

# DIN EN ISO 22675:2025-10 (E)

## Prosthetics - Testing of ankle-foot devices and foot units - Requirements and test methods (ISO 22675:2024)

---

<b>Contents</b>		<b>Page</b>
Foreword		vi
Introduction		vii
<b>1</b>	<b>Scope</b>	<b>1</b>
<b>2</b>	<b>Normative references</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions</b>	<b>2</b>
<b>4</b>	<b>Symbols</b>	<b>3</b>
<b>5</b>	<b>Strength and related performance requirements and conditions of use</b>	<b>3</b>
<b>6</b>	<b>Coordinate system and test configurations</b>	<b>4</b>
6.1	General	4
6.2	Origin and axes of the coordinate system	4
6.3	Reference points	5
6.4	Test force $F$	6
6.5	Line of application of test force $F$	6
6.6	Lines of action of resultant reference forces $F_{R1}$ and $F_{R2}$	6
6.7	Longitudinal axis of the foot and effective ankle joint centre	6
6.7.1	General	6
6.7.2	Longitudinal axis of the foot	6
6.7.3	Effective ankle-joint centre $C_A$	6
<b>7</b>	<b>Test loading conditions and test loading levels</b>	<b>8</b>
7.1	Test loading conditions	8
7.2	Test loading levels and Test Ranges (R)	8
<b>8</b>	<b>Values of test forces, dimensions and cycles</b>	<b>9</b>
<b>9</b>	<b>Compliance</b>	<b>17</b>
9.1	General	17
9.2	Particular arrangements and requirements concerning the part required to connect an ankle-foot device or foot unit to the remainder of a prosthetic structure	18
9.2.1	Arrangements for testing	18
9.2.2	Requirements for claiming compliance	18
9.3	Number of tests and test samples required to claim compliance with this document	18
9.4	Multiple use of test samples	18
9.4.1	General	18
9.4.2	Restriction	19
9.5	Testing at particular test loading levels not specified in this document	19
<b>10</b>	<b>Test samples</b>	<b>20</b>
10.1	Selection of test samples	20
10.1.1	General	20
10.1.2	Selection of ankle-foot devices and foot units of appropriate size of foot	20
10.2	Types of test sample	21
10.2.1	Complete structure	21
10.2.2	Partial structure	21
10.3	Preparation of test samples	21
10.4	Identification of test samples	21
10.5	Alignment of test samples	22
10.6	Worst-case alignment position of test samples	22

<b>11</b>	<b>Responsibility for test preparation</b>	<b>24</b>
<b>12</b>	<b>Test submission document</b>	<b>25</b>
12.1	General requirements	25
12.2	Information required for test samples	25
12.3	Information required for tests	26
12.3.1	General	26
12.3.2	For all tests	26
12.3.3	For the static proof test and the static ultimate strength test	26
12.3.4	For the static ultimate strength test	26
12.3.5	For the cyclic test	26
<b>13</b>	<b>Equipment</b>	<b>27</b>
13.1	General	27
13.2	End attachments	27
13.2.1	General	27
13.2.2	Proof test of end attachments	27
13.3	Jig	29
13.4	Test equipment	30
13.4.1	Test equipment to perform static heel and forefoot loading	30
13.4.2	Test equipment to perform cyclic loading	31
<b>14</b>	<b>Accuracy</b>	<b>37</b>
14.1	General	37
14.2	Accuracy of equipment	38
14.3	Accuracy of procedure	38
<b>15</b>	<b>Test principles</b>	<b>38</b>
15.1	General	38
15.2	Static test procedure	39
15.3	Cyclic test procedure	42
<b>16</b>	<b>Test procedures</b>	<b>42</b>
16.1	Test loading requirements	42
16.1.1	Preparation for test loading	42
16.1.2	Test loading conditions	45
16.2	Static proof test	46
16.2.1	Test method	46
16.2.2	Performance requirement	48
16.2.3	Compliance conditions	48
16.3	Static ultimate strength test	50
16.3.1	Test method	50
16.3.2	Performance requirements	52
16.3.3	Compliance conditions	52
16.4	Cyclic test	53
16.4.1	Test method	53
16.4.2	Performance requirements	56
16.4.3	Compliance conditions	56
16.5	Separate static test in torsion	59
16.5.1	General	59
16.5.2	Purpose of test	59
16.5.3	Test method	59
16.5.4	Performance requirements	60
16.5.5	Compliance conditions	60
<b>17</b>	<b>Test laboratory/facility log</b>	<b>61</b>
17.1	General requirements	61
17.2	Specific requirements	61
<b>18</b>	<b>Test report</b>	<b>61</b>
18.1	General requirements	61
18.2	Specific requirements	62
18.3	Options	62

<b>19</b>	<b>Classification and designation</b> .....	<b>62</b>
19.1	General.....	62
19.2	Example of classification and designation.....	62
<b>20</b>	<b>Identifier</b> .....	<b>63</b>
20.1	General.....	63
20.2	Identifier layout.....	63
20.3	Identifier placement.....	63
<b>Annex A</b> (informative)	<b>Reference data for the specification of the test loading conditions and test loading levels of this document</b> .....	<b>64</b>
<b>Annex B</b> (informative)	<b>Guidance on the application of an alternative static ultimate strength test</b> .....	<b>73</b>
<b>Annex C</b> (informative)	<b>Summary of the records entered in the test laboratory/facility log</b> .....	<b>74</b>
<b>Annex D</b> (informative)	<b>Information on ISO/TR 22676</b> .....	<b>79</b>
<b>Annex E</b> (informative)	<b>Background data (reduced) of the six-minute walk test for adults</b> .....	<b>90</b>
<b>Bibliography</b> .....		<b>91</b>