ISO 23826:2021-10 (E)

Gas cylinders - Ball valves - Specification and testing

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 Valve description 4

5 Valve design requirements 7
5.1 General 7
5.2 Materials 7
5.3 Valve connections 8
5.4 Mechanical strength 8
5.4.1 Resistance to hydraulic burst pressure 8
5.4.2 Resistance to mechanical impact 9
5.5 Valve operating mechanism 9
5.6 Valve operating device 10
5.7 Leakage 10
5.8 Securing arrangements 10
5.9 Manufacturing tests and examinations 11

6 Type testing 11
6.1 General 11
6.2 Documentation 13
6.3 Test samples 13
6.4 Test report 14
6.5 Test temperatures 14
6.6 Test pressures 14
6.6.1 Valve burst test pressure 14
6.6.2 Valve test pressure 14
6.7 Test gases 14
6.7.1 Gas quality 14
6.7.2 Leak tightness tests 15
6.7.3 Endurance tests 15
6.8 Test schedule 15
6.9 Hydraulic burst pressure test 16
6.10 Flame impingement test 16
6.11 Excessive torque test 16
6.12 Leak tightness test 17
6.12.1 General 17
6.12.2 Internal leak tightness test 17
6.12.3 External leak tightness test 18
6.13 Endurance test 19
6.14 Visual examination 19

7 Marking 19

8 Operating instructions 20

Annex A (normative) Endurance test machine 21

Bibliography 23