ISO 6366:2025-09 (E)

Non-destructive testing - Leak testing - Radioactive tracer methods for pressured vessels and underground pipelines

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Protection against ionizing radiation 1

5 Leak testing using external detection methods 2
5.1 General 2
5.2 Techniques 2
5.2.1 General 2
5.2.2 Pulse-velocity technique 2
5.2.3 Response curve technique 3
5.2.4 Displacement technique 4
5.3 Standard equipment requirements 5

6 Leak testing using internal detection methods 6
6.1 General 6
6.2 PIG technique 6

Annex A (informative) Selection of radioactive tracer 8

Annex B (informative) Calculation of leak rate in pressured vessels 9

Annex C (informative) Calculation of activity of radioactive tracer required in heat exchangers 11

Annex D (informative) Case studies for leak testing 13

Bibliography 16