

Date received: 14/07/14

Date of issue: 31/10/14

Report consists of 7 test reports.

Defects before testing: None

Sample name: FLASH swivel chair

CERANTOLA S.P.A.
VIA GIORGIONE 2-ZONA IND.LE
31037 RAMON DI LORIA (TV)
ITALIA

SAMPLE N° 180504

Overall dimensions: 660 x 660 x 1120 (h) mm

List performed tests:

1. Office work chair: dimensions EN 1335-1:2000 AC:2002
2. General design requirements EN 1335-2:2009, clause 4.1
3. Information for use EN 1335-2:2009, clause 5
4. Seat and back static load test 1335-3:2009 AC:2009, clause 7.2.1-7.2.2
5. Seat and back durability - EN 1335-3:2009 AC:2009 - Clause 7.3.1
6. Stability EN 1335-3:2009 AC:2009, clause 7.1
7. Rolling resistance of unloaded chair EN 1335-3:2009 AC:2009, clause 7.4



This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.

Managing Director
Dr. Andrea Glavon

The sample name and, when relevant, its description, are given by the orderer, and CATAS does not assume responsibility on this matter. This test report relates to the sample submitted for the test and no others. Additions, deletions or alterations are not permitted. This test report must always be reproduced in its entirety. Unless otherwise stated, sampling has been carried out by the orderer.

SAMPLE N° 180504

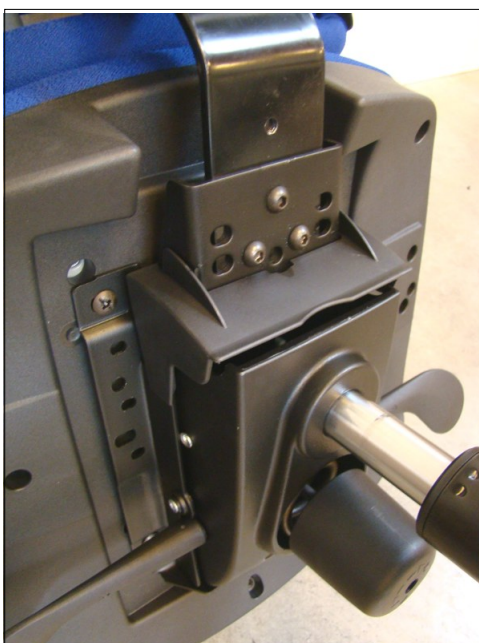
Date of issue: 31/10/14
Sample weight: Not determined
Sample name: FLASH swivel chair



Side view



Rear view



Bottom view

TEST REPORT

180504 / 1

Date received: 14/07/14

Date of test: 23/07/14

Date of issue: 31/10/14



Sample name: FLASH swivel chair

CERANTOLA S.P.A.
VIA GIORGIONE 2-ZONA IND.LE
31037 RAMON DI LORIA (TV)
ITALIA

Office work chair: dimensions EN 1335-1:2000 AC:2002

1. General features

1.1 Seat

depht: - adjustable with
horizontal movement
x fixed

inclination: - fixed
x adjustable

1.2 Backrest

heigth: - fixed
x adjustable
- adjustable lumbar support

inclination: - fixed
x adjustable

1.3 Seat and back synchronized

Yes

This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.

Managing Director
Dr. Andrea Giaron

TEST REPORT

180504 / 1

Date of issue:

31/10/14

Sample name:

FLASH swivel chair

Type of chair: B

Test Results:

All linear dimensions are in mm

symbol	Parameter	requirement	measured	conformity
SEAT				
a	seat height	420 to 510	419,1 ± 0,7* to 537	yes
	adjustment range	100 min	117,9	yes
b	seat depth - non adjustable	380 ÷ 440	430	yes
	seat depth - adjustable	400 to 420	/	/
	adjustment range	50 min	/	/
c	depth of seat surface	380 min	460	yes
d	seat width	400 min	475	yes
e	inclination of seat surface - non adjustable	-2° ÷ - 7°	/	/
	inclination of seat surface - adjustable	-2° to - 7°	2° to - 12°	yes
BACK REST				
f	height of the back supporting point "S" non adjust.	170 ÷ 220	/	/
	height of the back supporting point "S" adjust.	170 to 220	166,2 ± 0,7* to 224,3 ± 0,7*	yes
	adjustment range	50 min	58,1	yes
g	height of the back pad - adjustable in height	220 min	480	yes
	height of the back pad - non adjustable in height	260 min	/	/
h	height of the upper edge of the back rest	360 min	487	yes
i	back rest width	360 min	408	yes
k	horizontal radius of the back rest	400 min	> 400	yes
l	back rest inclination (adjustment range)	15° min	20	yes
ARM REST				
n	length of arm rest	200 min	/	/
o	width of arm rest	40 min	/	/
p	height of armrest - adjustable	200 to 250	/	/
	height of armrest - non adjustable	200 ÷ 250	/	/
q	distance from the front of the arm rest to the front edge of the seat	100 min	/	/
r	clear width between the arm rests	460 ÷ 510	/	/
UNDERFRAME				
s	maximum offset of the underframe	415 max	370	yes
t	stability dimension	195 min	244	yes

*The result is the average of 3 measures

Unless otherwise specified, measurement uncertainties expanded to a confidence level of about 95% are ±5 mm for linear measures, ±2° for angles, ±10mm for the height of the back supporting point "S".

