

ISO 4156-3:2005-10 (E)

Straight cylindrical involute splines - Metric module, side fit - Part 3: Inspection

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Symbols and abbreviated terms	2
5	Reference conditions	3
6	Quality features	4
6.1	General	4
6.2	Size	4
6.3	Location	4
6.4	Form	5
7	Methods of inspection	5
7.1	Size	5
7.2	Location	7
7.3	Form	9
8	Measurements with balls or pins	9
8.1	General	9
8.2	Selection of balls or pins	10
8.3	Use and marking of pins	10
8.4	Statistical actual tolerance limit STA	10
8.5	Calculation of ball or pin diameter (DRe or DRi)	13
8.6	Calculation of dimensions for ball or pin inspection (part and gauge inspection)	15
9	Measurement over k teeth -- External splines (W)	19
9.1	Calculation of W	19
9.2	Choice of k	20
10	Gauges	21
10.1	Generalities	21
10.2	Length of measuring part of gauges	22
10.3	Manufacturing tolerances for spline gauges (see Tables 8, 9 and 10)	24
10.4	Values of deviation allowances of spline gauges	27
10.5	Inspection of gauges	27
10.6	Dimensions, designation and marking of gauges	29
11	Measurement of spline deviations	40
11.1	General	40
11.2	Total profile deviation F	40
11.3	Total cumulative pitch deviation Fp	40
11.4	Total helix deviation F	40