Technical Report No. 68.190.16.01266.01C.1

Rev. 00

Dated 2016-06-28

Client:	SPACIO VINCOLO SL
Manufacturing place:	/
Test subject:	Product: D00220MF Type: D00220MF
Test specification:	EN1335-1:2000; EN1335-2:2009; EN1335-3:2009
Purpose of examination:	Test according to the client's requirement.
Test result:	PASS Details see the test result in report Clause 3.

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1 Description of the test subject

1.1 Function

☒ Manufacturer's specification for intended use:
Type of product: D00220MF
Type designation: D00220MF

1.2 Technical Data

Height: 918 mm -1028 mm
Width: 640 mm
Depth: 605 mm
Net weight: 12.5 kg

1.3 Sample photos

2 Order

2.1 Date of Purchase Order, Customer's Reference

2016-06-01

2.2 Receipt of Test Sample, Location

2016-06-01, TÜV SÜD Certification and Testing (China) Co., Ltd. Guanlan lab
No.11, Jukeng Rd., Juling Village, Jutang District, Guanlan, Longhua New District, Shenzhen, 518110, P.R.China
Revised sample was received at 2016-06-06

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2.3 Date of Testing

From 2016-06-02 to 2016-06-24
Retest from 2016-06-06 to 2016-06-28

2.4 Location of Testing

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No.11, Jukeng Rd., Juling Village, Jutang District, Guanlan, Longhua New District, Shenzhen, 518110, P.R.China

2.5 Points of Non-compliance or Exceptions of the Test Procedure

None

3 Test Results

Abbreviations:
P(ass) =passed F(ail) = failed NA = not applicable NT = not tested

EN1335-1:2000			
Clause	Requirement ~Test	Measuring result -Remark	Verdict
6	**Determination of dimensions** The dimension of the chair shall comply with one of the types of annex A.	Comply types C	P
6.1	**Seat height a**	387mm-480mm	P
6.2	**Seat depth b**	440mm	P
6.3	**Depth c of seat surface**	505mm	P
6.4	**Seat width d**	520mm	P
6.5	**Inclination e of seat surface**	-2^{o} -- -22^{o}	P
6.6	**Height f of the back supporting point "S" above the seat surface**	210mm	P
6.7	**Height g of the back pad**	475mm	P
6.8	**Height h of the upper edge of the back rest above the seat surface**	523mm	P
6.9	**Back rest width i**	487mm	P
6.10	**Horizontal radius k of back rest**	490mm	P
6.11	**Back rest inclination adjustment range L("tilt")**	19^{o}	P
6.12	**Length n of the useful area of the arm rest**	237mm	P
6.13	**Width o of the useful area of the arm rest**	80mm	P
6.14	**Height p of the useful area of the arm rest above the seat**	198mm-271mm	P
6.15	**Distance q from the front of the useful area of the arm rests to the front edge of the seat**	140mm	P
6.16	**Clear width r between the useful area**	465mm	P

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	of the arm rests		
6.17	**Maximum offset s of the under frame**	350mm	P
6.18	**Stability dimension t**	270mm	P

Annex A (normative) Dimensional requirements

Annex A (normative)

