

ISO 15654:2004-05 (E)

Fatigue test method for transmission precision roller chains

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Symbols	2
4	Principle	3
5	Apparatus	3
5.1	Testing machine	3
5.2	Test fixtures	4
6	Test specimens	4
7	Test procedure	4
7.1	Test forces	4
7.2	Conformity test	6
7.3	Staircase test	7
8	Staircase test data analysis	8
8.1	Data	8
8.2	Plotting staircase data	8
8.3	Statistical calculations	9
9	Report of test results	9
9.1	Test chain information	9
9.2	Test equipment and procedures	9
9.3	Test results for conformity and staircase tests	10
Annex A (informative) Survival test with abridged Probit analysis		11
Annex B (informative) Combined test method		15
Annex C (informative) Justification for adding one step to fatigue limit in staircase analysis		21
Annex D (informative) Adding an additional "phantom" point at the end of staircase test		24
Annex E (informative) Reporting fatigue test results		25
Annex F (informative) Establishing chain application fatigue ratings		32
Annex G (informative) Extrapolating fatigue strength from 3 ××× 10⁶ cycles to 10⁷ cycles		38
Annex H (informative) Finite life testing and data analysis		42
Bibliography		47