

European Technical Approval ETA-13/0171

English translation prepared by DIBt - Original version in German language

Handelsbezeichnung
Trade name

Korrosionsschutzverfahren ATIS Cableskin
Corrosion protection system ATIS Cableskin

Zulassungsinhaber
Holder of approval

Alpin Technik und Ingenieurservice GmbH
Plautstraße 80
04179 Leipzig
DEUTSCHLAND

Zulassungsgegenstand
und Verwendungszweck
*Generic type and use
of construction product*

Korrosionsschutzverfahren für tragende Seile
Corrosion protection system for load bearing cables

Geltungsdauer:
Validity: vom
from
bis
to

8 April 2013
8 April 2018

Herstellwerk
Manufacturing plant

Alpin Technik und Ingenieurservice GmbH

Diese Zulassung umfasst
This Approval contains

10 Seiten einschließlich 4 Anhänge
10 pages including 4 annexes

I LEGAL BASES AND GENERAL CONDITIONS

- 1 This European technical approval is issued by Deutsches Institut für Bautechnik in accordance with:
 - Council Directive 89/106/EEC of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products¹, modified by Council Directive 93/68/EEC² and Regulation (EC) N° 1882/2003 of the European Parliament and of the Council³;
 - *Gesetz über das In-Verkehr-Bringen von und den freien Warenverkehr mit Bauprodukten zur Umsetzung der Richtlinie 89/106/EWG des Rates vom 21. Dezember 1988 zur Angleichung der Rechts- und Verwaltungsvorschriften der Mitgliedstaaten über Bauprodukte und anderer Rechtsakte der Europäischen Gemeinschaften (Bauproduktengesetz - BauPG) vom 28. April 1998⁴, as amended by Article 2 of the law of 8 November 2011⁵;*
 - Common Procedural Rules for Requesting, Preparing and the Granting of European technical approvals set out in the Annex to Commission Decision 94/23/EC⁶.
- 2 Deutsches Institut für Bautechnik is authorized to check whether the provisions of this European technical approval are met. Checking may take place in the manufacturing plant. Nevertheless, the responsibility for the conformity of the products to the European technical approval and for their fitness for the intended use remains with the holder of the European technical approval.
- 3 This European technical approval is not to be transferred to manufacturers or agents of manufacturers other than those indicated on page 1, or manufacturing plants other than those indicated on page 1 of this European technical approval.
- 4 This European technical approval may be withdrawn by Deutsches Institut für Bautechnik, in particular pursuant to information by the Commission according to Article 5(1) of Council Directive 89/106/EEC.
- 5 Reproduction of this European technical approval including transmission by electronic means shall be in full. However, partial reproduction can be made with the written consent of Deutsches Institut für Bautechnik. In this case partial reproduction has to be designated as such. Texts and drawings of advertising brochures shall not contradict or misuse the European technical approval.
- 6 The European technical approval is issued by the approval body in its official language. This version corresponds fully to the version circulated within EOTA. Translations into other languages have to be designated as such.

¹ Official Journal of the European Communities L 40, 11 February 1989, p. 12
² Official Journal of the European Communities L 220, 30 August 1993, p. 1
³ Official Journal of the European Union L 284, 31 October 2003, p. 25
⁴ *Bundesgesetzblatt Teil I 1998*, p. 812
⁵ *Bundesgesetzblatt Teil I 2011*, p. 2178
⁶ Official Journal of the European Communities L 17, 20 January 1994, p. 34

II SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

1 Definition of the product and intended use

1.1 Definition of the construction product

The construction product is a corrosion protection system for cables (in particular bridge cables and other load bearing cables). The corrosion protection system can be used for other suitable structural parts (e.g. bracing, pipes, rods or convex bars) as well.

The corrosion protection system consists of a base layer with three-ply structure and a top layer of butyl rubber tapes whereas the top layer is provided with an additional coloured PE-foil at the outer side. These butyl rubber tapes are wrapped with a minimum overlap of 50 % creating a 4-layer system with an average thickness of 2.6 mm. As a result of interdiffusion of the butyl rubber material in the overlapping areas a hermitically closed, tube like sheath is achieved.