Dimensional requirements

Table A.1 - Dimensions of an office work chair

Dimensions in millimetre

Dimension[symbol]		Adjustability	Type A (-) allow.	Type A Min.[a]	Type A Max.[a]	Type A (+) allow.	Type B (-) allow.	Type B Min.[a]	Type B Max.[a]	Type B (+) allow.	Type C (-) allow.	Type C Min.[a]	Type C Max.[a]	Type C (+) allow.
SEAT														
seat height[b]	*a*	adjustable	yes	400	510	yes	yes	420	510	yes	yes	420	480	yes
		adjustment range	no	120	⊕	yes	no	100	⊕	yes	no	80	⊕	yes
seat depth	*b*	non-adjustable		no	no		no	380	440	no	no	380	⊕	yes
		adjustable	yes	400	420	yes	yes	400	420	yes	yes	400	⊕	yes
		adjustment range	no	50	⊕	yes	no	50	⊕	yes		⊕	⊕	
depth of seat surface	*c*		no	380	⊕	yes	no	380	⊕	yes	no	380	⊕	yes
seat width	*d*		no	400	⊕	yes	no	400	⊕	yes	no	400	⊕	yes
inclination of seat surface	*e*	non-adjustable		no	no		no	-2°	-7°	no	no	-2°	-7°	no
		adjustable	yes	-2°	-7°	yes	yes	-2°	-7°	yes	yes	-2°	-7°	yes
		adjustment range	no	6°	⊕	yes		⊕	⊕			⊕	⊕	
BACK REST														
Height of the back supporting point "S" above the seat surface	*f*	non-adjustable		no	no		no	170	220	no	no	170	220	no
		adjustable	yes	170	220	yes	yes	170	220	yes		⊕	⊕	
		adjustment range	no	50	⊕	yes	no	50	⊕	yes		⊕	⊕	
height of the back pad - adjustable in height	*g*		no	220	⊕	yes	no	220	⊕	yes		⊕	⊕	
- non-adjustable in height			no	260	⊕	yes	no	260	⊕	yes	no	260	⊕	yes
height of the upper edge of the back rest above the seat surface	*h*		no	360	⊕	yes	no	360	⊕	yes	no	360	⊕	yes
back rest width	*i*		no	360	⊕	yes	no	360	⊕	yes	no	360	⊕	yes
horizontal radius of the back rest	*k*		no	400	⊕	yes	no	400	⊕	yes	no	400	⊕	yes
back rest inclination	*l*	adjustment range	no	15°	⊕	yes	no	15°	⊕	yes		⊕	⊕	

Table A.1 - Dimensions of an office work chair (concluded)

Dimension[symbol]		Adjustability	Type A (-) allow.	Type A Min.[a]	Type A Max.[a]	Type A (+) allow.	Type B (-) allow.	Type B Min.[a]	Type B Max.[a]	Type B (+) allow.	Type C (-) allow.	Type C Min.[a]	Type C Max.[a]	Type C (+) allow.
ARM REST														
length of arm rest	*n*		no	200	⊕	yes	no	200	⊕	yes	no	200	⊕	yes
width of arm rest[c]	*o*		no	40	⊕	yes	no	40	⊕	yes	no	40	⊕	yes
height of arm rest above the seat	*p*	non adjustable	no	200	250	no	no	200	250	no	no	200	250	no
		adjustable	yes	200	250	yes	yes	200	250	yes	yes	200	250	yes
distance from the front of the arm rests to the front edge of the seat surface[d]	*q*		no	100	⊕	yes	no	100	⊕	yes	no	100	⊕	yes
clear width between the arm rests[e]	*r*		no	460	510	no	no	460	510	no	no	460	⊕	yes
UNDERFRAME														
maximum offset of the underframe (anti-stumbling-dimension)	*s*		yes	⊕	365[f]	no	yes	⊕	365[f]	no	yes	⊕	x[g]+50	no
stability dimension[h]	*t*		no	195	⊕	yes	no	195	⊕	yes	no	195	⊕	yes

[a] For adjustable functions the Min. and Max. values must be obtained.
[b] The minimum range of adjustment is suitable for working surface heights between at least 650 mm and 780 mm. For some part of the user group a foot rest is required.
[c] The requirement applies over the minimum value *n* (see clause 6.13).
[d] The requirement applies from a height of 170 mm above point "A" (see clause 6.15).
[e] The requirement applies to 3/4 of the seat depth *b* (measured from the front edge of the seat) with the back rest in its foremost position (see clause 6.16).
[f] If swivel castors are fitted the requirement is 415 mm.
[g] x is the maximum horizontal distance between parts of the upper part of the chair and the axis of rotation (see clause 6.).
[h] See clause 4.
⊕ No requirement specified.

