

# DIN 30670-1:2024-01 (E)

## Polyethylen coatings of steel pipes and fittings - Part 1: Requirements and testings of factory-applied extruded coatings

---

<b>Contents</b>		<b>Page</b>
Foreword .....		5
Amendments .....		5
Previous editions .....		5
1	Scope .....	6
2	Normative references .....	6
3	Terms and definitions .....	8
4	Symbols and abbreviations .....	8
5	Coating .....	9
5.1	General .....	9
5.2	Types of coating .....	9
6	Information to be supplied by the purchaser .....	9
6.1	Mandatory information .....	9
6.2	Order options .....	10
7	Application of the coating .....	10
7.1	General .....	10
7.2	Surface preparation .....	10
7.3	Structure of the coating .....	10
7.3.1	General .....	10
7.3.2	Epoxy resin primer .....	12
7.3.3	Polyethylene adhesive (PE adhesive) .....	12
7.3.4	Polyethylene coating .....	12
7.3.5	Cutback .....	13
8	Requirements and testing .....	13
8.1	General .....	13
8.2	Coating properties .....	13
8.3	Test methods .....	20
8.4	Inspection documents .....	20
9	Repairs .....	20
9.1	General .....	20
9.2	Minor damage .....	20
9.3	Serious damage .....	20
10	Marking .....	21
11	Handling, transportation and storage .....	21
Annex A (normative) Measuring thickness .....		22
A.1	General .....	22
A.2	Test report .....	22

<b>Annex B (normative) Degree of cure of the epoxy resin layer .....</b>	<b>23</b>
<b>B.1 General .....</b>	<b>23</b>
<b>B.2 Apparatus .....</b>	<b>23</b>
<b>B.3 Description of method .....</b>	<b>23</b>
<b>B.3.1 Sampling .....</b>	<b>23</b>
<b>B.3.2 Measurement procedure .....</b>	<b>23</b>
<b>B.3.3 Evaluation .....</b>	<b>24</b>
<b>B.4 Test report .....</b>	<b>24</b>
<b>Annex C (normative) Cathodic disbondment (CD test) .....</b>	<b>25</b>
<b>C.1 General .....</b>	<b>25</b>
<b>C.2 Apparatus .....</b>	<b>25</b>
<b>C.3 Description of method .....</b>	<b>27</b>
<b>C.3.1 Sample preparation .....</b>	<b>27</b>
<b>C.3.2 Measurement procedure .....</b>	<b>27</b>
<b>C.3.3 Evaluation .....</b>	<b>27</b>
<b>C.4 Test report .....</b>	<b>28</b>
<b>Annex D (normative) Peel strength .....</b>	<b>29</b>
<b>D.1 General .....</b>	<b>29</b>
<b>D.2 Apparatus .....</b>	<b>29</b>
<b>D.3 Description of method .....</b>	<b>32</b>
<b>D.3.1 Sample preparation .....</b>	<b>32</b>
<b>D.3.2 Measurement procedure .....</b>	<b>32</b>
<b>D.3.3 Evaluation .....</b>	<b>32</b>
<b>D.4 Test report .....</b>	<b>32</b>
<b>Annex E (normative) Continuity (holiday detection) .....</b>	<b>33</b>
<b>E.1 General .....</b>	<b>33</b>
<b>E.2 Test apparatus .....</b>	<b>33</b>
<b>E.3 Procedure .....</b>	<b>33</b>
<b>E.4 Test report .....</b>	<b>34</b>
<b>Annex F (normative) Strain at break .....</b>	<b>35</b>
<b>F.1 General .....</b>	<b>35</b>
<b>F.2 Test apparatus .....</b>	<b>35</b>
<b>F.3 Description of method .....</b>	<b>35</b>
<b>F.3.1 Sample preparation .....</b>	<b>35</b>
<b>F.3.2 Measurement procedure .....</b>	<b>35</b>
<b>F.3.3 Evaluation .....</b>	<b>35</b>
<b>F.4 Test report .....</b>	<b>36</b>
<b>Annex G (normative) Impact resistance and low temperature impact resistance .....</b>	<b>37</b>
<b>G.1 General .....</b>	<b>37</b>
<b>G.2 Test apparatus .....</b>	<b>37</b>
<b>G.3 Description of method .....</b>	<b>37</b>
<b>G.3.1 Sample preparation .....</b>	<b>37</b>
<b>G.3.2 Procedure and evaluation .....</b>	<b>37</b>
<b>G.4 Test report .....</b>	<b>38</b>
<b>Annex H (normative) Indentation resistance .....</b>	<b>39</b>
<b>H.1 General .....</b>	<b>39</b>
<b>H.2 Test apparatus .....</b>	<b>39</b>
<b>H.3 Description of method .....</b>	<b>39</b>

H.3.1	Sample preparation .....	39
H.3.2	Procedure and evaluation .....	39
H.4	Test report .....	39
Annex I (normative) Specific electrical coating resistance .....		40
I.1	General .....	40
I.2	Test apparatus .....	40
I.3	Description of method .....	40
I.3.1	Sample preparation .....	40
I.3.2	Procedure and evaluation .....	40
I.4	Test report .....	41
Annex J (normative) UV resistance .....		42
J.1	General .....	42
J.2	Apparatus .....	42
J.3	Description of method .....	42
J.3.1	Sample preparation .....	42
J.3.2	Measurement procedure .....	42
J.3.3	Evaluation .....	42
J.4	Test report .....	43
Annex K (normative) Thermal ageing resistance .....		44
K.1	General .....	44
K.2	Test apparatus .....	44
K.3	Description of method .....	44
K.3.1	Sample preparation .....	44
K.3.2	Measurement .....	44
K.3.3	Evaluation .....	44
K.4	Test report .....	44
Bibliography .....		46