

TEST REPORT

Applicant : ANJI HUAHENG HOME SUPPLIES CO., LTD
Address : Fantan Industrial Park, Anji County, Zhejiang Province, China.

Report on the submitted sample said to be:

Sample Name : Office Chair
Model/style : N/A
Manufacture : 5727
Address : ANJI HUAHENG HOME SUPPLIES CO., LTD
Sample received date : Fantan Industrial Park, Anji County, Zhejiang Province, China.
Testing period : Apr. 17, 2020 – Apr. 21, 2020

Test Standards:

Test Standards	
UNE EN1335-1: 2001	Determination of dimensions
UNE EN1335-2: 2019	Safety requirements
For further details, please refer to the following page(s)	

REMARKS:

1. This statement is based upon the testing of the submitted samples. It is incumbent on the manufacturer to assure the constant quality of the product.
2. The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the company.
3. Characterization & Condition of sample: Normal.
4. Ambient Condition During Testing: (15~22)°C, (25~50)%

Prepared by:

Examine By :

Approved (Manager):


Cvan


Calvin Chen



TESTS CONDUCTED:

- (I) Determination of dimensions
As per European standard on safety of office work chair UNE EN1335 part 1.

UNE EN 1335			
Clause	Test Items and Requirements	Result – Remark	Verdict
4	Dimensions		P
	Provided sufficient height and depth to provided user a suitable sitting position	Suitable dimensions, see bellow The chair fits type B	P
5	Determination of reference points		P
	The chair shall be positioned on a flat, rigid and horizontal test surface	Complied, all measures were performed on such suitable position	P
5.1	Point “A”		P
	The dummy shall be place on the seat surface symmetrically to the median plane in such a way that the centre of gravity of the main mass coincides with the axis of rotation.	median plane of sitting, centre of gravity, all measures based on the position	P
5.2	Back supporting point “S”		P
	The chair with a back rest rotatable around a horizontal axes the upper and lower edges of the back rest shall be positioned vertically one above the other midway in the median plane before measurements are made.	A back rest rotatable around a horizontal axes the upper and lower edges of the back rest position, all measures based on the position	P
6	Determination of dimensions		P
	The chair shall be positioned on a flat, rigid and horizontal test surface. The seat shall be set as close as possible to the horizontal and back rest shall be set as close as possible to the horizontal vertical . Liner dimensions shall have an accuracy of ± 2 mm and all angles an accuracy of $\pm 1^\circ$ Unless otherwise specified, all dimension shall be loaded by the dummy in accordance with 5.1. All adjustable dimensions and angles shall be measured both in the smallest and largest position.	Complied the rule	P
6.1	Seat height a		P
	The seat height a is the vertical distance the floor and the point “A”	440mm	P
6.2	Seat depth b		P
	The seat b is the horizontal from the front edge of the seat to the vertical projection of the back	420mm	P

	supporting point "A". if the seat depth and back rest are adjusted simultaneously ,i.e. when the seat depth is increased, the back rest height is automatically increased, the maximum seat depth .		
6.3	Depth c of seat surface		P
	The depth c of seat surface maximum horizontal distance between vertical lines though the fort and rear edges of the seat surface. if the shape of the seat makes it impossible be to define a rear edge, the maximum horizontal distance shall be measured from the rear of the seat surface. The measurement shall be carried out with the back rest to the forward tilt.	500mm	P
6.4	Seat width d		P
	The seat width d is the horizontal distance between vertical lines through the edge of the seat surface measured in the transverse plane.	420mm	P
6.5	Inclination e of the seat surface		P
	Inclination e of the seat surface is the median plane between the lower edge of the dummy and a horizontal line. Rearward slope is designated "- " otherwise "+".	0	P
6.6	Height f of the back supporting point "S" above surface		P
	Height f of the back supporting point "S" above surface is the vertical distance between the point "S" and point "A".	200mm	P
6.7	Height g of the back pad		P
	Height g of the back pad is the vertical distance between the upper and lower edges of the back pad, measured in the median plane.	780mm	P
6.8	Height h of the upper edge of the back rest above the seat surface		P
	The height h of the upper edge of the back rest above the seat surface is the vertical between the upper edge of the back rest and the point "A" measured in the median plane.	800mm	P
6.9	Back rest width l		P
	The backrest width l is the maximum horizontal distance its side edges	540mm	P
6.10	Horizontal radius k of bake rest		P
	The horizontal radius k of bake rest is the radius	500mm	P

