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AMENDMENT 1
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Petroleum and natural gas industries — External coatings for buried or submerged pipelines used in pipeline transportation systems —

Part 3: **Field joint coatings**

AMENDMENT 1: Introduction of mesh-backed coating systems

Industries du pétrole et du gaz naturel — Revêtements externes des conduites enterrées ou immergées utilisées dans les systèmes de transport par conduites —

Partie 3: Revêtements des joints soudés sur site

AMENDEMENT 1: Introduction de systèmes de revêtement à support maillé

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 2, *Pipeline transportation systems*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 459 *ECISS — European Committee for Iron and Steel Standardization*, Subcommittee SC 10, *Steel tubes, and iron and steel fittings*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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Petroleum and natural gas industries — External coatings for buried or submerged pipelines used in pipeline transportation systems —

Part 3: Field joint coatings

AMENDMENT 1: Introduction of mesh-backed coating systems

Clause 8, Table 1

Replace the following row:

Clause	Code	Type of field joint coating
12	12	Cold-applied polymeric tape coatings

with

Clause	Code	Type of field joint coating
12	12A	Cold-applied tape coatings with a polymeric continuous backing
	12B	Cold-applied tape coatings with a polymeric mesh backing

Clause 12

Replace text with the following:

12 Cold-applied polymeric tape coatings

12.1 Coating identification

Cold-applied polymeric tape coatings (FJC Types 12A or 12B) shall be identified in the APS in accordance with Table 2 and shall meet the requirements of Table 10. Data sheets for the coating materials shall be in accordance with Table 4 (primer) and Table 5 (tape).

Application instructions shall be provided by the manufacturer in accordance with Table 6.

12.2 Description of the coatings

12.2.1 Cold-applied tape coatings with a polymeric continuous backing (Type 12A)

Cold-applied tape coatings with a polymeric continuous backing consist of several layers of one or more continuous polymeric tapes, with or without a primer.

This coating type can be further subdivided into the following:

— **12A-1:** with a T_{max} not greater than 50 °C;

— **12A-2**: with a T_{max} not greater than 80 °C;

— **12A-3**: with a T_{max} not greater than 120 °C.

The T_{max} shall be stated in brackets, e.g. FJC Type 12A-1(30) or FJC Type 12A-1(50).

A T_{max} higher than 120 °C can be agreed as long as the requirements of Table 10 are met.

12.2.2 Cold-applied tape coatings with a polymeric mesh backing (Type 12B)

Cold-applied tape coatings with a polymeric mesh backing consist of a single layer or multiple layers of one or more mesh-backed tapes, with or without a primer.

The mesh-backed tape shall be composed of rubber or polymeric based adhesive and a supporting woven fabric backing.

This coating type can be further subdivided into the following:

— **12B-1:** with a T_{max} not greater than 50 °C;

— **12B-2**: with a T_{max} not greater than 80 °C;

The T_{max} shall be stated in brackets, e.g. FJC Type 12B-1(30) or FJC Type 12B-1(50).

A T_{max} higher than 80 °C can be agreed as long as the requirements of Table 10 are met.

12.3 Surface preparation

Surface preparation shall be carried out in accordance with the APS. The edges of the plant coating shall be bevelled and the plant coating shall be roughened for the minimum length according to the overlap on the plant coating (12.4.4).

The area to be coated shall be cleaned by abrasive blast-cleaning as described in ISO 8504-2 to a minimum grade Sa 2 according to ISO 8501-1. The profile/roughness shall be in accordance with the manufacturer's application instructions.

For FJC Type 12A-1 and Type 12-B, surface preparation can be achieved by power tool cleaning as described in ISO 8504-3 to a minimum grade St 3 according to ISO 8501-1, by agreement of the end user.

Dust contamination shall be grade 3 or better, measured in accordance with ISO 8502-3.

12.4 Coating application

12.4.1 General

Application of the coating, including the primer if applicable, shall be carried out in accordance with the APS.

12.4.2 Application of the primer

If applicable, application of the primer shall be carried out in accordance with the APS.

12.4.3 Application of polymeric tapes with continuous or mesh baking

Application shall be carried out in accordance with the APS.

As a general guide, the following application procedure shall be followed.

— Prepare the surface according to the approved method.

— Apply a thin coat of compatible primer (if any); allow the primer to dry.

— Spirally wrap the area being coated with tapes of an adequate width, employing the right overlap and using sufficient tension to ensure a complete conformability of the coating. Any tenting effect shall be prevented. A manual application tool should be used to achieve these goals.

A single piece of wrapping wide enough to cover the required area may be used in certain circumstances (in particular, for offshore installation on a conventional barge).