The measurement uncertainties stated in this document have been determined according to UNI CEI ENV 13005:2000. They were estimated as expanded uncertainty obtained multiplying the standard uncertainty by the coverage factor k corresponding to a confidence level of about 95%. Normally k=2.

NOTE: the back supporting point has been determined setting the back rest in its most upright position because the method described in EN 1335-1:2000 clause 3.6 is not applicable.

TEST REPORT

180504 / 2

Date received: 14/07/14

Date of test: 05/08/14

Date of issue: 31/10/14



Sample name: FLASH swivel chair

CERANTOLA S.P.A.
VIA GIORGIONE 2-ZONA IND.LE
31037 RAMON DI LORIA (TV)
ITALIA

General design requirements EN 1335-2:2009, clause 4.1

Requirements	Remarks
a) Parts in contact by user: Distance of accessible movable parts shall be either ≤ 8 mm e ≥ 25 mm in any position during movement.	Yes
b) Corners and edges in contact by user: Minimum radius of corners and edges: 2 mm	Yes
c) Edges of handles: Minimum radius of handle edges: 2 mm	Yes
d) All other edges: Rounded or chamfered:	Yes
e) Ends of hollow components: Closed or capped	Yes
f) It shall be possible to operate the adjusting devices from sitting position in the chair:	Yes
g) It shall not be possible for any load bearing part to come loose unintentionally:	Yes
h) Lubricated parts: All parts wick are lubricated shall be protected	Yes

This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.

Managing Director
Dr. Andrea Glavon

The sample name and, when relevant, its description, are given by the orderer, and CATAS does not assume responsibility on this matter. This test report relates to the sample submitted for the test and no others. Additions, deletions or alterations are not permitted. This test report must always be reproduced in its entirety. Unless otherwise stated, sampling has been carried out by the orderer.

TEST REPORT

180504 / 3

Date received: 14/07/14
Date of test: 27/10/14
Date of issue: 31/10/14



Sample name: FLASH swivel chair

CERANTOLA S.P.A.
VIA GIORGIONE 2-ZONA IND.LE
31037 RAMON DI LORIA (TV)
ITALIA

Information for use EN 1335-2:2009, clause 5

Statement checked	Remarks
Information for use in the language of the country in which the chair will be delivered to the end user.	Italian language
Information regarding the intended use.	Present
Information regarding possible adjustments and chair type	Present
Instruction for operating the adjusting mechanisms.	Present
Instruction for the care and the maintenance of the chair.	Present
Information regarding adjustment of the seat and back rest.	Present
Advice that only trained personnel may replace or repair seat height adjustment components with energy accumulators.	Present
Information on the choice of castors in relation to the floor surface.	Present

This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.

Managing Director
Dr. Andrea Giavon

The sample name and, when relevant, its description, are given by the orderer, and CATAS does not assume responsibility on this matter. This test report relates to the sample submitted for the test and no others. Additions, deletions or alterations are not permitted. This test report must always be reproduced in its entirety. Unless otherwise stated, sampling has been carried out by the orderer.

TEST REPORT

180504 / 4

Date received: 14/07/14
Date of test: 17/09/14
Date of issue: 31/10/14



Sample name: FLASH swivel chair

CERANTOLA S.P.A.
VIA GIORGIONE 2-ZONA IND.LE
31037 RAMON DI LORIA (TV)
ITALIA

Seat and back static load test 1335-3:2009 AC:2009, clause 7.2.1-7.2.2

Seat front edge static load, clause 7.2.1

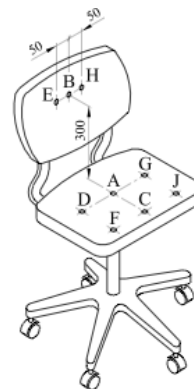
Seat height: highest position
Seat depth: foremost position

Test results:

Seat load N	Number of cycles	Back rest inclination mechanism	Remarks
1.600	10	F	No defects

Seat and back static load test, clause 7.2.2

Seat height: highest position
Seat inclination: horizontal
Back rest in height: highest position
Back rest in depth: rearmost position
Position of castors: perpendicular to the base arms
Tension of mechanism spring: medium



Test results:

Seat load N	Back force N	Number of cycles	Loading point	Back rest inclination mechanism	Remarks
1.600	560	5	A - B	Blocked	No defects
1.600	560	5	A - B	Unlocked	No defects

This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.