	measured at the height of the back supporting point "S".		
6.11	Back rest inclination adjustment i		P
	The Back rest inclination adjustment I is the angle between the transverse plane and the back rest determined at point "S". Rearwards slope is designated "-" otherwise "+". The inclination adjustment range between the rearmost position of the inclined back rest back rest.	90°	P
6.12	Length n of the useful arm rest		P
	The length n of the useful arm rest is the horizontal distance between vertical lines through its front and edges. In the case of an arm rest which is not horizontal or which at the ends or is of non-rigid material, the arm rest .	280mm	P
6.13	Width of the useful area of the arm rest		P
	The width of the useful area of the arm rest is the horizontal distance between vertical lines through the inner out edges of the arm rest, If the shape of the arm does not allow for an exact measurement of this width, it shall be measured 20 mm below the top edge.	80mm	P
6.14	Height of the useful area of the arm rest above the seat		P
	The height p of the useful area of the arm rest above the seat is for horizontal arm rests the vertical distance between the upper surface of the arm rest and point "A". in the case of an arm rest which is not horizontal or which is rounded at the ends or is of non-rigid material, the dimension p is the vertical distance between the horizontal plane 20 mm below the arm rest and point "A".	220mm	P
6.15	Distance q from the front of the arm rest to the seat		P
	The distance q from the front of the useful area of the arm rests and a line extended vertically above the front edge of the seat surface in the median plane.	100mm	P
6.16	Clear width r between the useful area of the rests		P
	The clear width r between the useful area of the arm rests to the front edge of the seat surface horizontal distance between vertical lines through the inner edges of the arm rests, measured in the transverse	500mm	P

	plane.		
6.17	Maximum offset s of the underframe		P
	The maximum offset s the underframe is the maximum distance between the outmost point of the underframe including castor or glides and the axis of rotation .	330mm	P
6.18	Stability dimension t		P
	The stability dimension t is the smallest distance between the overbalancing axes on the axes of rotation of the chair, Where castors are used, the most unfavourable castor position shall be used for the measurement	240mm	P

(II) Safety requirements

As per European standard on safety of office work chair UNE EN1335 part 2.

UNE EN 1335			
Clause	Test Items and Requirements	Result – Remark	Verdict
4	Safety requirements		P
4.1	General		P
	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.		P
	a) 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 2 mm radius;		P
	b) the edges of handles are rounded or chamfered in the direction of the force applied;		P
	c) all other edges and corners are free from burrs and rounded or chamfered;		P
	d) the ends of accessible hollow components are closed or capped.		P
4.2	Shear and squeeze points		P
4.2.1	Shear and squeeze points under influence of powered mechanisms		P
4.2.2	Shear and squeeze points during use		P
4.3	Sequence of testing		P
	The chair shall be tested for stability according to UNE EN 1022:2019, 7.3 and in the order of Table 1.		P
	The chair shall be tested for strength and durability		P