EN1335-2:2009			
Clause	Requirement ~Test	Measuring result -Remark	Verdict
4	**Safety requirements**		---

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4.1	**General design requirements**		---
4.1.1	**Corners and edges, trapping, pinching and shearing** The chair shall be so designed as to minimise the risk of injury to the user. All parts of the chair with which the user comes into contact during intended use, shall be so designed that physical injury and damage to property are avoided. These requirements are met when: a) The safety distance of accessible movable parts is either ≤8mm or ≥25mm in any position during movement; b) Accessible corners are rounded with minimum 2mm radius; c) The edges of the seat, back rest and arm rests which are in contact with the user when sitting in the chair are rounded with minimum 2mm radius; d) The edges of handles are rounded with minimum 2mm radius in the direction of the force applied; e) All other edges are free from burrs and rounded or chamfered; f) The ends of accessible hollow components are closed or capped.	Meet requirement.	P
4.1.2	**Adjusting devices** Movable and adjustable parts shall be designed so that injuries and inadvertent operation are avoided. It shall be possible to operate the adjusting devices from sitting position in the chair.	Meet requirement.	P
4.1.3	**Connections** It shall not be possible for any load bearing part of the chair to come loose unintentionally.	Meet requierment.	P
4.1.4	**Avoiding of soiling** All parts which are lubricated to assist sliding (greasing, lubricating, etc.) shall be designed to protect users from lubricant stains when in normal use.	Meet requierment.	P
4.2	**Test sequence** The chair shall be tested in the following sequence of tests of EN 1335-3:		---

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	a) Stability tests (optional); b) Rolling resistance test (optional); c) Seat and back rest tests; d) Foot rest static load test; e) Arm rests durability test; f) Armrest downward static load test – central (see table A.2, Footnote a); g) Stability test; h) Arm rest downward static load test – central (see table A.2, Footnote b); i) Rolling resistance test		
4.3	**Stability during use** The chair shall not overbalance under the following conditions: a) by pressing down on the front edge of the seat surface in the most adverse position; b) by leaning out over the arm rests c) by leaning against the back rest; d) by sitting on the front edge The first requirement is fulfilled if the chair does not overbalance when tested according to EN 1335-3:2009, 7.1.1 and under the given forces and test cycles according to table A.1 does not tip over. The second and forth requirements are fulfilled if the chair does not overbalance when tested according to EN 1335-3:2009, 7.1.2, 7.1.3, 7.1.4 and 7.1.5 and under the given forces and test cycles according to table A.1 does not tip over. The third requirement is fulfilled if the chair does not overbalance when tested according to EN 1335-3:2009, 7.1.6 oder 7.1.7 and under the given forces and test cycles according to table A.1 does not tip over. The forces and test cycles in table A.1 are to be applied for the setting of the chair components table 1 counts in the appendix of this test program.	Meet requirement.	P
4.4	**Rollig resistance of the unloaded chair** The unloaded chair shall not roll unintentional. This requirement is met when: a) the castors are of identical construction; b) the rolling resistance ≥ 12 N when tested according to EN 1335-3:209,7.4	Meet requirement. Caster have spring locking device.	P

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4.5	**Strength and fatigue strength** The chair must be constructed in such a way that he shows no injury risk for the user under the following conditions: a) Put concentric and external-concentric on the seat; b) to seats and moving forwards, to the back and aside; c) leaning out over the armrest; d) Support on the armrest to get up. The requirements count as fulfilled if the test is carried out accordingly EN 1335-3:2009, 7.2.1, 7.2.2, 7.2.6, 7.3.1 and 7.3.2 and under the given forces and test cycles according to table A.2 and: e) no chair part, component or connecting element has broken; f) itself no connecting element has solved which must stick; g) itself no weight-bearing element significantly has deformed and the chair his functions after distance of the test loads fulfilled h) After the test of EN 1335-3:2009, 7.2.3 and under the given forces and test cycles according to table A.2 the armrests show no damages.	Meet requirement.	P
5	**Information for use** Each chair shall be accompanied by information for use in the language of the country in which it will be delivered to the end user. It shall contain at least the following details: a) Information regarding the intended use; b) Instruction regarding possible adjustments and chair type (see EN 1335-1:2000) c) Instruction for operating the adjusting mechanisms; d) Instruction for the care and maintenance of the chair; e) Information regarding all adjustments; f) Information for chairs with seat height adjustments with energy accumulators that only trained personnel may replace or repair seat height adjustment components with energy accumulators; g) Information on the choice of castors in relation to the floor surface.	Information for use was not provided.	NT

