Ref: 2906/17/05/11
Project: 505-17

TEST REPORT

Laboratory Test

COMPANY:	SBS, S.R.L
ADDRESS:	VIA MOTTINELL 141/B 36028 ROSSANO VENETTO (VICENZA) ITALIA IT01269540249
PRODUCT:	*Office chair AIDA*
PETITIONER:	Jorge Martínez
SERVICE:	*Customer-defined test battery corresponding to standard:* *Office furniture - Office work chair –* *Part 1: Determination of dimensions. UNE EN 1335-1/AC :2003* *Part 2: Safety requirements. UNE EN 1335-2 :2009* *Part 3: Test methods. UNE EN 1335-3 :2009* - *Dimensions control* - *General design requirements* - *Stability. Front edge overturning (chair without load) .* - *Stability Forwards overturning (horizontal force)* - *Stability . Sideways overturning (chair without arms)* - *Stability . Rearwards overturning.* - *Seat and back static loads test* - *Seat and back durability* - *Rolling resistance of unloaded chair*

Sample supplied by the costumer:

Date received:	**25/05/17**
Date beginning test:	**29/05/17**
Date end test:	**22/08/17**
Date of report:	**31/08/17**

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Test Report

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1.- Description and identification of the analyzed object.

Ref.: *Office chair AIDA*

Description :
Chair with backrest in grid with lumbar reinforcement and seat in upholstered foam. The foot is made of metal and consists of five legs with wheels. It is adjustable in height and with rocking movement in the seat backrest..

Main dimensions:

Total height: 1075mm
Height of seat max: 540mm
Height of seat min.: 422mm
Number of legs: 5

Observed defects before tests:
No identify

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2.- Description of the test method

Dimension Control

Description:

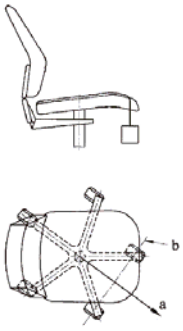
The sample supplied to the laboratory is examined for correct initial conditions.
The seat and back loading points are determined using the template.

The chair should be placed on a flat, horizontal and rigid measuring surface. The seat should be placed in the most horizontal position possible, and the backrest in the most vertical position possible.
Unless otherwise specified, all dimensions must be measured without load or strain at the measurement points.

Stability. Front edge overturning (chair without load)

Description:

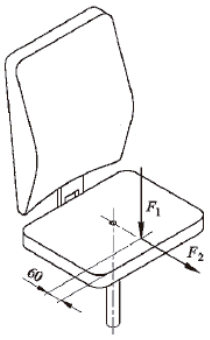
No stops should be placed against the support points. The belt is fixed to the chair, so that the force is applied at the furthest possible distance from the axis of rotation and the mass M_1 is allowed to hang freely.



Stability. Forwards overturning (horizontal force)

Description:

A vertical force F_1 is applied by means of the stability loading tool acting at 60 mm from the leading edge of the seat support structure at those points which are considered more favorable to failure. At the same time, a horizontal force towards the outside F_2 is applied at least for 5 s from the point of the surface of the seat in which the vertical force is applied.



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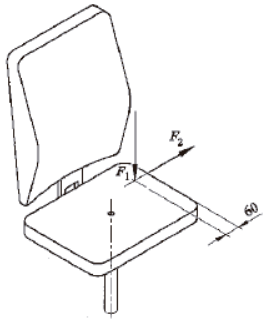
Stability . Sideways overturning (chair without arms)

Description:

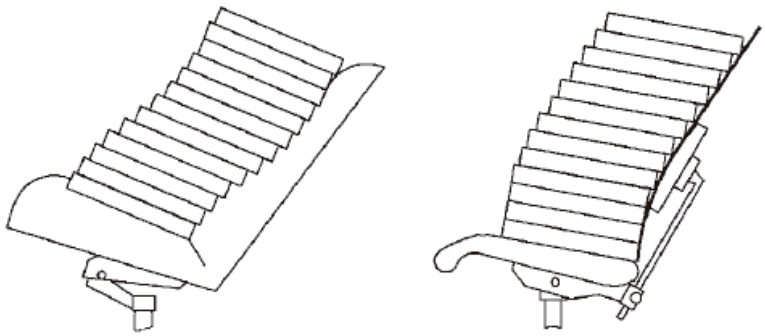
A vertical force F_1 is applied by means of the stability loading tool acting at 60 mm from the leading edge of the seat support structure at those points which are considered more favorable to failure. At the same time, a horizontal force towards the outside F_2 is applied at least for 5 s from the point of the surface of the seat in which the vertical force is applied.



