DIN EN ISO 5139:2023-08 (E)

Dentistry - Polymer-based composite machinable blanks (ISO 5139:2023)

Contents

Page

European foreword ... **3**

Foreword ... **4**

Introduction ... **5**

1 Scope ... **6**

2 Normative references ... **6**

3 Terms and definitions ... **6**

4 Characteristics ... **7**
4.1 Requirement ... 7
4.2 Recommendations ... 7
4.2.1 Machining damage ... 7
4.2.2 Machinability ... 7
4.2.3 Bonding properties between blank and holding jig ... 7

5 Sampling ... **7**

6 Test methods ... **7**
6.1 General ... 7
6.2 Size of blanks ... 7
6.2.1 Apparatus ... 7
6.2.2 Procedure ... 7
6.3 Machining damage ... 8
6.3.1 General ... 8
6.3.2 Apparatus ... 8
6.3.3 Water ... 8
6.3.4 Preparation of test specimens ... 8
6.3.5 Procedure ... 9
6.3.6 Expression of results ... 9

7 Packaging and labelling ... **10**
7.1 Packaging ... 10
7.2 Labelling ... 10
7.2.1 General ... 10
7.2.2 Labelling of outer pack ... 11
7.2.3 Labelling of polymer-based composite machinable blank ... 11

8 Instructions for use ... **11**

Annex A (informative) **Preparation method of control specimen for flexural strength** ... **13**

Annex B (informative) **Milling design of test specimen for machining damage** ... **18**

Annex C (informative) **Test method to determine the bonding properties between blank and holding jig** ... **19**

Bibliography ... **23**