
Wet scrub resistance*	at 200 scrubs	5.3 µm = class 2	5.8 µm = class 2
Contrast ratio*	24h @23°C, 50% rel. hum.	5.7 m ² /L = class 1	5.6 m ² /L = class 1

* tested according to ISO EN 13300



FP 6900-02

silicate wall paint

Feature	Test Conditions	Test Results	
		Alberdingk® AS 6900 VP	market standard styrene acrylic
Wet scrub resistance*	at 200 scrubs	14.2 µm = class 2	35.0 µm = class 3

* tested according to ISO EN 13300



FP 6900-03

silicate containing wall paint

Feature	Test Conditions	Test Results
		Alberdingk® AS 6900 VP
Wet scrub resistance*	at 200 scrubs	5.80 µm = class 2

* tested according to ISO EN 13300



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Features

Universally applicable as a binder for:

- Low odour indoor and outdoor coatings
- Tough-elastic films with excellent water and alkali resistance
- Films from matt to gloss possible
- Exterior house paints and plasters
- Outstanding early water and weathering resistance !





Alberdingk® SC 4450 VP

only formulated with 2% Dowanol DPnB
(prediluted 1:1 in water)

Feature	Test Conditions	Test Results
Water vapor permeability [g/m ² *d ⁻¹]	Alberdingk-method based on DIN EN ISO 12572	105
Water absorption [%]	Alberdingk-method (available upon request)	8



