

ISO 18669-2:2025-02 (E)

Internal combustion engines - Piston pins - Part 2: Inspection measuring principles

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Measurement principles	4
4.1 General measuring conditions	4
4.2 Characteristics and measurement principles	4
4.2.1 Outside diameter, d_1	4
4.2.2 Cylindricity of the outside diameter, d_1	5
4.2.3 Circularity of the outside diameter, d_1	5
4.2.4 Circumferential waviness	5
4.2.5 Edge drop-off, b, c	6
4.2.6 Inside diameter, d_2, d_4	6
4.2.7 Concentricity of inside diameter (ID) relative to outside diameter (OD)	6
4.2.8 Length, l_1	6
4.2.9 Gauge length, l_5	7
4.2.10 Runout of the end faces, s	7
4.2.11 End face concavity, h_1 , and end face step, h_2	7
4.2.12 End face diameter, d_6	8
4.2.13 Outside-edge profile	8
4.2.14 Inside chamfer, t_1	8
4.2.15 Tapered bore diameter, d_3	8
4.2.16 Tapered bore angle, α	8
4.2.17 Runout tapered bore, e	8
4.2.18 Roughness	9
4.2.19 Carburised and nitrided case depth	9
4.2.20 Core hardness	9
4.2.21 Peripheral surface hardness	10
4.2.22 Volume change	10
4.2.23 Material defects	10
4.2.24 Residual magnetism	12
4.2.25 Visual defects	12
4.2.26 Grinder burn	12
4.2.27 Streaks on bore surface	12
Bibliography	13