



TEST REPORT

1. NO : CT26-063007E

2. Client

○ Name : HN HANA Co., Ltd.

○ Address : 3F, 79, Omok-ro, Yangcheon-gu, Seoul, Republic of Korea

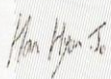
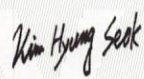
3. Date of Test : 2026.07.15 ~ 2026.08.04

4. Use of Report : Quality management

5. Test Sample : Chair

6. Test Method

(1) ANSI/BIFMA X5.1-2017

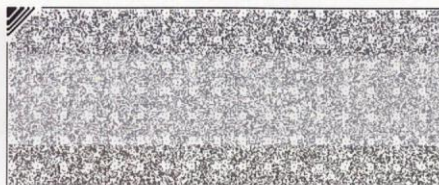
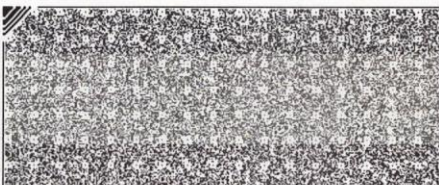
Affirmation	Tested By Name : Han Hyun Jo 	Technical Manager Name : Hyung Seok Kim 
This report is not accredited by KOLAS and KS Q ISO/IEC 17025. Our report apply only to the standards or procedures identified and to the sample(s) tested unless otherwise specified. The test results are not indicative of representative of the qualities of the lot from which the sample was taken or of apparently identical or similar products. The results of using only a portion of this report cannot be guaranteed. The authenticity of this test report can be checked on KCL website(www.kcl.re.kr).		

2026.08.04

Korea Conformity Laboratories



Result Inquiry : 85, Dambang-ro, Namdong-gu, Incheon, Republic of Korea (82-32-460-5155)

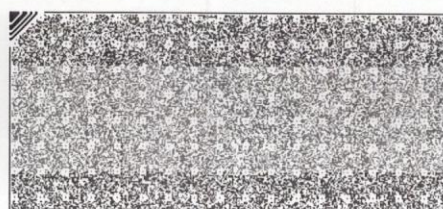
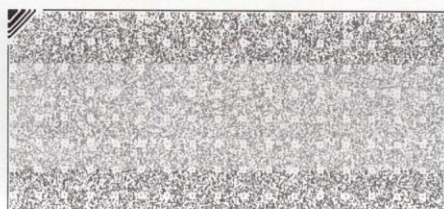
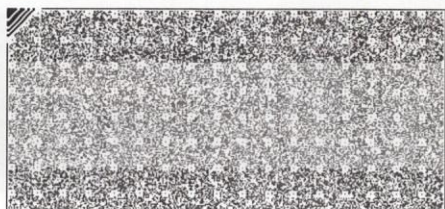


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7. Test Results

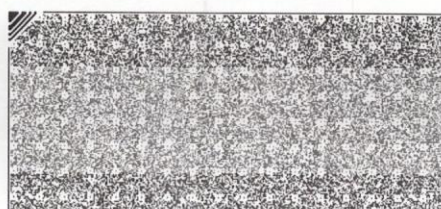
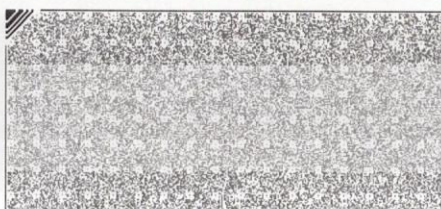
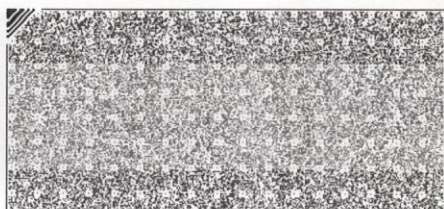
Test Item(s)	Test Method	Specifications	Test Results
Backrest Strength Test-Static (Functional Load) (Type I Chair)	ANSI/BIFMA X5.1-2017 Clause 5	There shall be no loss of serviceability to the chair when a force of 667 N (150 lbf.) is applied to the backrest at the backstop position for one (1) minute.	N/A
Backrest Strength Test-Static (Proof Load) (Type I Chair)	ANSI/BIFMA X5.1-2017 Clause 5	There shall be no sudden and major change in the structural integrity of the chair (Loss of serviceability is acceptable) when a force of 1001 N (225 lbf.) is applied to the backrest at the backstop position for one(1) minute.	N/A
Backrest Strength Test-Static (Functional Load) (Type III Chair)	ANSI/BIFMA X5.1-2017 Clause 6	A functional load applied once shall cause no loss of serviceability to the chair when a force of 667 N (150 lbf.) is applied to the backrest at the backstop position for one(1) minute.	Pass
Backrest Strength Test-Static (Proof Load) (Type III Chair)	ANSI/BIFMA X5.1-2017 Clause 6	A proof load applied once shall cause no sudden and major change in the structural integrity of the chair (Loss of serviceability is acceptable) when a force of 1001 N (225 lbf.) is applied to the backrest at the backstop position for one (1) minute.	Pass
Drop Test Dynamic (Functional Load)	ANSI/BIFMA X5.1-2017 Clause 7	There shall be no loss of serviceability when a test bag weighting 102 kg (225 lb.) is raised 152 mm (6 in.) above the uncompressed seat and released one time.	Pass
Drop Test Dynamic (Proof Load)	ANSI/BIFMA X5.1-2017 Clause 7	There shall be no sudden and major change in the structural integrity of the chair (Loss of serviceability is acceptable) when a proof load of 136 kg (300 lb.) is raised 152 mm (6 in.) above the uncompressed seat and released one time.	Pass
Swivel Test-Cyclic	ANSI/BIFMA X5.1-2017 Clause 8	There shall be no loss of serviceability when the seat or platform is rotate for total of 120,000 at a rate between 5 and 15 rotations per minute with a 122 kg (270 lb.) load placed on the seat.	N/A
Tilt Mechanism Test- Cyclic (Type I & II Chair)	ANSI/BIFMA X5.1-2017 Clause 9	No structural breakage or loss of serviceability in 300,000 cycles at a rate between 10 and 30 cycles per minute under a 109 kg (204 lb.) load to the center of the seat.	N/A