	according to UNE EN 1728:2013, Clause 7 and in the		
4.4	Stability tests and requirements		P
	When tested according to Table 1, the seating shall not overturn.		P
4.5	Structural safety requirements The structural safety requirements are met when the requirements according to 5.2 are fulfilled.		P
5	Strength and durability		P
5.1	General		P
5.2	Requirements		P
	The strength and durability requirements are fulfilled when, after testing in accordance with Table 2:		P
	a) there are no fractures of any member, joint or component;		P
	b) there is no loosening of joints intended to be rigid; and		P
	c) the chair fulfils its functions after removal of the test loads.		P
5.3	Rolling resistance test and requirements		P
	The unloaded chair shall be tested for rolling resistance according to UNE EN 1728:2013, 6.30 and shall fulfil the following requirements:		P
	a) the castors shall be of identical construction;		P
	b) the rolling resistance shall be ≥ 12 N.		P
6	Information for use		P
	Information for use shall be available in the language of the country in which the product will be available to the end user. It shall contain at least the following details:	See user manual	P
	a) information regarding the intended use;		P
	b) information regarding possible adjustments;		P
	c) instruction for operating the adjusting mechanisms;	See user manual	P
	d) instruction for the care and maintenance of the chair;	See user manual	P
	e) 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;	See user manual	P
	f) information on the choice of castors in relation to the floor surface.	No such components	P
Annex A	Loads, masses and cycles for functional tests -		P

	Suggested loads, masses and cycles		
	The suggested loads, masses and cycles in this informative Annex are based upon use for 8 h a day by persons weighing up to 110 kg.		P

Attachment (I)-append table

Table 1: Determination of dimensions

No.	Position	Unit	Measure value
1	Seat height	Millimetre(mm)	440
2	Seat depth	Millimetre(mm)	420
3	Depth of seat surface	Millimetre(mm)	500
4	Seat width	Millimetre(mm)	420
5	Inclination of the seat surface	Degree(°)	0
6	Height of the back supporting point “S” above surface	Millimetre(mm)	200
7	Height of the back pad	Millimetre(mm)	780
8	Height of the upper edge of the back rest above the seat surface	Millimetre(mm)	800
9	Back rest width	Millimetre(mm)	540
10	Horizontal radius of back rest	Millimetre(mm)	500
11	Back rest inclination adjustment	Degree(°)	90
12	Length of the useful arm rest	Millimetre(mm)	280
13	Width of the useful area of the arm rest	Millimetre(mm)	80
14	Height of the useful area of the arm rest above the seat	Millimetre(mm)	220
15	Distance from the front of the arm rest to the seat	Millimetre(mm)	100
16	Clear width between the useful area of the rests	Millimetre(mm)	500
17	Maximum offset of the underframe	Millimetre(mm)	330
18	Stability dimension	Millimetre(mm)	240

Table 2: Former edge toppled over test

Position	Load	Result
front edge seat	265N	No toppled and fall

Table 3: Forwards toppled over test

Position	Load	Result
Before tipped position 60mm (vertical)	265N	No toppled and fall
Before tipped position 60mm (level)	20N	
Note: a link stopper is installed before center of resistance		

Table 4: Lateral toppled over test

Position	Load	Result
Distance back side 190mm and centre 100mm (vertical)	250N	After 5 minutes have no toppled and fallen, arm not be breakage, no serious transformation.
Distance front 40mm of arm centre (vertical)	350N	
Perpendicular to arm	20N	
Note: a link stopper is installed on another side		

Table 5: back side toppled over test

Position	Load	Result
Position A (vertical)	75KG	Maximum inclination is 18°not toppled over
Above position A 220mm and perpendicular to backrest	315N	
Before tipped position 60mm (level)	20N	
Note: a link stopper is installed in backrest strong point		

Table 6: Fatigue Test

Position	Action	Unit	Result
Turn table	Revolve	6r/Min	After 100 hours, chair revolve and upload normally, no hazards
EUT	Revolve	Angle: 0-180 inverting 180-0	
Note: 1, ensure pedestal can't revolve, but won't disturb truckle move normally. 2, Truckle will revolve freely. 3, Each time the changes of direction, turn table keep 2Min 4, Load action will be a circulate which charge 60s and discharge 30s.			

Table 7: Armrest durability test

Steps	Position	Action	Unit	Result
1	Distance the head of armrest 100mm (10°deflection between vertical)	Load	10N (preload)	After test, chair armrest has not serious deformation and no broken
2	Distance the head of armrest 100mm (10°deflection between vertical)	Load	400N	
Note: 1, Before test, adjust chair to lowest position state. 2, Every arm test 60000 times, all results are pass.				