Stability . Rearwards overturning (chair without arms)

Description:

The chair is loaded with discs so that they are perfectly seated against the backrest..



Seat and back static loads

Description:

In the case of chairs with a locking mechanism for angular movement of the seat and / or backrest, half of the cycles must be tested with the mechanism locked, with the backrest in the vertical position, and the other half with the mechanism released.

The vertical force F1 is applied through the seat loading tool at point A. With the saddle loaded, a force F2 is applied through the back-loading utility at point B.

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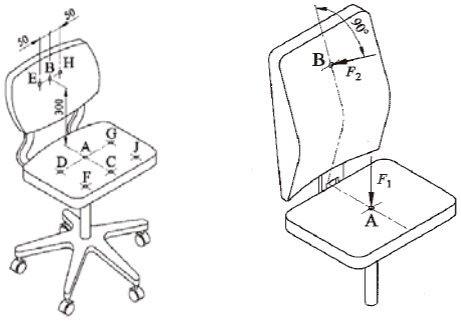

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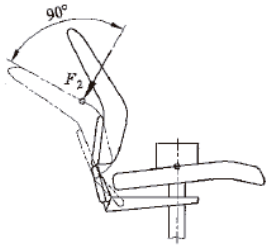
Seat and back durability

Description:

The top of the chair should be positioned so that the center of the backrest matches the midpoint.
In the seat, the load must be applied vertically using the seat loading tool. The backrest force is applied by the backrest loading tool.



All chairs must complete the five stages of the test.
In the case of chairs with locking mechanism, half of the cycles must be tested with the lock blocked, and the other half with the mechanism released, in stages 3,4 and 5, the mechanism must be released.

Stages	Charging points
1	A
2	C-B
3	J-E
4	F-H
5	D-G

Rolling resistance of unloaded chair

Description:

The chair should be placed on a test surface and should be pushed or pulled over a minimum distance of 500mm, along which a velocity of (50 ± 5 mm / s) should be maintained. The force should be applied at a height of (200 ± 50 mm) on the test surface.

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3.- Results

Ref. Company: OFFICE CHAIR AIDA Ref. CETEM: 2906/17/05/11

Tabla de Resultados.

Ensayo	Requisitos	Método	Resultado
Dimensions Control	*UNE EN 1335-1/AC:2003*	*UNE EN 1335-3:2009*	*CORRECT*
General desing requirements	*UNE EN 1335-2:2009*	*UNE EN 1335-3:2009*	*CORRECT*
Stability. Front edge overturning (chair without load)	*UNE EN 1335-2:2009*	*UNE EN 1335-3:2009*	*CORRECT*
Stability. Forwards overturning (horizontal force)	*UNE EN 1335-2:2009*	*UNE EN 1335-3:2009*	*CORRECT*
Stability. Sideways overturning (chair without arms)	*UNE EN 1335-2:2009*	*UNE EN 1335-3:2009*	*CORRECT*
Stability. Rearwards overturning	*UNE EN 1335-2:2009*	*UNE EN 1335-3:2009*	*CORRECT*
Seat and back static load test Fvert=1600N, Fhor=560N, 5 times	*UNE EN 1335-2:2009*	*UNE EN 1335-3:2009*	*CORRECT*
Seat and back durability (Table A.2)	*UNE EN 1335-2:2009*	*UNE EN 1335-3:2009*	*CORRECT*
Rolling resistance of unloaded	*UNE EN 1335-2:2009*	*UNE EN 1335-3:2009*	*CORRECT*

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Especificaciones dimensionales