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EN1335-3:2009			
4.5	**Sequence of testing** All applicable tests shall be carried out on the same sample. The sequence of the safety tests shall be as specified in EN1335-2:2009,4.2 If functional tests shall be carried out, this shall be done in the sequence of tableC.1 after completing all the safety tests specified in EN 1335-2.		---
4.6	**Inspection and assessment of results** After completion of each test, inspect the unit again. Record any changes including: a) Fracture of any component or joint; b) Loosening of any joint intended to be rigid, which can be demonstrated by hand pressure; c) Deformation or wear of any part or component such that its function is impaired; d) Loosening of any means of fixing components to the unit; e) Changes that may affect stability;	Meet requirement.	P
7	**Test methods**		---
7.1	**Stability** Position the chair on the test surface whit its components as specified in 4.1 and table1. Record whether the chair overturns during the tests in 7.1.1 to 7.1.7.	See Table A.1 and Table 1 at page 13, 15.	---
7.1.1	**Forwards overbalancing** - 27 kg needs to hang freely, so that the chair not tips.	Fulfilled.	P
7.1.2	**Forwards overbalancing** position the chair with two adjacent supporting points on the front against the stops. Apply by means of the stability loading device a vertical force F1 acting 60 mm from the front edge of the load bearing structure of the seat at those points most likely to result in overturning. Apply for at least 5s a horizontal outwards force F2 from the point on the seat surface where the vertical force is applied.	Fulfilled.	P
7.1.3	**Forwards overbalancing by chairs with footrest**	Product without footrest.	NA
7.1.4	**Sideways overbalancing for chairs without arm rest**	Product with arm rest.	NA

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7.1.5	**Sideways overbalancing for chairs with arm rest** Position the chair with two adjacent supporting points on one side against the stops. Apply by means of the stability loading device a vertical force F1 acting at a point 100mm from the froce and aft centre line of the seat at the side where the supporting points are restrained and between 175mm and 250mm forward of the rear edge of the seat. Apply a vertical downward force F2 acting at points on the arm rest which is on the same side as the restrained supporting points up to a maximum 40mm inwards from the outer edge of the upper surface of the arm rest. But not beyond the centre of the arm rest, and at the most adverse position along its length. Apply a horizontal sideways force F3 outward from the same point for at least 5s.	Fulfilled. See table A.1 at page 13.	P
7.1.6	**Rearwards overbalancing of chairs without inclinable back rest** Position the chair with two adjacent supporting points on the back against the stops. When an independent lumbar adjustment is fitted it shall be set in the most adverse configuration. A vertical force F1 shall be applied at point A and a horizontal force F2 shall be applied at point B. If the back rest pad is pivoting around a horizontal axisabove the height of the eat and is free to move, the horizontal force shall be applied on the axis. If height adjustable, the axis shall be set as close as possible to 300mm above pointA.	Fulfilled. See table A.1 at page 13.	P
7.1.7	**Rearwards overbalancing of chairs with inclinable back rest** - The chair will be loaded with 13 slabs	Fulfilled. See table A.1 at page 13.	P
7.2	**Staic load tests** Position the chair and its components as specified in 4.1 and table 1 on the test surface	See table A.2 and Table 1 at page 14-15.	---
7.2.1	**Testing with static load of the seat overbalancing** The small seat-pressure stamp is to be positioned in the application of force point "F" or "J". A vertically downwards affected strength F1 is to be raised by the centre of the pressure stamp.	Fulfilled. See table A.2 at page 14.	P
7.2.2	**Combined Testing with static load the seat and back rest**	Fulfilled. See table A.2 at page 14.	P