The application of the corrosion protection system is possible on new cables as well as on old coating systems after the removal of loose parts. It is mostly carried out by wrapping robots. Annex 1 shows a sample of the structure of the corrosion protection system.

1.2 Intended use

The corrosion protection system is intended to be used for internal and external applications as a long term corrosion protection system for load bearing cables (e. g. bridge cables) or for other suitable structural parts as initial corrosion protection as well as replacement or strengthening of old corrosion protection systems. The corrosion protection system is suitable for corrosion loads up to corrosivity category C5-I and C5-M according to EN ISO 12944-2.

The provisions made in this European technical approval are based on an assumed working life of the corrosion protection system for load bearing cables of 25 years, provided that the conditions laid down in sections 4.2, 5.1 and 5.2 for the packaging, transport, storage, installation, inspection and repair are met. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

2 Characteristics of the product and methods of verification

The assessment of the fitness of the corrosion protection system for cables for the intended use in relation to the requirements for mechanical resistance and stability; safety in case of fire; hygiene, health and the environment in the sense of the Essential Requirements No. 1, No. 2 and No. 3 has been made in accordance with section 3.2 of the Common Procedural Rules for Requesting, Preparing and the Granting of European technical approvals set out in the Annex to Commission Decision 94/23/EC⁶.

Concerning Essential Requirements No. 1 (Mechanical resistance and stability) the following applies:

The assessment of the mechanical resistance and stability is only relevant to the load bearing cables which are not part of the ETA.

Concerning Essential Requirement No. 2 (Safety in case of fire) the following applies:

The assessment of the resistance to fire performance is not relevant due to the fire behaviour of the corrosion protection system (class E according to EN 13501-1).

Concerning Essential Requirement No. 3 (Hygiene, health and environment) the following applies:

The corrosion protection system does not contain dangerous substances or radiation.

Note: In addition to the specific clauses relating to dangerous substances contained in this European technical approval, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Directive, these requirements need also to be complied with, when and where they apply.

3 Evaluation and attestation of conformity and CE marking

3.1 System of attestation of conformity

According to the Decision 99/92/EC of the European Commission⁷ system 2+ of the attestation of conformity applies.

In addition, according to the Decision 2001/596/EC of the European Commission⁸ system 3 of the attestation of conformity applies with regard to reaction to fire.

These systems of attestation of conformity are defined as follows:

System 2+: Declaration of conformity of the product by the manufacturer on the basis of:

- (a) Tasks for the manufacturer:
 - (1) initial type-testing of the product;
 - (2) factory production control;
 - (3) testing of samples taken at the factory in accordance with a prescribed test plan.
- (b) Tasks for the approved body:
 - (4) certification of factory production control on the basis of:
 - initial inspection of factory and of factory production control;
 - continuous surveillance, assessment and approval of factory production control.

System 3: Declaration of conformity of the product by the manufacturer on the basis of:

- (a) Tasks for the manufacturer:
 - (1) factory production control;
- (b) Tasks for the approved body:
 - (2) initial type-testing of the product.

Note: Approved bodies are also referred to as "notified bodies".

⁷ Official Journal of the European Communities L 80 of 18.03.1998
⁸ Official Journal of the European Communities L 209/33 of 2.8.2001

3.2 Responsibilities

3.2.1 Tasks for the manufacturer

3.2.1.1 Factory production control

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall insure that the product is in conformity with this European technical approval.

The manufacturer may only use materials stated in the technical documentation of this European technical approval.

The factory production control shall be in accordance with the control plan which is part of the technical documentation of this European technical approval. The control plan is laid down in the context of the factory production control system operated by the manufacturer and deposited with Deutsches Institut für Bautechnik.⁹

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the control plan.