Managing Director
Dr. Andrea Giavon

The sample name and, when relevant, its description, are given by the orderer, and CATAS does not assume responsibility on this matter. This test report relates to the sample submitted for the test and no others. Additions, deletions or alterations are not permitted. This test report must always be reproduced in its entirety. Unless otherwise stated, sampling has been carried out by the orderer.

TEST REPORT

180504 / 5

Date received: 14/07/14

Date of test: 17/09/14

Date of issue: 31/10/14



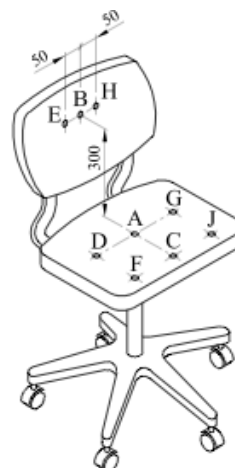
Sample name: FLASH swivel chair

CERANTOLA S.P.A.
VIA GIORGIONE 2-ZONA IND.LE
31037 RAMON DI LORIA (TV)
ITALIA

Seat and back durability - EN 1335-3:2009 AC:2009 - Clause 7.3.1

Seat and back durability clause 7.3.1

Seat height: highest position
Seat inclination: horizontal
Back rest in height: highest position
Back rest in depth: rearmost position
Position of castors: perpendicular to the base arms
Tension of mechanism spring: medium



Test results:

Number of cycles	Loading point	Force N	Back rest inclination mechanism	Remarks
120.000	A	1.500	Locked	No defects
40.000	C B	1200 320	Locked	No defects
40.000	C B	1200 320	Unlocked	No defects
20.000	J E	1200 320	Unlocked	No defects
20.000	F H	1200 320	Unlocked	No defects
20.000	D G	1100 1100	Unlocked	No defects

This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.

Managing Director
Dr. Andrea Giavon

The sample name and, when relevant, its description, are given by the orderer, and CATAS does not assume responsibility on this matter. This test report relates to the sample submitted for the test and no others. Additions, deletions or alterations are not permitted. This test report must always be reproduced in its entirety. Unless otherwise stated, sampling has been carried out by the orderer.

TEST REPORT

180504 / 6

Date received: 14/07/14

Date of test: 10/10/14

Date of issue: 31/10/14



Sample name: FLASH swivel chair

CERANTOLA S.P.A.
VIA GIORGIONE 2-ZONA IND.LE
31037 RAMON DI LORIA (TV)
ITALIA

Stability EN 1335-3:2009 AC:2009, clause 7.1

Chairs with back rest inclination: no overturning with 13 discs of 10 Kg.

Positioning of chair components: as specified in Table 1 of EN 1335-3

Forwards overturning

Horizontal force : 20 N does not overturn

Front edge overturning

Horizontal force : 27 kg does not overturn

Rearwards overturning

Fixed back chair

Horizontal force : /

Chair with back rest inclination

Loading discs on the seat : 13 does not overturn

Sideways overturning for chairs with arms

Horizontal force : /

Sideways overturning for chairs without arms

Horizontal force : 20 N does not overturn

Forwards overturning for chairs with footrest

Horizontal force : /

This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.

Managing Director
Dr. Andrea Giayon

The sample name and, when relevant, its description, are given by the orderer, and CATAS does not assume responsibility on this matter. This test report relates to the sample submitted for the test and no others. Additions, deletions or alterations are not permitted. This test report must always be reproduced in its entirety. Unless otherwise stated, sampling has been carried out by the orderer.

TEST REPORT

180504 / 7

Date received: 14/07/14

Date of test: 10/10/14

Date of issue: 31/10/14



Sample name: FLASH swivel chair

CERANTOLA S.P.A.
VIA GIORGIONE 2-ZONA IND.LE
31037 RAMON DI LORIA (TV)
ITALIA

Rolling resistance of unloaded chair EN 1335-3:2009 AC:2009, clause 7.4

Rolling resistance of unloaded chair, clause 7.4

Type of castors: H
Test surface: steel floor
Test speed: 50 mm/s
Seat height: lowest position

Test results:

Measured resistance of castors N	Minimum allowed resistance N	Remarks
15	12	No defects

Unless otherwise specified, measurement uncertainty expanded to a confidence level of about 95% are $\pm 2,0$ N.

The measurement uncertainties stated in this document have been determined according to UNI CEI ENV 13005:2000. They were estimated as expanded uncertainty obtained multiplying the standard uncertainty by the coverage factor k corresponding to a confidence level of about 95%. Normally $k=2$.

This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.

Managing Director
Dr. Andrea Giavon

The sample name and, when relevant, its description, are given by the orderer, and CATAS does not assume responsibility on this matter. This test report relates to the sample submitted for the test and no others. Additions, deletions or alterations are not permitted. This test report must always be reproduced in its entirety. Unless otherwise stated, sampling has been carried out by the orderer.