Comparison of early water resistance against market standard products



Market standard 1

Market standard 2

**ALBERDINGK®
SC 4450 VP**



SC 4450 VP

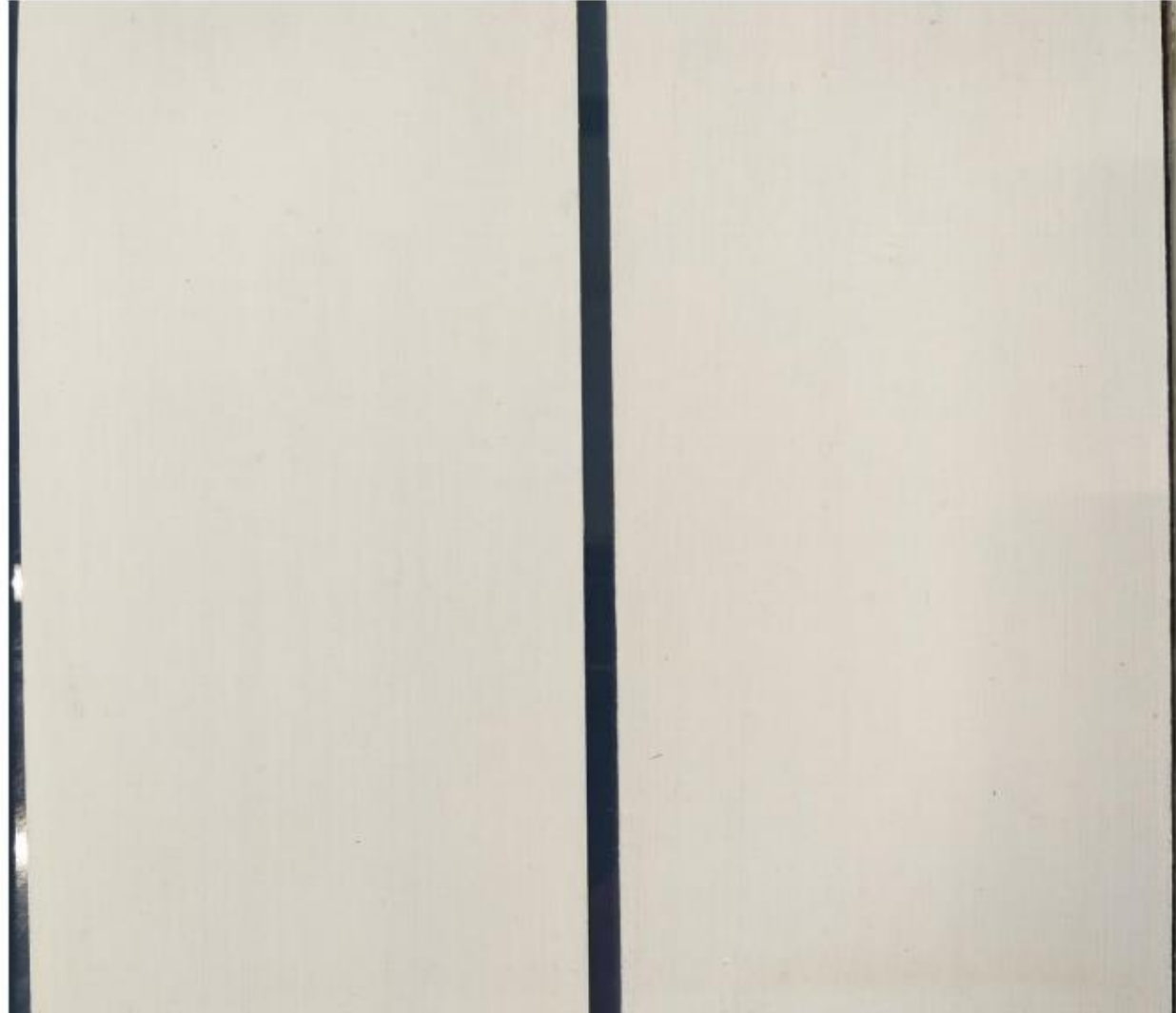
competitor 790





SC 4450 VP

competitor 790





New approach architectural & decorative I - Alberdingk® AS 6900

New approach architectural & decorative II - Alberdingk® SC 4450

Corrosion protection – The new norm DIN EN ISO 12944-6:2018-06

Update of corrosion protection check with Alberdingk® AC Metal Portfolio



- A scribe line shall be made on each test panel to ensure full exposure to all the elements of the test.
- The scribe line shall be made mechanically (with a machine such as a drill press with cobalt slot drills).
- **It shall be 50 mm long, 2 mm wide, minimum 12,5 mm from each long edge of the panel and minimum 25 mm from one of the short edges of the panel.**
- It shall cut completely through the paint coating and into the carbon steel.
- **The scribe has to be put into the cabinet horizontally.**
- On hot-dip galvanized and thermal-sprayed metallic coating the scribe shall cut completely through the paint coating and the metal layer and into the carbon steel.
- The cut depth into the steel should be as low as possible.



DIN EN ISO 12944-6:2018-06 / EN ISO 12944-6:2018(E)