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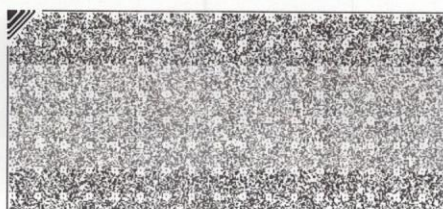
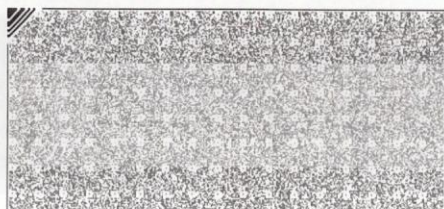
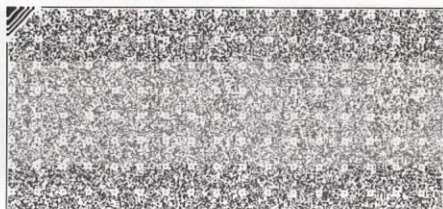
Test Item(s)	Test Method	Specifications	Test Results
Seating Durability Test-Cyclic	ANSI/BIFMA X5.1-2017 Clause 10	There shall be no loss of serviceability to the chair after completion of both the impact 57 kg (125 lb.) free fall to seat 36 mm (1.4 in) for 100,000 cycles and load-ease 890 N (200 lbf) lowering to front corners of seat for 40,000 cycles tests.	Pass
Stability Tests (Rear Stability) (Type III Chair)	ANSI/BIFMA X5.1-2017 Clause 11.3.1	The chair shall not tip over when loaded with 6 disks (disk weighing 10 kg (22 lb) each having diameter of 350 mm (13.8in.)) and horizontal force is applied. For seat height < 710 mm (28.0 in.); • F = 0.1964 (1195 - H) Newton. H is the seat height in mm. • F = 1.1 (47 - H) pounds force. H is the seat height in inches. For chairs with seat height equal to or greater than 710 mm (28.0 in.), a fixed force of 93 N (20.9 lbf.) shall be applied.	Pass
Stability Tests (Rear Stability) (Type I & II Chair)	ANSI/BIFMA X5.1-2017 Clause 11.3.2	The chair shall not tip over when loaded with 13 disks (disk weighing 10 kg (22 lb) each having diameter of 350 mm (13.8in.))	N/A
Stability Tests (Front Stability)	ANSI/BIFMA X5.1-2017 Clause 11.4	The chair shall not tip over when a vertical load of 61 kg (135 lbf.) is applied by means of the front stability loading fixture with horizontal force of 20 N (4.5 lbf.) applied at the same level of the plane of the top of the seat.	Pass
Arm Strength Test- Vertical-Static (Functional Load)	ANSI/BIFMA X5.1-2017 Clause 12	There shall be no loss of serviceability when a force of 750 N (169 lbf.) is applied for one (1) minute.	N/A
Arm Strength Test- Vertical-Static (Proof Load)	ANSI/BIFMA X5.1-2017 Clause 12	There shall be no sudden and major change in the structural integrity of the chair when a force of 1125 N (253 lbf.) is applied for 15 seconds	N/A
Arm Strength Test- Horizontal-Static (Functional Load)	ANSI/BIFMA X5.1-2017 Clause 13	It shall cause no loss of serviceability when a force of 445 N (100 lbf.) is applied for one (1) minute in the outward direction.	N/A
Arm Strength Test- Horizontal-Static (Proof Load)	ANSI/BIFMA X5.1-2017 Clause 13	It shall cause no sudden and major change in the structural integrity of the unit (Loss of serviceability is acceptable) when a force of 667 N (150 lbf.) is applied for 15 seconds in the outward direction.	N/A



