

Test- report

Nr. IWQ MBL 733 1640/1

Reported to: HÅG asa
P. O. Box 50 55 MAJ

0301 Oslo
Norwegen

Object: Office work chair model range "H04"
(2 samples supplied by the client)

Order: Safety test to DIN EN 1335- 1, -2, -3
(Prerequisite for the GS-Mark)

Findings:

The office work chair model range "H04" **meets** the requirements for the GS-mark.

The examination was conducted following DIN EN 1335, part 1, 2 and 3, ed. 08.02 and DIN 4550, ed. 05.92 respecting the actual state of safety technique.

The office work chair complies with type A of DIN EN 1335, part 1. Thus the requirements for ergonomic design of the EU-Video Display Terminal Directive as laid out in DIN EN ISO 9241 part 5, ed. 08.1999 are met.

Nürnberg, 17.11.2003
IWQ /hy/kl/şe

LGA - PRODUCTS Division
Institute for Product Testing
and Quality Control

Competence Centre IWQ MBL


Dipl.-Ing. (FH) R. Heym



Test officer:


Eberhard Klöber

This test report consists of 6 pages.

Test Results

Object:

Article: Office work chair
Type/Model: H04
Number of samples: 2
delivered: 07/2003, 09/2003
delivered by: HÅG

Scope of tests

General examination

Technical tests

- Dimensions to DIN EN 1335-1
- Safety Requirements to DIN EN 1335-2
- Durability seat centre to DIN EN 1335-3
- Alternating bending load on seat and back to DIN EN 1335-3
- Additional test of the pivoting back to DIN EN 1335-3
- Durability of arms to DIN EN 1335-3
- Arm rest static load to DIN EN 1335-3
- Stability to DIN EN 1335-3
- Rolling resistance to DIN EN 1335-3
- Instruction Manual to DIN EN 1335-2
- Marking of the chair to DIN 4551
- Marking of the Gas cylinder to DIN 4550

Applicability of test results

The test results refer solely to the samples tested. The digital pictures shown in this report are for additional information only and are not part of this report.

Measurement uncertainty

Unless otherwise stated all dimensions are measured to an accuracy according to DIN 7168-g for old constructions resp. DIN ISO 2768 part 1 "c" for new constructions. For all other physical values the measurement uncertainty is < 5 %. The test has been carried out at standard climate 23 °C/50 % r.h.

General examination

Brief description of the sample

- Seat height adjustable by means of gas cylinder from SUSPA
- Denomination of gas cylinder:
17-04-26 DIN 4550-4
- Seat mechanism synchronised
- Seat and back padded and upholstered
- Base made of die-cast light metal
- 5 break unloaded twin wheel castors Type H
Denomination of castors:
Marking of the castors: GR
Castor Manufacturer: Guy Raymond
- Other characteristics: arm rests adjustable in width and height, sliding seat



IWQ MBL 733 1640/1

Prüfkriterium / Anforderung		Ergebnis	+ positiv - negativ ./entfällt
Technical Test - HÅG H04 - Model 4400			
Dimensions following DIN EN 1335 part 1 - Office work chairs			
Type A			
Denomination/Code letter	Nominal value (mm)	Actual Value (mm)	
Seat height adjustment range	a ≤ 420 to ≥ 510 100 min.	392 - 523	+
Seat depth	b ≤ 400 to ≥ 420	391 - 505	+
Depth of seat surface	c 380 min.	420	+
Seat width	d 400 min.	420	+
Inclination of seat surface adjustment range	e -2° to -7° ≤ -2° to ≥ -7°	-+3° - -16°	+
Height of back supp. point "S" above the seat; adj. range	f 170 to 220 fixed ≤ 170 to ≥ 220/50 min.	166 - 257	+
Height of the back pad	g 260 min.	462	+
Height of the upper edge of the back rest above the seat	h 360 min.	442 min.	+
Back rest width	i 360 min.	372	+
Horizontal radius of the back rest	k 400 min.	> 400	+
Back rest inclination adjustment range	l 15°	25°	+
Length of arm rest	n 200 min.	293	+
Width of arm rest	o 40 min.	69	+
Height of arm rest above the seat	fixed adjustable p 200 to 250 ≤ 220 to ≥ 250	207 - 300	+
Distance from the arm rest to the front edge of the seat	q 100 min.	220	+
Clear width between the arm rests	r 460 - 510.	436 - 540	+
Maximum offset of the underframe	s 365 ^{f)}	365	+
Stability dimension	t 195 min.	241	+

Prüfkriterium / Anforderung	IWQ MBL 733 1640/1	
	Ergebnis	+ positiv - negativ ./entfällt
Safety *) (EN 1335-2 cl.. 4.1)	Requirements met	
Edges and corners, shearing and crushing points		+
Adjustment devices		+
Joints		+
Soiling		+
Seat and back rest (EN 1335-3 cl. 7 and 8)	Requirements met	
Alternate bending load - lateral	1100 N, 20000 LW	+
Arm rests (EN 1335-3 cl. 9)	Requirements met	
Test under vertical static load		
Functional load	750 N each, 5 LW	+
Overload	900 N each, 5 LW	+
Stability (EN 1335-3 cl. 5)	Requirements met	
Front edge overturning		+
Sideways overturning		+
Rearward overturning		+

* unless otherwise specified the specifications as laid down in the relevant standards shall apply.

Prüfkriterium / Anforderung	IWQ MBL 733 1640/1 Ergebnis	+ positiv - negativ ./entfällt
<p>Rolling resistance*) (EN 1335-3 cl.. 6)</p> <p>Rolling resistance Fatigue</p>	<p>Requirements met</p> <p>24 N 100 hours</p>	<p>+ +</p>
<p>User's information (EN 1335-2 cl. 5)</p> <ul style="list-style-type: none"> • Information how to operate the unit • Information on the type of chair and how to operate the adjustment settings. • Information on the use of the adjustment device • Information on care & maintenance • Information on seat- and back rest adjustments • For chairs provided with seats adjustable in height by energy storage elements an additional information is required that only trained personnel may replace or repair the energy storage elements. • Information as to the type of castors with respect to the flooring 	<p>Requirements met</p>	<p>+ + + + + +</p>
<p>Marking of the chair (DIN 4551 cl.. 8)</p> <p>Name or label of manufacturer Type designation Year of construction</p>	<p>Requirements met</p>	<p>+ + +</p>
<p>Marking of gas spring (DIN 4550 cl. 7)</p> <p>Manufacturer Type designation Classification Date of production - week/year</p>	<p>Requirements met</p>	<p>+ + ./. +</p>

* unless otherwise specified the specifications as laid down in the relevant standards shall apply.