

Lifts for the transport of persons and goods - Part 34: Measurement of lift ride quality

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Measuring instrumentation	3
4.1 General	3
4.2 Characteristics	3
4.3 Processing of vibration data	4
4.4 Environmental effects	4
4.5 Sound measurement requirements	4
4.6 Calibration requirements	4
4.6.1 General	4
4.6.2 Vibration measuring system	4
4.6.3 Acceleration measuring system	5
4.6.4 Sound measuring system	5
5 Evaluation of ride quality	5
5.1 Boundaries of calculation	5
5.2 Acceleration and deceleration	6
5.2.1 General	6
5.2.2 Maximum acceleration and deceleration	7
5.2.3 A95 acceleration and deceleration	7
5.3 Jerk	7
5.3.1 General	7
5.3.2 Maximum jerk	7
5.4 Vibration	8
5.4.1 General	8
5.4.2 Horizontal vibration: x- and y-axes	9
5.4.3 Vertical vibration: z-axis	9
5.5 Velocity	10
5.5.1 General	10
5.5.2 Maximum velocity	10
5.5.3 V95 velocity	11
5.6 Sound	11
6 Procedure and expression of results	12
6.1 Preparation for measurement and expression of results	12
6.1.1 General	12
6.1.2 Auxiliary car equipment	12
6.1.3 Auxiliary landing equipment	12
6.1.4 Building plant and equipment	12
6.2 Location of transducers	12
6.2.1 General	12
6.2.2 Coupling of instrumentation to floor	13
6.3 Personnel	14
6.4 Measurement process	14
6.5 Reporting of results	15
Annex A (normative) Calculation of peak-to-peak vibration levels	16
Annex B (normative) Calculation of constant and non-constant acceleration regions	17
Bibliography	18