

DIN EN ISO 4180:2020-03 (E)

Packaging - Complete, filled transport packages - General rules for the compilation of performance test schedules (ISO 4180:2019)

Contents	Page
European foreword	3
Foreword	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Hazard	6
5 Preparation of the test schedule	7
6 Test method	11
6.1 The laboratory atmosphere	11
6.2 Specimens	11
6.2.1 Content of specimens	11
6.2.2 Number of specimens	11
6.2.3 Degradation of specimen	11
6.2.4 Identification of specimen	11
6.3 Conditioning	11
6.4 Vibration test	12
6.4.1 General	12
6.4.2 Vertical random vibration test in general transportation	12
6.4.3 Sinusoidal vibration test in general transportation	13
6.4.4 Random vibration test in rough road transportation	14
6.4.5 Sinusoidal vibration test in rough road transportation	15
6.4.6 Stacked vibration test	16
6.5 Drop test	16
6.5.1 Testing classification (common for free-fall test and rotational edge drop test)	16
6.5.2 Free-fall test (applies to manual handling)	16
6.5.3 Rotational drop test (applies to mechanical handling)	17
6.5.4 Horizontal impact test	18
6.6 Compression test	18
6.6.1 Test apparatus and test method	18
6.6.2 Compression test using a compression tester	18
6.6.3 Stacking load tests using a static load	20
6.7 Temperature and humidity environmental test	22
6.8 Low-pressure test	23
7 Test report	23
Bibliography	25