DIN EN ISO 16610-22:2026-12 (E)

Geometrical product specifications (GPS) - Filtration - Part 22: Linear profile filters: Spline filters (ISO 16610-22:2026)

Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Characteristics of the spline filter for open profiles ... **3**
4.1 General ... 3
4.2 Filter equations ... 3
4.2.1 Determination of the large-scale lateral component ... 3
4.2.2 Determination of the small-scale lateral component ... 4
4.3 Transmission characteristics ... 5
4.3.1 Transmission characteristic for the large-scale lateral component ... 5
4.3.2 Transmission characteristic for the small-scale lateral component ... 6

5 Characteristics of the spline filter for a closed profile ... **7**
5.1 General ... 7
5.2 Filter equations ... 7
5.2.1 Determination of the large-scale lateral component ... 7
5.2.2 Determination of the small-scale lateral component ... 8
5.3 Transmission characteristics ... 8
5.3.1 Transmission characteristic for the large-scale lateral component ... 8
5.3.2 Transmission characteristic of the small-scale lateral component ... 9

6 Series of nesting index values ... **10**

7 Tension parameter β ... **10**

8 Implementation ... **10**

9 Filter designation ... **11**

Annex A (informative) **Examples for the application of the spline filter** ... **12**

Annex B (informative) **Influence of the tension parameter β** ... **15**

Annex C (informative) **Relationship to the filtration matrix model** ... **21**

Annex D (informative) **Relationship to the GPS matrix model** ... **22**

Bibliography ... **23**