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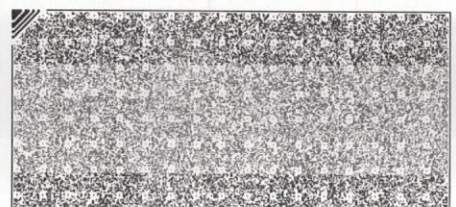
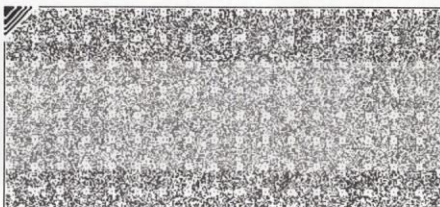
Test Item(s)	Test Method	Specifications	Test Results
Backrest Durability Test-Cyclic (Type I Chair)	ANSI/BIFMA X5.1-2017 Clause 14	There shall be no loss of serviceability when a weight of 109 kg (240 lb.) is secured in the center of the seat and applying a 445 N (100 lbf.) total force to the backrest at a rate between 10 and 30 cycles per minute for 120,000 cycles for backrest widths less than or equal to 406 mm (16 in.) at the height of the loading point. For chairs with backrest widths greater than 406 mm (16 in.) at the height of the loading point, apply the load to the backrest for 80,000 cycles, additional 20,000 cycles to right side of backrest and last 20,000 cycles to the left side of backrest.	N/A
Backrest Durability Test-Cyclic (Type III Chair)	ANSI/BIFMA X5.1-2017 Clause 15	There shall be no loss of serviceability when a weight of 109 kg (240 lb.) is secured in the center of the seat and applying a 334 N (75 lbf.) total force to the backrest at a rate between 10 and 30 cycles per minute for 120,000 cycles for backrest widths less than or equal to 406 mm (16 in.) at the height of the loading point. For chairs with backrest widths greater than 406 mm (16 in.) at the height of the loading point, apply the load to the backrest for 80,000 cycles, additional 20,000 cycles to right side of backrest and last 20,000 cycles to the left side of backrest.	Pass
Caster/Chair Base Durability Test-Cyclic (Pedestal Base Chairs)	ANSI/BIFMA X5.1-2017 Clause 16.1	There shall be no loss of serviceability when a 122 kg (270 lb.) load is on the seat of the chair and cycled 2,000 cycles over the obstacles then 98,000 cycles on a smooth, hard surface without obstacles. After the durability cycling test, No part of the caster shall separate from the chair as a result of the application of the 22 N (5 lbf.) force.	N/A
Caster/Chair Base Durability Test-Cyclic (Chairs with legs)	ANSI/BIFMA X5.1-2017 Clause 16.2	There shall be no loss of serviceability when a 122 kg (270 lb.) load is on the seat of the chair and cycled 2,000 cycles over the obstacles then 98,000 cycles on a smooth, hard surface without obstacles. After the durability cycling test, No part of the caster shall separate from the chair as a result of the application of the 22 N (5 lbf.) force.	N/A



