

Update sheet No. 2024/001 to the Technical Specifications Version 4.3. – January 2024

Applicable from the 1st of May 2024

Subject

APPROVAL OF CHEMICAL PRE-TREATMENT
SYSTEMS

Proposal/Request

Questions were raised regarding coating systems that needs to be tested to follow Track 2 of the definition of the Approved Coating Systems according to Track 1.

After the changes in the specifications regarding "Deposition of colloidal organic primer in liquid medium", it was unclear which coating system should be tested for the approval of a chemical conversion layer and to which coating systems the approval applies.

QUALISTEELCOAT technical specification - Version 4.3 Page 25

4. Approval of chemical pre-treatment systems

To maintain ideal performance of the coating system, which is applied by a coater licensed by QUALISTEELCOAT, the quality of the provided chemical pre-treatment system is tested. This part of the specification describes the testing process and acceptable critical values for the test results.

A coater may only use approved chemical pre-treatment systems for applications under the quality label of QUALISTEELCOAT. All approved and valid chemical pre-treatment systems are listed on the homepage of QUALISTEELCOAT⁸.

The approval is defined by:

- A specific base material (ST – SZ – HD)
- Corrosivity class in combination with the number of organic coatings
- **The approval is always valid for mono- and multilayer coating systems.**
- Brand
- Commercial codification of the conversion layer independent of the cleaning and pickling conditions.

⁸ This is mandatory from 1st of January 2025.

Qualisteelcoat resolution

Res. 2023/... TC decides that the approval for chemical pre-treatment systems is defined by:

- the substrate steel
- the optional presence and the type of a metallic layer (e.g. HD, SZ, MS)
- the optional presence and type of the electrophoretic or currentless deposited primer
- the corrosivity class
- Brand
- Commercial codification of the conversion layer independent of the cleaning and pickling conditions.
- The approval is valid for all coating systems where the combination: **base material + optional presence and type of the colloidal primer in liquid medium (EC or CP)**, can achieve the same corrosivity class according to the specifications 1.3.2.

Positive tested coating systems from a licensed coater (according Track 1) or Coating system tested by a Qualisteelcoat laboratory (Track 2)	Chemical supplier can apply for an approval for
ST1	ST1
ST2 or ST3	ST2 + ST3
STEC2 or STEC3	STEC2 + STEC3
STCP2 or STCP3 (with conversion layer)	STCP2 + STCP3
SZ1	SZ1
SZ2	SZ2
SZ3	SZ3
SZEC2	SZEC2
HD1	HD1
HD2 or HD3	HD2 + HD3
HDEC2	HDEC2

The approval applies to the highest corrosivity class achieved by the license holder according to track 1 or according to the corrosivity class achieved according to the test procedure according to track 2, always limited to the maximum permitted corrosivity class according to § 1.3.

Approved

Approved by remote vote of the Executive Board on 19 April 2024.

Amendments to the specifications

Amendments in §4

4. Approval of chemical pre-treatment systems

To maintain ideal performance of the coating system, which is applied by a coater licensed by QUALISTEELCOAT, the quality of the provided chemical pre-treatment system is tested. This part of the specification describes the testing process and acceptable critical values for the test results.

A coater may only use approved chemical pre-treatment systems for applications under the quality label of QUALISTEELCOAT. If a coater applies a chemical pre-treatment before applying the organic coating, the coater may only use approved chemical pre-treatment systems for applications under the QUALISTEELCOAT quality label.

During the homologation process, the supplier of the chemical pre-treatment system and the candidate license holder can jointly apply for the approval of the chemistry and the granting of the license.

All approved and valid chemical pre-treatment systems are listed on the homepage of QUALISTEELCOAT⁸.

The approval is defined by:

- ~~A specific base material (ST – SZ – HD)~~
- ~~Corrosivity class in combination with the number of organic coatings~~
- ~~The approval is always valid for mono- and multilayer coating systems:~~
 - the substrate steel
 - the optional presence and the type of a metallic layer (e.g. HD, SZ, MS)
 - the optional presence and type of the electrophoretic or currentless deposited primer
 - the corrosivity class
- Brand
- Commercial codification of the conversion layer independent of the cleaning and pickling conditions.
- The approval is valid for all coating systems where the combination: base material + optional presence and type of the colloidal primer in liquid medium (EC or CP), can achieve the same corrosivity class according to the specifications 1.3.2.

Positive tested coating systems from a licensed coater (according Track 1) or Coating system tested by a Qualisteelcoat laboratory (Track 2)	Chemical supplier can apply for an approval for
ST1	ST1
ST2 or ST3	ST2 + ST3
STEC2 or STEC 3	STEC2 + STEC3
STCP2 or STCP 3 (with conversion layer)	STCP2 + STCP3
SZ1	SZ1
SZ2	SZ2
SZ3	SZ3
SZEC2	SZEC2
HD1	HD1
HD2 or HD3	HD2 + HD3
HDEC2	HDEC2

The approval applies to the highest corrosivity class achieved by the license holder according to track 1 or according to the corrosivity class achieved according to the test procedure according to track 2, always limited to the maximum permitted corrosivity class according to § 1.3..

⁸ This is mandatory from 1st January 2025.