Silla de Oficina AIDA
Tabla de Resultados para UNE EN 1335-1. **(TYPE B)**

Dimensions		Requirements (mm)	Measured (mm)
SEAT			
Seat height *Adjustment range*	*A*	*≤ 420 a ≥ 510* *100 min*	*422-532* *100*
Seat depth	*B*	*≥ 380 a ≤ 440*	*400*
Depth of seat surface	*C*	*380 min*	*454*
Seat width	*D*	*400 min*	*500*
Inclination of seat surface	*E*	*-2º a -7º*	*-2º*
BACK REST			
Height of the back supporting point "S"	*F*	*170 a 220*	*172*
Height of the back pad *- adjustable in height* *- non adjustable in height*	*G*	 *220 min* *260 min*	 *-* *568*
Height of the upper edge of the back rest	*H*	*360 min*	*548*
Back rest width	*I*	*360 min*	*485*
Horizontal radius of the back rest	*K*	*400 min*	*>400*
Back rest inclination (adjustment range)	*L*	*15º min*	*19 º*
UNDERFRAME			
Maximum offset of the underframe	*S*	*415 max*	*383*
Stability dimension	*T*	*195 min*	*270*

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3.- Conclusions

After the results of the tests carried out, no structural defects or permanent deformations have been observed in the structure, elements or components of attachment or fixation.

*The sample tested **MEETS** the specifications of the test battery specified by the customer, as set out in standard UNE EN 1335- / AC: 2003 Office furniture. Office chairs. Part 1: Dimensions. Determination of dimensions, UNE EN 1335-2: 2009 Part 2: Safety requirements, UNE EN 1335-3: 2009 Part 3: Test methods.*

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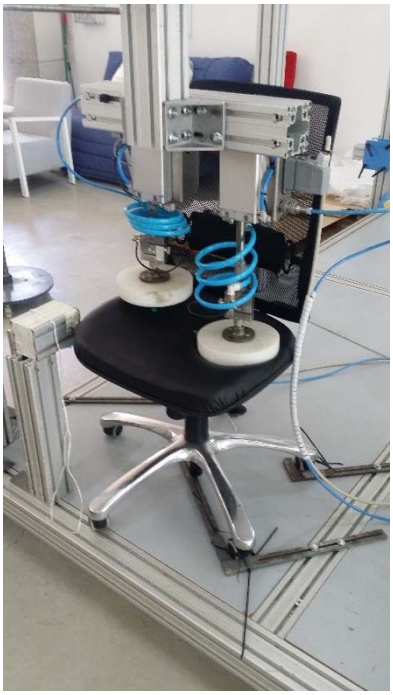
4.- Images



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Annexes

Sequence and test parameters

Clauses of the norm UNE EN 1335-3:2009	Test		Load	Cicles
7.1.1	Front edge overtuning	M_1	27Kg	1
7.1.2	Forwards overturning	F_1 F_2	600N 20N	1
7.1.3	Forwards overturning chair with footrest	F_1 F_2	1100N 20N	1
7.1.4	Sideways overturning for chairs without arms	F_1 F_2	600N 20N	1
7.1.5	Sideways overturning for chairs with arms	F_1 F_2 F_3	250N 350N 20N	1
7.1.6	Rearwards overturning (Fixed back chair)	F_1 F_2	600N 192N	1
7.1.7	Rearwards overturning Nº de Discos		13	1

Table A.1

Clauses of the norm UNE EN 1335-3:2009	Test		Load	Cicles
7.2.1	Seat front edge static load test	F_1	1600N	1
7.2.2	*Seat front edge static load test*	F_1 F_2	1600N 560N	1
7.2.6	Footrest static load test	F_1	1300N	1
7.3.1	Seat and back durability			
	Stage 1: Loading point A	F	1500N	120000
	Stage 2: Loading point C Loading point B	F F	1200N 320N	80000
	Stage 3: Loading point J Loading point E	F F	1200N 320N	20000
	Stage 4: Loading point F Loading point H	F F	1200N 320N	20000
	Stage 5: Loading point D and G (Alternately)	F	1100N	20000
7.3.2	Arms durability	F	400N	60000
7.2.3	Arms static load (middle point)	F F	750N 900N	5 5

Table A.2

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