3.2.1.2 Other tasks for the manufacturer

The manufacturer shall, on the basis of a contract, involve a body which is approved for the tasks referred to in section 3.1 in the field of corrosion protection systems in order to undertake the actions laid down in section 3.2.2. For this purpose, the control plan referred to in sections 3.2.1.1 and 3.2.2 shall be handed over by the manufacturer to the approved body involved.

The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provisions of this European technical approval.

3.2.2 Tasks for the approved body

The approved body shall perform the

- initial type-testing of the product (for system 3 only),
- initial inspection of factory and of factory production control (for system 2+ only),
- continuous surveillance, assessment and approval of factory production control (for system 2+ only),

in accordance with the provisions laid down in the control plan.

The approved body shall retain the essential points of its actions referred to above and state the results obtained and conclusions drawn in a written report.

The approved certification body involved by the manufacturer shall issue an EC certificate of conformity of the factory production control stating the conformity with the provisions of this European technical approval.

In cases where the provisions of the European technical approval and its control plan are no longer fulfilled the certification body shall withdraw the certificate of conformity and inform Deutsches Institut für Bautechnik without delay.

3.3 CE marking

The CE marking shall be affixed on the accompanying commercial documents to the corrosion protection systems. The letters "CE" shall be followed by the identification number

⁹ The control plan is a confidential part of the documentation to this European technical approval and only handed over to the approved body involved in the procedure of attestation of conformity. See section 3.2.2.

of the approved certification body, where relevant, and be accompanied by the following additional information:

- the name and address of the producer (legal entity responsible for the manufacture),
- the last two digits of the year in which the CE marking was affixed,
- the number of the EC certificate for the factory production control,
- the number of the European technical approval,
- the description of the product.

4 Assumptions under which the fitness of the product for the intended use was favourably assessed

4.1 Manufacturing

The European technical approval is issued for the product on the basis of agreed data/information, deposited with Deutsches Institut für Bautechnik, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to Deutsches Institut für Bautechnik before the changes are introduced. Deutsches Institut für Bautechnik will decide whether or not such changes affect the approval and consequently the validity of the CE marking on the basis of the approval and if so whether further assessment or alterations to the approval shall be necessary.

4.2 Installation

The execution of the corrosion protection system ATIS Cableskin is carried out according to the provisions of Alpin Technik und Ingenieurservice GmbH deposited with Deutsches Institut für Bautechnik. This also applies to overlap of the butyl rubber tapes including of the tape ends and areas to be repaired (see Annexes 1, 2 and 4).

All works are executed by Alpin Technik und Ingenieurservice GmbH or by companies with appropriate and valid training of Alpin Technik und Ingenieurservice GmbH. This training shall be documented.

5 Indications to the manufacturer

It is in the responsibility of the manufacturer to ensure that the information on the specific conditions according to 1, 2, 4.2, 5.1 and 5.2 (including Annexes referred to) is given to those who are concerned. This information may be given by reproduction of the respective parts of the European technical approval.