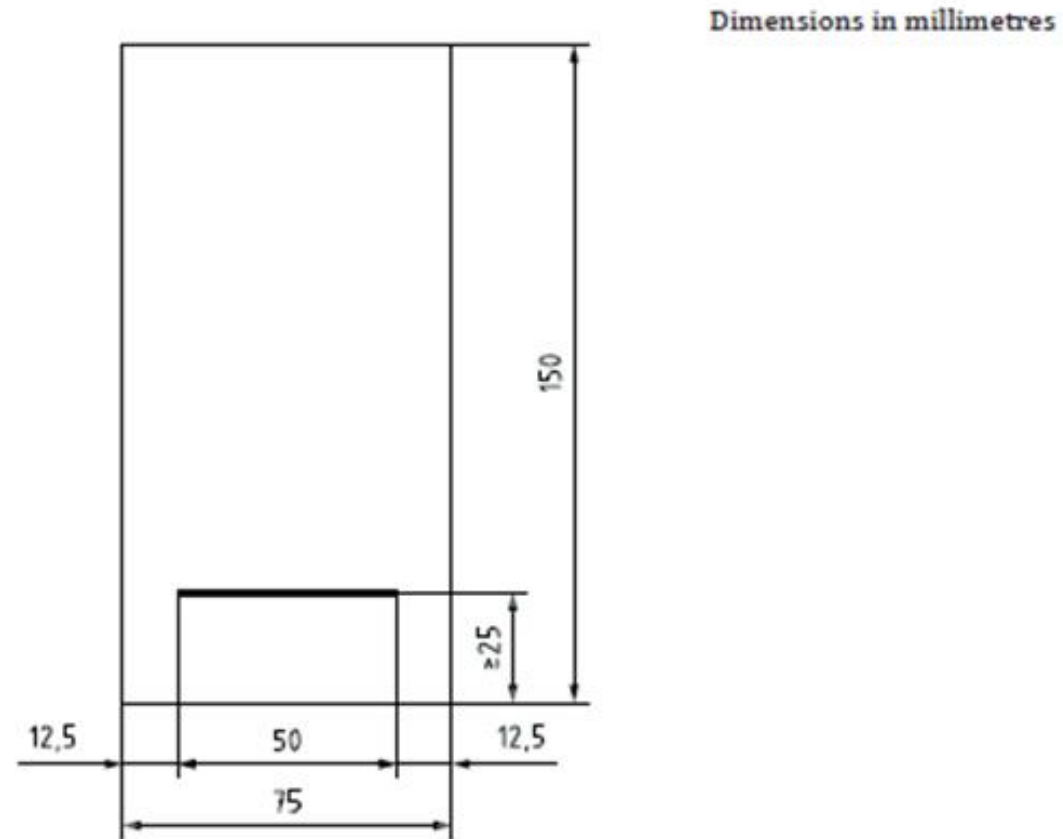


Figure A.2 — Example of test panel showing position of scribe line



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Update of corrosion protection check with Alberdingk® AC Metal Portfolio

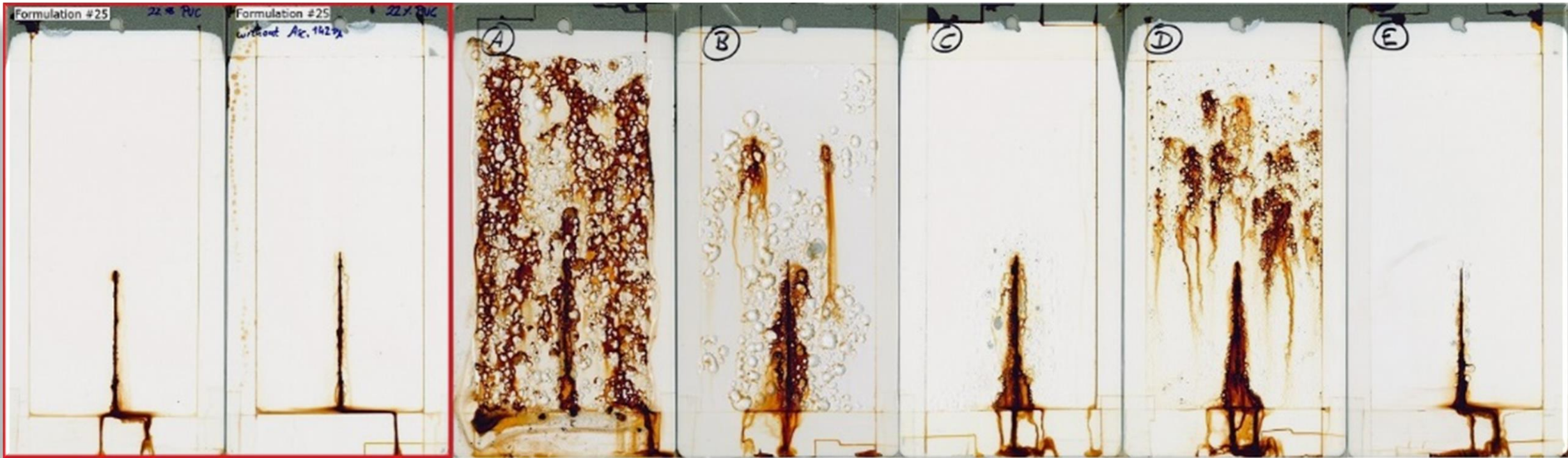


Target Product	Special Property
AC 2403	Best in class corrosion resistance, meets C5-I-L, multiphase, super hydrophobic, MFFT 16°C, no need of passive or active anticorrosive pigments, but liquid anticorrosion agents
AC 2420	Harder version of AC 2403, MFFT 22°C, higher surface hardness, for metal coatings with improved adhesion-properties, especially on galvanized surfaces
AC 2433	Single phase, MFFT 30°C, higher surface hardness, corrosion protection for general industrial purpose
AC 2003	Single phase, hydrophobic, MFFT 3°C, outdoor