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	Of a regression of the chair is by stop devices which Roll behind both neighbouring supporting points (rolls or sliders) are attached in the back of the chair. The chairs which dispose of locking device for the seat and/or the inclination of the back support are to be checked first half of the cycles with barred device and afterwards other cycle half with unbarred device. In the first cycle half the back support must be in straight position. A vertical strength F1 is to be raised by the seat-pressure stamp in point "A" . The seat is to be loaded furthermore and to raise a strength F2 by the centre of the back supports-pressure stamp in the point "B". With full load the strength must attack under a corner of 90 ° ± 10 ° to the back support level. If the chair threatens to tip, the strength working on the back support is to be reduced and to give the really working strength. First the back support is to be relieved and afterwards the seat.		
7.2.3	**Testing the arm rests by meaning of downwards affected the static load concentric** The armrests are by meaning of the local pressure stamps vertically. The application of force points must be in the centre of the armrest length and both ways centred. The strength is to be raised on both armrests at the same time.	Fulfilled. See table A.2 at page 14.	P
7.2.4	**Testing the arm rests by meaning of downwards affected the static load forward** The armrests are by meaning of the local pressure stamps vertically. The application of force points must show a distance to the leading edge of 75 mm and be on both sides centred. The strength is to be raised on both armrests at the same time.	Fulfilled. See table C.1 at page 14.	P
7.2.5	**Testing the arm rests by meaning of sideways affected the static load forward** A horizontally outwardly working strength is to be raised on both armrests at the same time. The forces are to be raised on the edge of the armrest in the point along the armrest which causes a failure, but at least 75 mm of forward or backward edge in the earliest one remotely	Fulfilled. See table C.1 at page 14.	P
7.2.6	**Testing the footrest by meaning of the static load**	Product without footrest.	NA

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7.3	**Durability tests** Position the chair and its components as specified in 4.1 and table 1 on the test surface except for the castor and chair base durability test (7.3.5).		---
7.3.1	**Durable Functionality of the seat and the back rest** The upper top of the chair is to be positioned in such a way that the middle of the back support concentric between two neighbouring Abstützpunkten (or planing hulls) of the underframe considers and to itself in this support points stop devices consider. The seat load is to be raised under use of the seat-pressure stamp vertically. The back support strength must be raised under a corner of 90 ° ± 10 ° to the back support if this is fully loaded under use of the back supports-pressure stamp. Chairs with locking device (s) for the seat and/or inclination movements of the back support are to be checked in step 2 half of the cycles first with the device (s) in locking positions and afterwards in the second cycle half in unbarred position. In the first cycle half the back support must be in straight position. With the steps 3, 4 and 5 the mechanism must be put freely flexibly. A cycle must exist of the application and removing the strength / forces in the suitable application of force points. Every step must be concluded, before the next is to be begin. The strength working on the seat is to be raised first and to maintain, while the back support strength is raised. If the back support about the height of the seat is stored horizontally pendulous, the horizontal strength must be raised in the fulcrum. If the back support is heights-adjustable, the fulcrum must be put so near as possible to 300 mm about point "A" . If the fulcrum on 300 mm cannot be put, the strength is to be adapted in such a way that she generates the same moment of curving. All chairs are to be tested to the steps 1 to 5 accordingly (see table 2).	Fulfilled. See table A.2 at page 14.	P

