

DIN EN ISO 18796-1:2021-01 (E)

Petroleum, petrochemicals and natural gas industries - Internal coating and lining of carbon steel process vessels - Part 1: Technical requirements (ISO 18796-1:2018); English version EN ISO 18796-1:2020

Contents		Page
Foreword		v
Introduction		vi
1 Scope		1
2 Normative references		1
3 Terms, definitions and abbreviated terms		3
3.1 Terms and definitions.....		3
3.2 Abbreviated terms.....		4
4 Conformance		5
4.1 Rounding.....		5
4.2 Conformance to this document.....		5
5 Pre-work requirements		6
5.1 General.....		6
5.2 Safety precautions in flammable atmosphere.....		6
5.3 Safety precautions in confined space.....		6
5.4 Safety precautions for blasting and coating works.....		6
5.5 Isolation and ventilation.....		7
5.6 Qualification of coating/lining application and inspection personnel.....		7
6 Coating/lining materials		7
6.1 General.....		7
6.2 Approvals.....		7
6.3 Procedure qualification trial (PQT).....		8
6.4 Pre-production trial (PPT).....		8
6.5 Thickness classifications of coatings.....		9
6.6 Holding (blast) primer.....		9
6.7 Coating and lining systems.....		9
6.8 Material approvals — Coating and lining systems.....		10
7 Surface preparation		11
7.1 General.....		11
7.2 Preparations.....		11
7.3 Patching, grinding, degreasing and washing (for new and rehabilitation works).....		12
7.4 Dry abrasive blasting cleaning.....		12
7.5 Humidity control.....		13
7.6 After blast cleaning.....		14
8 Coating/lining application		14
8.1 General requirements.....		14
8.2 Application of environmental conditions.....		15
8.3 Primer application.....		15
8.4 Coating/lining thickness.....		15
9 Coating/lining application		16
10 Inspection and testing		16
10.1 General requirements.....		16
10.2 Environmental conditions testing.....		17
10.3 Materials and equipment inspection.....		17
10.4 Compressed air and abrasive.....		17
10.5 Surface preparation inspection.....		17
10.6 Coating/lining inspection and testing.....		18

10.6.1	General.....	18
10.6.2	Lining film thickness.....	18
10.6.3	Holiday detection test.....	18
10.6.4	Curing test.....	18
10.7	Adhesion test.....	19
11	Quality requirements.....	19
12	Documentation.....	19
12.1	General.....	19
12.2	Work proposal.....	20
12.3	Work records/reports.....	20
12.4	Inspection and testing reporting.....	20
12.5	Final report.....	20
Annex A (informative) Example of coating/lining work record/data sheet.....		21
Annex B (informative) Example of coating/lining inspection and testing data sheet.....		22
Bibliography.....		23