# ISO 10893-1:2011-04 (E)

## Non-destructive testing of steel tubes - Part 1: Automated electromagnetic testing of seamless and welded (except submerged arc-welded) steel tubes for the verification of hydraulic leaktightness

## Contents

Page


Foreword ..... iv

1 Scope ..... 1

2 Normative references ..... 1

3 Terms and definitions ..... 1

4 General requirements ..... 2

5 Test method ..... 3
5.1 Test techniques ..... 3
5.2 Test equipment ..... 4

6 Reference tube ..... 7
6.1 General ..... 7
6.2 Eddy current concentric coil technique ..... 8
6.3 Eddy current segment coil technique ..... 8
6.4 Eddy current and flux leakage rotating techniques ..... 8
6.5 Flux leakage -- multiple transducer technique ..... 9
6.6 Dimensions of the reference standards ..... 9

7 Equipment calibration and checking ..... 11

8 Acceptance ..... 12

9 Test report ..... 12

Annex A (informative) Guidance notes on limitations of eddy current test method ..... 13

Annex B (normative) Limitations of magnetic flux leakage test method ..... 14