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Test Item(s)	Test Method	Specifications	Test Results
Leg Strength Test- Front Application (Functional Load)	ANSI/BIFMA X5.1-2017 Clause 17.3	It shall cause no loss of serviceability when a force of 334 N (75 lbf.) is applied once to each front leg individually for one (1) minute.	Pass
Leg Strength Test- Front Application (Proof Load)	ANSI/BIFMA X5.1-2017 Clause 17.3	It shall cause no sudden and major change in the structural integrity of the chair (loss of serviceability is acceptable) when a force of 503 N (113 lbf.) is applied once to each front leg individually for one (1)minute.	Pass
Leg Strength Test- Side Application (Functional Load)	ANSI/BIFMA X5.1-2017 Clause 17.4	It shall cause no loss of serviceability when a force of 334 N (75 lbf.) is applied to a front and rear leg individually for one (1) minute.	Pass
Leg Strength Test- Side Application (Proof Load)	ANSI/BIFMA X5.1-2017 Clause 17.4	It shall cause no sudden and major change in the structural integrity of the chair (loss of serviceability is acceptable) when a force of 503 N (113 lbf.) is applied once to a front and rear leg individually for one (1) minute.	Pass
Footrest Static Load Test-Vertical (Functional Load)	ANSI/BIFMA X5.1-2017 Clause 18.4.1	There shall be no loss of serviceability or sudden loss of footrest height when a force F1 of 445 N (100 lbf.) is applied to the footrest and additional a force F2 of 445 N (100 lbf.) is applied to opposite side. Then F2 is removed and F1 is increased to 200 lbf.	N/A
Footrest Static Load Test-Vertical (Proof Load)	ANSI/BIFMA X5.1-2017 Clause 18.4.3	The load applied once shall cause no sudden and major change in the structural integrity of the unit (Loss of serviceability is acceptable) when a force of 1334 N (300 lbf.) is applied uniformly along a 102 mm (4 in.) distance along the footrest.	N/A
Footrest Durability Test-Vertical -Cyclic	ANSI/BIFMA X5.1-2017 Clause 19	There shall be no loss of serviceability when a 890 N (200 lbf.) force is applied uniformly along the footrest for 50,000 cycles at a rate between 10 and 30 cycles per minute.	N/A
Arm Durability Test -Cyclic	ANSI/BIFMA X5.1-2017 Clause 20	There shall be no loss of serviceability to the chair when simultaneously applying a force of 400 N (90 lbf.) to each arm initially at a 10 degrees $\pm$ 1 degree angle for 60,000 cycles at a rate between 10 and 30 cycles per minute.	N/A



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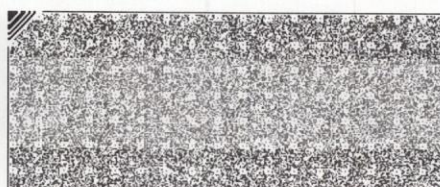
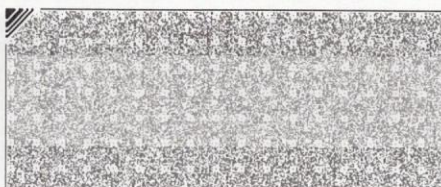
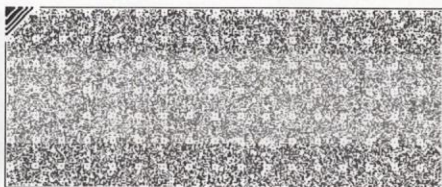
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Test Item(s)	Test Method	Specifications	Test Results
Out stop test for chairs with manually adjustable seat depth	ANSI/BIFMA X5.1-2017 Clause 21	There shall be no loss of serviceability to the unit when a 74 kg (163 lb.) is loaded on the seat and a hanging weight of 25 kg (55 lb.) is held at its most rearward position, then released, permitting it to move forward rapidly and impact the out stops for a total of 25 cycles.	N/A
Tablet arm chair static load test	ANSI/BIFMA X5.1-2017 Clause 22	The load applied once shall cause no sudden and major change in the structural integrity of the chair after applying a load of 68 kg (150 lb.) for one (1) minute.	N/A
Tablet arm chair load ease test - Cyclic	ANSI/BIFMA X5.1-2017 Clause 23	There shall be no loss of serviceability to the chair and/or tablet arm when a 25 kg (55 lbf.) force applied through a 203 mm $\pm$ 13 mm (8.0 in. $\pm$ 0.51 in.) diameter area 25 mm (1 in) from edge of the surface at its apparent weakest point at a rate of 14 $\pm$ 6 cycles per minute for a total of 100,000 cycles.	N/A
Structural durability test - Cyclic	ANSI/BIFMA X5.1-2017 Clause 24	Place a weight of 109 kg (240 lbf) in the center of the seat. Apply a force of 334 N (75 lbf) at an appropriate for 25,000 cycles by a cycling device. There shall be no loss of serviceability.	Pass

Remark :

1. N/A means not applicable to this product design.
2. N/C means not perform on request by customer

Location of Testing : 85, Dambang-ro, Namdong-gu, Incheon, Republic of Korea



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Product Photos



----- End of Report -----

