DIN EN ISO 12211:2013-04 (E)

Petroleum, petrochemical and natural gas industries - Spiral plate heat exchangers (ISO 12211:2012); English version EN ISO 12211:2012

Inhalt

Seite

Foreword 4

Introduction 5

1 Scope 6

2 Normative reference 6

3 Terms and definitions 6

4 General 9

5 Proposal information required 10

6 Drawings and other data requirements 10
6.1 Outline drawings and other supporting data 10
6.2 Information required after outline drawings are reviewed 11
6.3 Reports and records 12

7 Design 13
7.1 General 13
7.2 Design temperatures 13
7.3 Design pressure 13
7.4 Fouling margin 13
7.5 Corrosion allowance 13
7.6 Components 14
7.6.1 Spiral plate 14
7.6.2 Centre core 15
7.6.3 Outer shell 15
7.6.4 Outer shell sealing 15
7.6.5 End covers 16
7.6.6 Nozzles and other connections 16
7.7 Supports 19
7.8 Cover gaskets 19
7.9 Handling devices 20

8 Materials 21
8.1 General 21
8.2 Requirements for carbon steel in sour or wet hydrogen sulfide service 21
8.3 Cover gaskets 21

9 Fabrication 22
9.1 Welding 22
9.2 Heat treatment 22
9.3 Gasket contact surfaces other than nozzle flange facings 22

10 Inspection and testing 23
10.1 Quality assurance 23
10.2 Quality control 23
10.3 Pressure testing 24
10.4 Nameplates 25

11 Preparation for shipment 25
11.1 Protection 25
11.2 Identification 25

Annex A (informative) **Recommended practice** 26

A.1 General **26**
A.2 Reports and records — Guidance to 6.3 ..... **26**
A.3 Design **26**
A.3.1 Cyclic design — Guidance to 7.1.2 ..... **26**
A.3.2 Configurations of spiral heat exchangers — Guidance to 7.1.6 ..... **27**
A.3.3 Fouling margin — Guidance to 7.4 ..... **28**
A.3.4 Corrosion allowance — Guidance to 7.5 ..... **29**
A.3.5 Components **29**
A.3.6 Supports — Guidance to 7.7 ..... **29**
A.4 Preparation for shipment **30**
A.4.1 Protection (cleaning) — Guidance to 11.1 ..... **30**
A.4.2 Cleaning methods **30**

Annex B (informative) **Spiral plate heat exchanger checklist** **32**

Annex C (informative) **Spiral plate heat exchanger data sheets** **33**

Bibliography **42**