5.1 Packaging, transport and storage

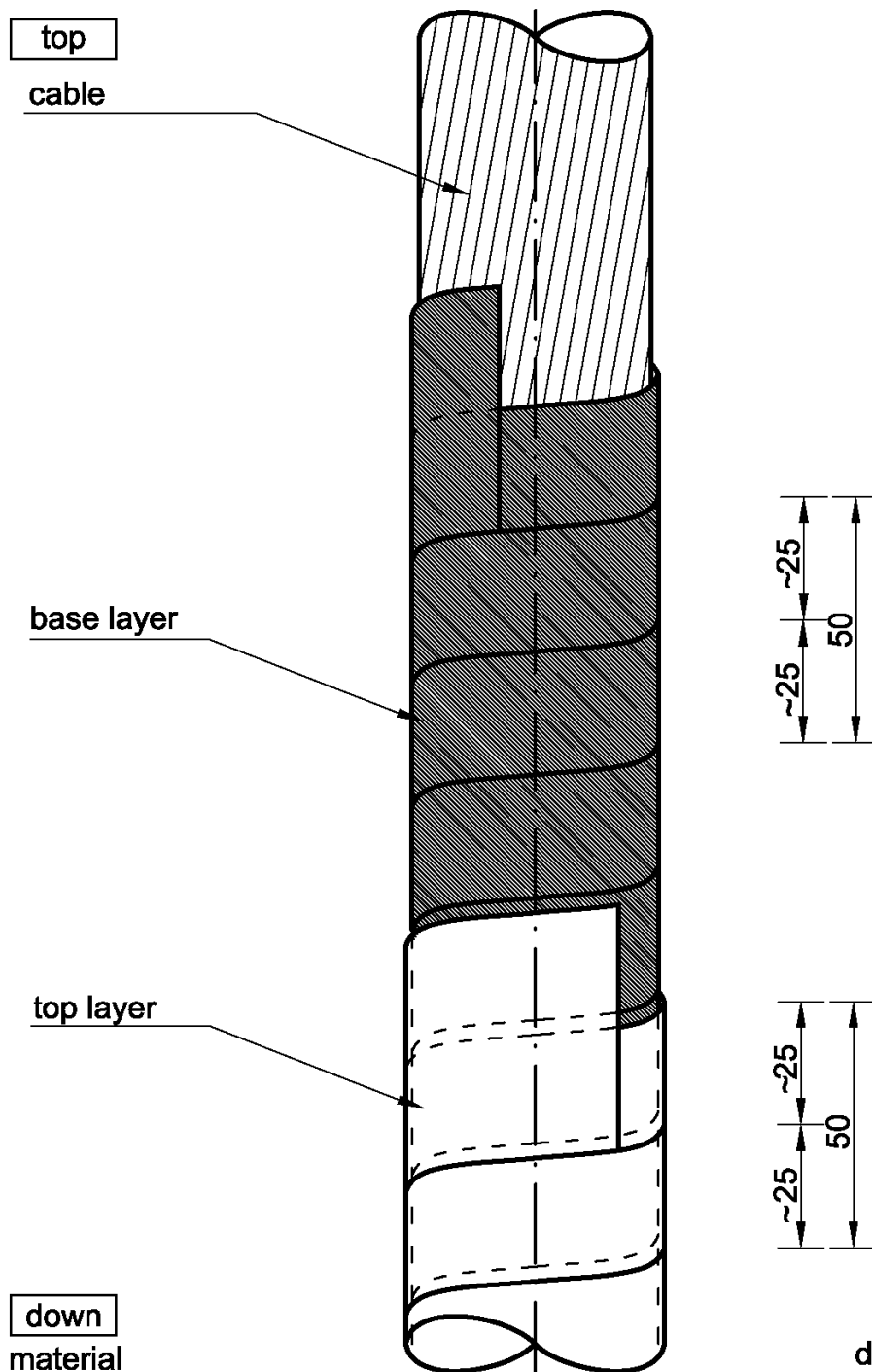
For the packaging, transport and storage of the butyl rubber tapes the instructions of the manufacturer of the tapes apply

5.2 Inspection, repair

For inspecting the long time behaviour of the corrosion protection system under environmental conditions control areas according Annex 3 may be installed according to the regulations deposited with Deutsches Institut für Bautechnik. In case of damages of the corrosion protection system the repair works have to be executed according to Annex 4 and the manual deposited with Deutsches Institut für Bautechnik.