Table 8: Stability tests and parameters

Tests	Reference	Loads and cycles	Test parameters	Result
1. Corner stability	UNE EN 1022:2019, 7.3.3	Force F1, N Cycle	300 1	P
2. Forward overturning	UNE EN 1022:2019, 7.3.1	Force F1, N Force F2, N Cycle	600 20 1	P
3. Forward overturning for chairs with footrests	UNE EN 1022:2019, 7.3.2	Force F1, N Force F2, N Cycle	1100 20 1	N/A
4. Sideways overturning for chairs without arm rests	UNE EN 1022:2019, 7.3.4	Force F1, N Force F2, N Cycle	600 20 1	N/A
5. Sideways overturning for chairs with arm rests	UNE EN 1022:2019, 7.3.5.1 and 7.3.5.2	Force F1, N Force F2, N Force F3, N Cycle	250 350 20 1	P
6. Rearwards overturning for chairs without back rest inclination and for chairs with adjustable backrest inclination that can be locked	UNE EN 1022:2019, 7.3.6	Force F1, N Force F2, N Cycle	600 0,2857*(1000-H ^a) 1	N/A
7. Rearwards overturning for chairs with back rest inclination	UNE EN 1022:2019, 7.4	Number of Discs Cycle	13 1	P

Table 9: Strength and durability test sequence and parameters

Tests	Reference	Loads and cycles	Test parameters	Result
1. Combined seat and back static load test	UNE EN 1728:2013, 7.3	Seat force F1, N Back rest force F2, N Cycles	1600 560 10	P
2. Seat front edge static load test	UNE EN 1728:2013, 7.4	Force, N Cycles	1600 10	P
3. Foot rest static load test	UNE EN 1728:2013, 7.8	Force, N Cycles	1300 10	N/A
4. Seat and back durability	UNE EN 1728:2013, 7.9	Step 1: Force, N, at point A Cycles Step 2: Force, N, at point C Force, N, at point B Cycles Step 3: Force, N, at point J Force, N, at point E Cycles Step 4: Force, N, at point F Force, N, at point H Cycles Step 5 ^a : Force, N, at point D and G Cycles	1 500 120 000 1 200 320 80 000 1 200 320 20 000 1 200 320 20 000 1 100 20 000	P
5. Armrests durability	UNE EN 1728:2013, 7.10	Force, N Cycles	400 60 000	P
6.1 Armrest downward static load test – central ^b	UNE EN 1728:2013, 7.5	Force, N Cycles	750 5	P
6.2 Armrest downward static load test – central ^c		Force, N Cycles	900 5	P

a In derogation to UNE EN 1728:2013, 7.2.5 and 7.2.8, the loading point D shall be 150 mm to the right of point A and the loading point G shall be 150 mm to the left of point A.

b This test shall be carried out before the stability tests.

c This test shall be carried out after the stability tests.

Table A.1: Loads, masses and cycles for functional tests

Tests	Reference	Loads and cycles	Test parameters	Result
1. Arm rest downward static load test – front	UNE EN 1728:2013, 7.6	Force, N Cycles	450 5	P
2. Arm rest sideways static load test	UNE EN 1728:2013, 7.7	Force, N Cycles	400 10	P
3. Swivel test	UNE EN 1728:2013, 7.11	Masse M1, kg Masse M2, kg Cycles	60 35 120 000	P
4. Foot rest durability	UNE EN 1728:2013, 7.12	Force, N Cycles	900 50 000	N/A
5. Castor and chair base durability	UNE EN 1728:2013, 7.13	Masse M1, kg Cycles	110 36 000	P

Attachment (II): real photos of EUT

Photo 1

view

- ☒ front
☐ back
☐ side
☐ top
☐ internal
☐ bottom



Photo 2

view

- ☐ front
☐ back
☒ side
☐ top
☐ internal
☐ bottom



Photo 3

view

- ☐ front
☐ back
☒ side
☐ top
☐ internal
☐ bottom



Photo 4

view

- ☐ front
☒ back
☐ side
☐ top
☐ internal
☐ bottom



**** THE END OF REPORT ****