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	Tabelle 2 — Prüfung der Dauerfunktionstüchtigkeit von Sitzfläche und Rückenlehne **Schritt** / **Kraftangriffspunkt (siehe Bild 6)** 1 — A 2 — C — B 3 — J — E 4 — F — H 5 — D — G		
7.3.2	**Durable Functionality of the arm rests** On the armrests is concurrent and to raise a strength in the points cyclically in each case which lie 100 mm behind the foremost point of the armrest length. A strength from (10 ± 5) N with the pressure stamp is to be raised in support. With this strength the testing set is so put that every "arm" of the testing set shows a corner of 10 ° ± 1 ° to the perpendiculars. The length of the "arm" of the testing set must amount to 600 mm ± 10 mm. The armrests must be freely deformable.	Fulfilled. See table A.2 at page 14.	P
7.3.3	**Swivel test** The underframe of the chair is on a turntable with a test surface to to protect so that the axis of rotation of the chair with the axis of rotation of the table agrees. The upper top of the chair is to be fastened in such a way laxly that the rotation of the underframe is not hindered. The seat is to be loaded in the application of force point "A" with a mass M1 and in the application of force point "C" with a mass of M² or with any equivalent load which leads to the same strength down working on the chair and the same moment of curving. The rotary corner must amount to 360 ° with a test frequency from (10 ± 5) cycles / minute. The rotation direction is to be turned around after every rotation.	Fulfilled. See table C.1 at page 14.	P
7.3.4	**Durable Functionality of the footrest**	Product without footrest.	NA
7.3.5	**Durable Functionality of the casters and the under frame of the chair** This test does not count to chairs with roles which are braked with a load of the chair. The chair is on a turntable with a test surface to put in such a way that the axis of rotation of the chair with the axis of rotation of the table agrees. The seat is to be loaded in point "A" with M1. The underframe is to be protected so that it cannot turn, but the natural movement of	Fulfilled. See table C.1 at page 14.	P

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	the roles is not hindered during the check. The roles must remain freely tiltable, the table must be turned at a speed of 6 cycles minute. The rotary corner goes back from 0 ° to 180 ° and A cycle exists from Forward and a reverse rotation. Alternatively the chair on a device is to be fastened which allows a linear movement from (1,000 ± 250) to mm and shows a test surface after 5.11. The seat is to be loaded in point "A" with M1. The underframe is to be protected so that it cannot turn, but the natural movement of the roles is not hindered during the test. The roles must be freely tiltable; the device must be turned at a speed of 6 cycles minute. A cycle exists from Forward and a regression. REMARK for both alternatives is recommended to carry out the test at an as low as possible speed and with a short break with the change of course.		
7.4	**Testing of rollig resistance of the unloaded chair** The chair is put on the test surface (a steady, horizontal and level surface) and is pulled about a distance of at least 550 mm and is pushed. About the measuring distance must be kept a speed from (50 ± 5) mm / sec. The strength is raised at a height of (200 ± 50) mm above the test surface. As a rolling opposition counts the strength them is required to pull the chair about a distance of 250 mm to 500 mm and to push.	Fulfilled. Caster have spring locking device.	P

Loads, masses and cycles for safety tests

Table A.1 — Loads, masses and cycles for stability tests

Clauses given in EN 1335-3:2009	Test		Loads	Cycle
7.1.1	Front edge overturning	M_1	27 kg	1
7.1.2	Forward overturning	F_1 F_2	600 N 20 N	1
7.1.3	Forward overturning for chairs with foot rests	F_1 F_2	1 100 N 20 N	1
7.1.4	Sideways overturning for chairs without arm rests	F_1 F_2	600 N 20 N	1
7.1.5	Sideways overturning for chairs with arm rests	F_1 F_2 F_3	250 N 350 N 20 N	1
7.1.6	Rearwards overturning of chairs without back rest inclination	F_1 F_2	600 N 192 N	1
7.1.7	Rearwards overturning of chairs with back rest inclination	Number of discs:	13	1

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Table A.2 — Loads and cycles for strength and durability tests