Georg Feistel
Head of Department

beglaubigt:
Ulbrich



down
material

base layer: stabilized PE-carrier film, double-sided applied with butyl rubber, $t \geq 0,8 \text{ mm}$

top layer: exterior stabilized PE - carrier film, coloured, one-sided inside with butyl rubber, gray $t \geq 0,5 \text{ mm}$

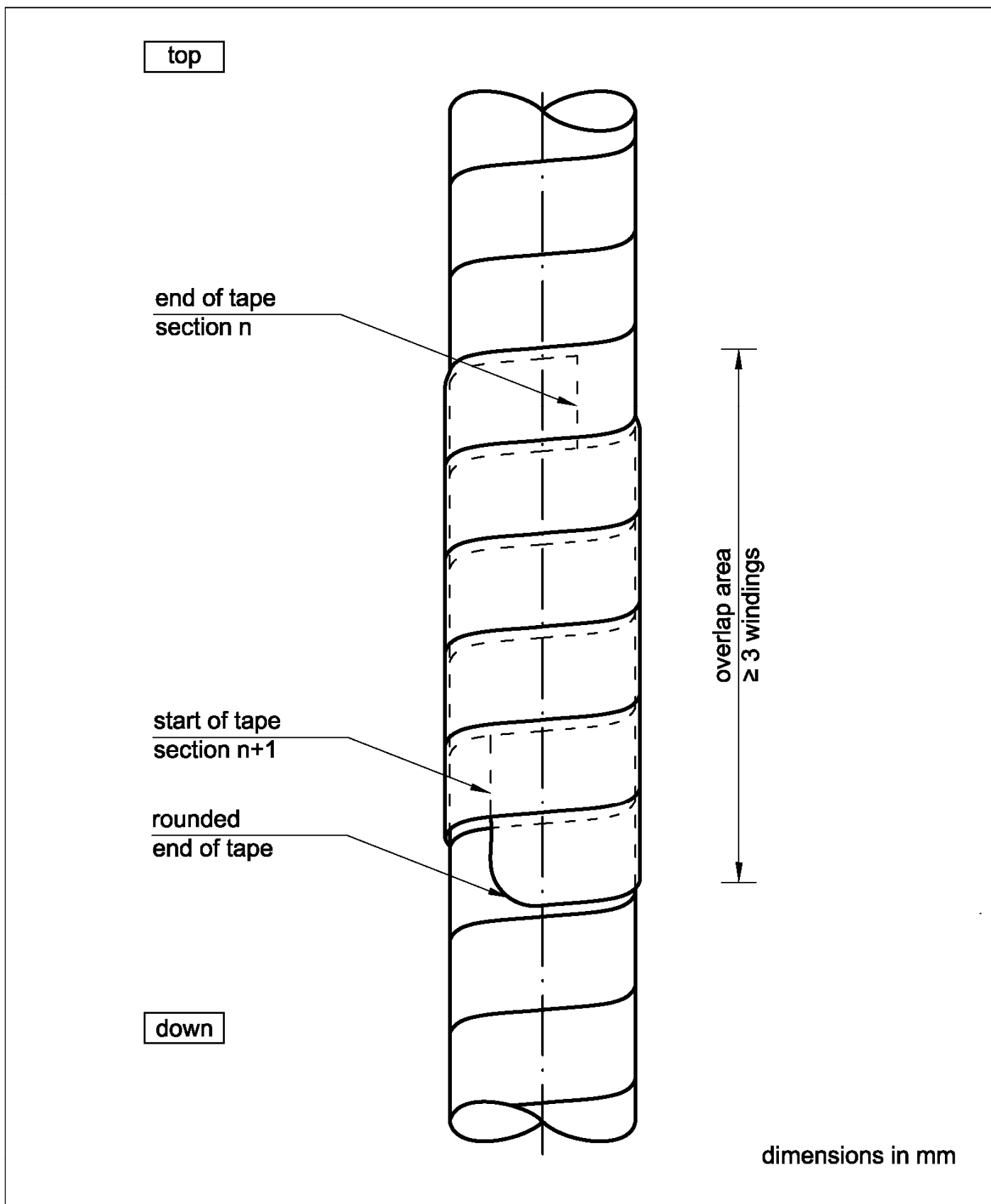
dimensions in mm

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Corrosion protection system ATIS Cableskin

