ISO/TR 20896-2:2023-02 (E)

Dentistry - Digital impression devices - Part 2: Methods for assessing accuracy for implanted devices

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Literature review **3**

5 Assessment of accuracy **3**

5.1 General 3

5.1.1 Clinical quality 3

5.1.2 Sources of uncertainty 4

5.1.3 Auxiliary methods 4

5.2 Accuracy 4

5.2.1 General 4

5.2.2 Trueness 4

5.2.3 Precision 5

5.2.4 External reliability 5

5.3 Test objects 5

5.3.1 General 5

5.3.2 Single implant 5

5.3.3 Multiple implants 5

5.4 Reference measurement of test objects 6

5.4.1 Calibrated measures of interest 6

5.4.2 Independent scanning device 6

5.5 Auxiliary devices 6

5.5.1 General 6

5.5.2 Calliper measurement 6

5.5.3 Extra-oral photogrammetry 6

6 Accuracy assessment methods **7**

6.1 Measures of interest 7

6.1.1 General 7

6.1.2 Position of interest 7

6.2 Assessment of trueness 7

6.2.1 Single implant 7

6.2.2 Multiple implants 7

6.3 Assessment of precision 8

6.3.1 Repeated scanning procedures 8

6.3.2 Design analysis 8

6.4 Expression of accuracy 8

6.5 Assessment of reliability 8

7 Test report **9**

7.1 General 9

7.2 Device 9

7.3 Test object 9

7.4 Test method 10

7.5 Test results 10

7.6 Test data 10

Annex A (Informative) **Scan body for accuracy assessment** **11**
Annex B (informative) **Test object — Single implant** **13**
Annex C (informative) **Test object — Multiple implants** **16**
Annex D (informative) **Guidance on evaluating precision and external reliability** **18**
Bibliography **22**