Clauses given in EN 1335-3:2009	Test		Loads	Cycles
7.2.1	Seat front edge static load test	F_1	1 600 N	10
7.2.2	Combined seat and back static load test	F_1	1 600 N	10
		F_2	560 N	
7.2.6	Foot rest static load test	F	1 300 N	10
7.3.1	Seat and back durability			
	Step 1 – Loading Point A	F	1 500 N	120 000
	Step 2 – Loading Point C	F	1 200 N	80 000
	Loading Point B	F	320 N	
	Step 3 – Loading Point J	F	1 200 N	20 000
	Loading Point E	F	320 N	
	Step 4 – Loading Point F	F	1 200 N	20 000
	Loading Point H	F	320 N	
	Step 5 – Loading Point D and G (alternating)	F	1 100 N	20 000
7.3.2	Arm rest durability	F	400 N	60 000
7.2.3	Arm rest downward static load test – central	F	750 N [a]	5
		F	900 N [b]	5

[a] This test shall be carried out before the stability tests
[b] This test shall be carried out after the stability tests

Annex C
(informative)

Loads, masses and cycles for functional tests

The loads, masses and cycles are based upon use for 8 h a day by persons weighing up to 110 kg. For more severe conditions of use increased requirements will be necessary.

Table C.1 — Loads, masses and cycles for functional tests

Clauses given in EN 1335-3:2009	Test		Loads	Cycles
7.2.4	Arm rest downward static load test – front		450 N	5
7.2.5	Arm rest sideways static load test		400 N	10
7.3.3	Swivel test	M_1	60 kg	120 000
		M_2	35 kg	
7.3.4	Foot rest durability		900 N	50 000
7.3.5	Castor and chair base durability	M_1	110 kg	36 000

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Table 1 — Positioning of chair components

Clause	Test	Seat height	Seat	Back rest in height	Back rest in depth	Tilt stiffness adjustment	Castors and base	Arm rest	Foot rest
7.1.1	Front edge overturning	highest position	foremost position	highest position	foremost position	maximum tension	most likely to cause overturning	most likely to cause overturning	
7.1.2	Forward overturning	highest position	foremost position	highest position	foremost position	maximum tension	most likely to cause overturning	most likely to cause overturning	---
7.1.3	forward overturning for chairs with foot rest	highest position	foremost position	lowest position	foremost position	maximum tension	most likely to cause overturning	most likely to cause overturning	most likely to cause overturning
7.1.4	Sideways overturning for chairs without arm rests	highest position	foremost position	highest position	foremost position	maximum tension	most likely to cause overturning	---	---
7.1.5	Sideways overturning for chairs with arm rests	highest position	foremost position	highest position	foremost position	maximum tension	most likely to cause overturning	most likely to cause overturning	---
7.1.6	Rearwards overturning of chairs without back rest inclination	highest position	rearmost position	highest position	rearmost position	minimum tension	most likely to cause overturning	most likely to cause overturning	---
7.1.7	Rearwards overturning of chairs with back rest inclination	highest position	rearmost position	highest position	rearmost position	minimum tension	most likely to cause overturning	most likely to cause overturning	---
7.2.1	Seat front edge static load test	highest position	foremost position	---	---	---	---	---	---
7.2.2	Combined seat and back static load	highest position	most adverse position	highest position	rearmost position	mid range	least likely to cause overturning	---	---
7.2.3	Arm rest downward static load test – central	lowest position	horizontal	---	---	---	---	most likely to cause failure	---
7.2.4	Arm rest downward static load test – front	lowest position	horizontal	---	---	---	---	highest, foremost position	---
7.2.5	Arm rest sideways static load test	lowest position	horizontal	---	---	---	---	highest, widest position	---
7.2.6	Foot rest static load test	---	---	---	---	---	least likely to cause overturning	---	highest position
7.3.1	Seat and back durability	highest position	horizontal	highest position	most likely to cause failure	mid range	90° to the base arm	---	---
7.3.2	Arm rest durability	lowest position	horizontal	---	---	maximum tension	---	highest, widest position	---
7.3.3	Swivel test	highest position	horizontal, foremost position	highest position	rearmost position	---	---	---	---
7.3.4	Foot rest durability	---	---	---	---	---	least likely to cause overturning	---	lowest position
7.3.5	Castor durability	lowest position	horizontal	---	---	---	---	---	---

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--- End of Report ---

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