

ISO 18669-2:2020-04 (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	Measuring principles	4
4.1	General measuring conditions	4
4.2	Characteristics and measuring 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	6
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	7
4.2.9	Gauge length, l_5	7
4.2.10	Runout of the end faces, s	8
4.2.11	End face concavity, h_1 , and end face step, h_2	8
4.2.12	End face diameter, d_6	8
4.2.13	Outside-edge profile	8
4.2.14	Inside chamfer, t_1	9
4.2.15	Tapered bore diameter, d_3	9
4.2.16	Tapered bore angle, α	9
4.2.17	Runout tapered bore, e	9
4.2.18	Roughness	9
4.2.19	Carburised and nitrided case depth	10
4.2.20	Core hardness	10
4.2.21	Peripheral surface hardness	10
4.2.22	Volume change	11
4.2.23	Material defects	11
4.2.24	Residual magnetism	12
4.2.25	Visual defects	13
4.2.26	Grinder burn	13
4.2.27	Streaks on bore surface	13
Bibliography		14