ALBERDINGK® AC 2403

Conventional waterborne multi phase Acrylics

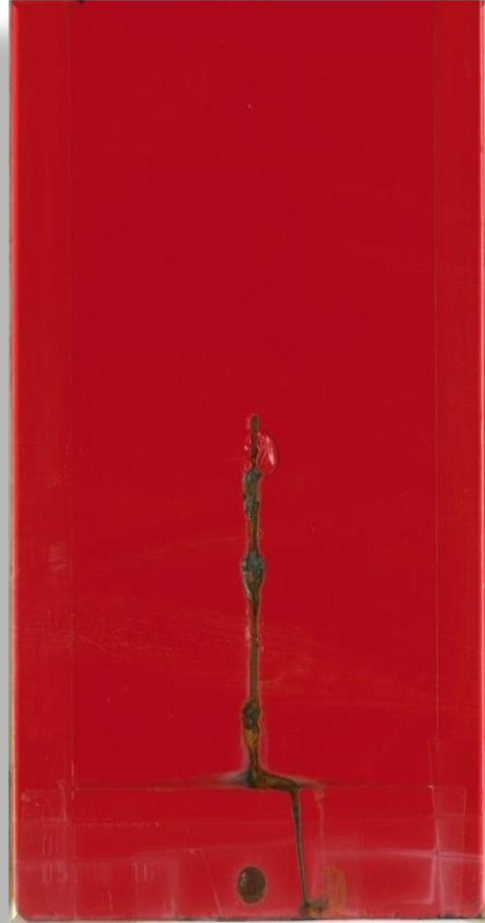


*Picture: Same formulation with 22% PVC, 720 h NSST on Q-Panel R, ca. 100 - 120 μm DFT