Taping on the free length

Annex 1

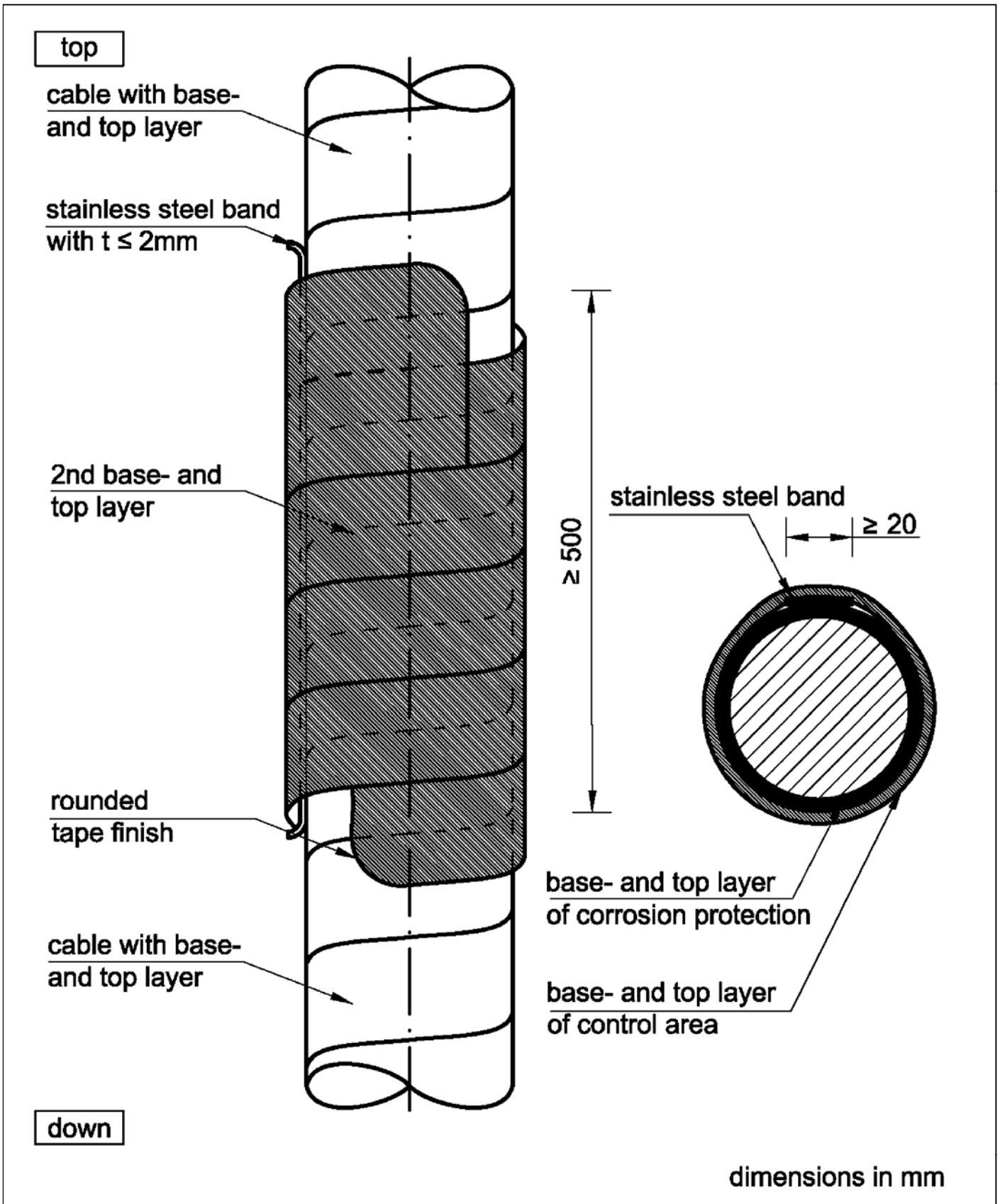


dimensions in mm

Corrosion protection system ATIS Cableskin

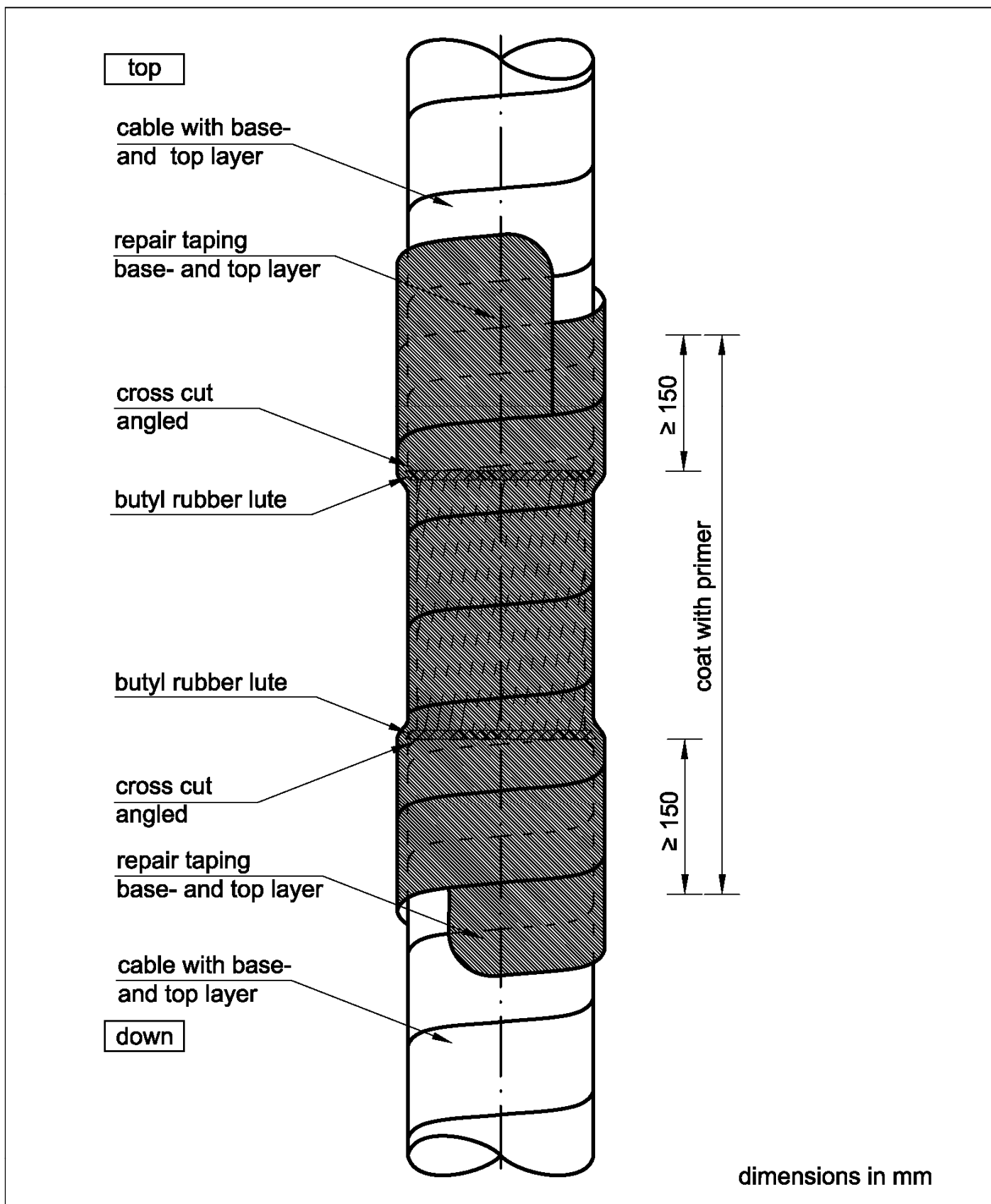
Joint on the free length

Annex 2



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Corrosion protection system ATIS Cableskin	Annex 3
Control area	



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Corrosion protection system ATIS Cableskin

Repair area

Annex 4