Anti corrosion paints, also as coloured paints - 100µm DFT 1440 h NSST



RAL 1007
Brufablend paste 20%



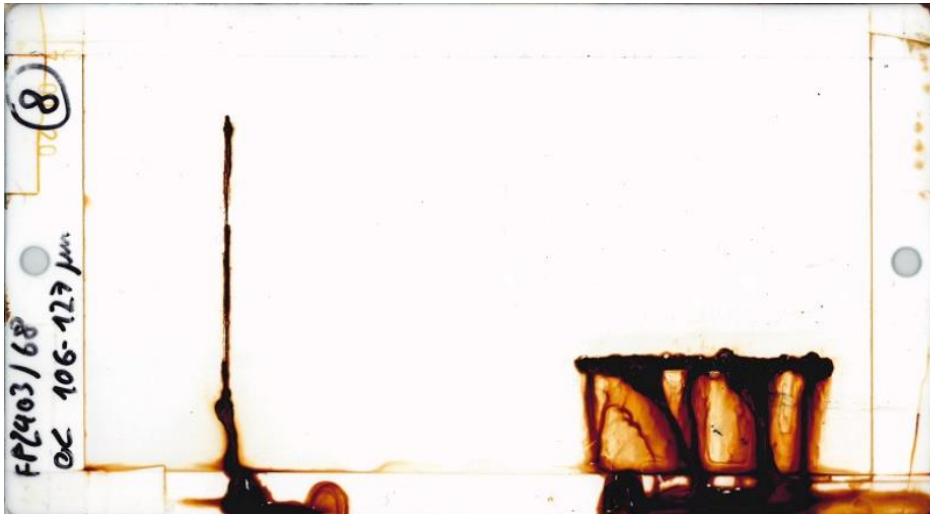
RAL 3001
Brufablend paste 20%



RAL 6011
Brufablend paste 20%



RAL 9005
Color black FW
200 paste 7.5%

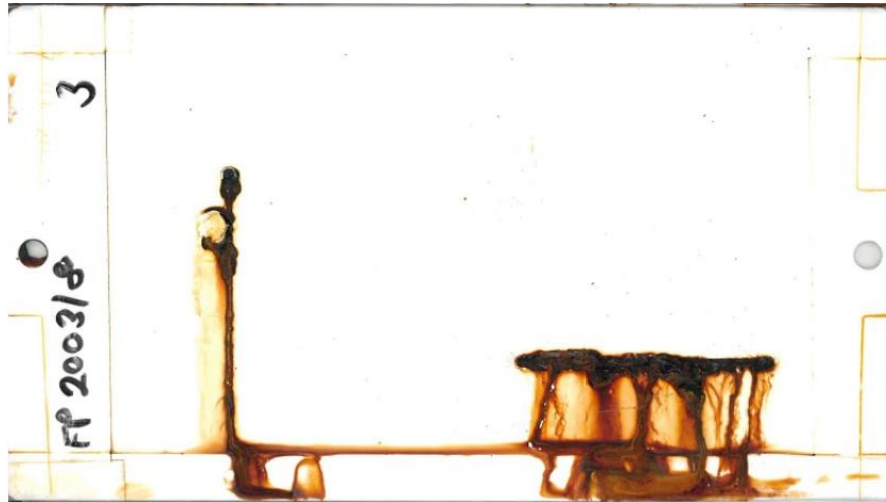


FP 2403/68 on OC-plate
PVC ca. 11%



FP 2403-71 on OC-plate
RAL 3001, PVC ca. 9%

Comparison tests according to old and new norms – 100-150 μm DFT, 1440 h NSST

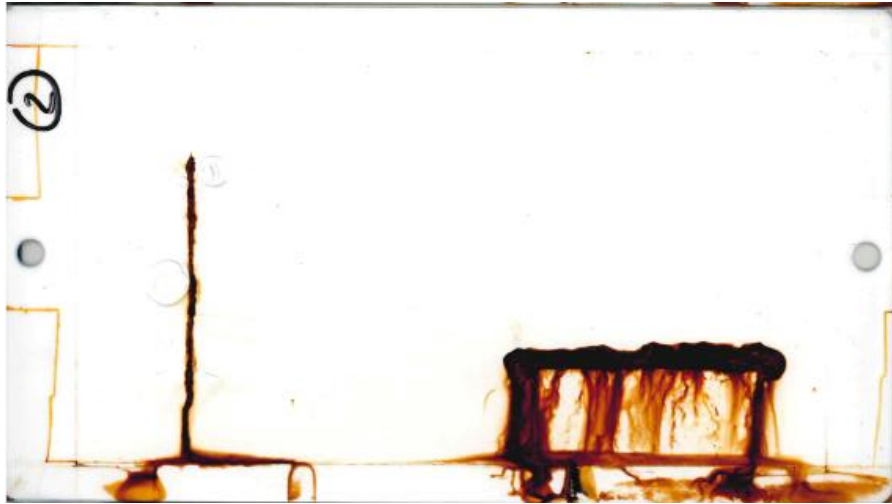


FP 2003-08 on OC-plate
PVC ca. 11%, 1440 h NSST



FP 2403/68 on DC01-plate
PVC ca. 11%, 1440 h NSST

Comparison tests according to old and new norms – 100-150 μm DFT



FP 2420-06 on OC-plate
PVC ca. 11%, 720 h NSST



FP 2420-06 on galvanized plate
PVC ca. 11%, 720 h NSST



- According to the new norm, the paint surfaces underneath the 2-mm wide scribe line are strongly soiled with rust stains, but the paint films are intact
- Around the verticle cuts (old norm) the paint surface all looks well.
- Around the wider horizontal scribe lines there are only sporadically a couple of bubbles, anyhow without rust creep unter the paint surface.
- The anti-corrosive paints based on Alberdingk® Metal Protection Portfolio keep the strong performance also according to the new norm !



Questions?

Thanks for your attention!



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