Institute for Goods Testing
and Quality Monitoring
Furniture Test Institute

LGA
Landesgewerbeanstalt Bayern

Test-report

No. **IWQ MBL 732 1676/1**

Client: HÅG asa
P.O. Box 5055 Majorstua

0301 Oslo
Norwegen

Object: Visitor´s swivel chair „H05“
(2 samples supplied by the client)

Order: Safety test following E DIN EN 1728
and DIN EN 13 761

Findings:

The test contained the following safety technical criteria according to the Equipment Safety Act:

Functional dimensions, workmanship regarding DIN VDE 1000, ed. 03.1979 and DIN 31 001, ed. 04.1983, resp. DIN EN 292, Part 1, ed. 11.1991 and Part 2, ed. 06.1995, DIN EN 294, ed. 08.1992, DIN EN 349, ed. 06.1993 as well as stability to DIN EN 1022, ed. 01.1997, static and dynamic load. The tests were carried out following E DIN EN 1728, ed. 04.1995, and the requirements are laid out in DIN EN 13761, ed. 12.2002.

Strength and stability showed no failure and meet the requirements for contractual use.

The following pages contain technical data and detailed test conditions and requirements.

Note: The visitor´s swivel chair does not to be marked as an office work chair.

Nuremberg, 18.12.02
IWQ / hy / ra/ bed

LGA - PRODUCTS Division
Institute for Product Testing
and Quality Control

LANDESGEWERBEANSTALT BAYERN * LGA * MÖBEL-PRÜF-INSTITUT * NÜRNBERG *

Competence Center IWQ MBL

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Test technician

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The test report consists of 7 pages.

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Test results

Object

Article:	Visitor´s swivel chair model, „H05“
Type/Model:	"5372" and "5472"
Number of samples:	each 1
delivered:	24.10.2002
delivered by:	HAG

Scope of tests

General examination

Safety test following E DIN EN 1728, ed. 04.1995, with regard to DIN EN 13761, ed. 12.2002 and DIN EN 1022, ed. 01.1997

Functional dimensions
Workmanship
Stability
Corrosion test
Dynamic load test
Static load test

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 incertainty

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 incertainty is < 5 %.

General examination

Overall dimensions (mm)

Height:	830 - 970
Width:	560
Depth:	580

Weight: 9,0 kg

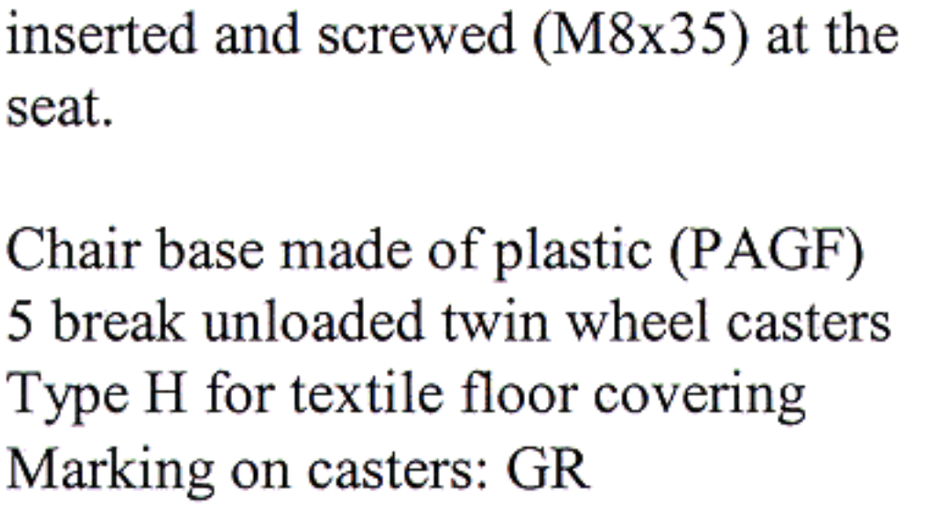
Brief description of the sample

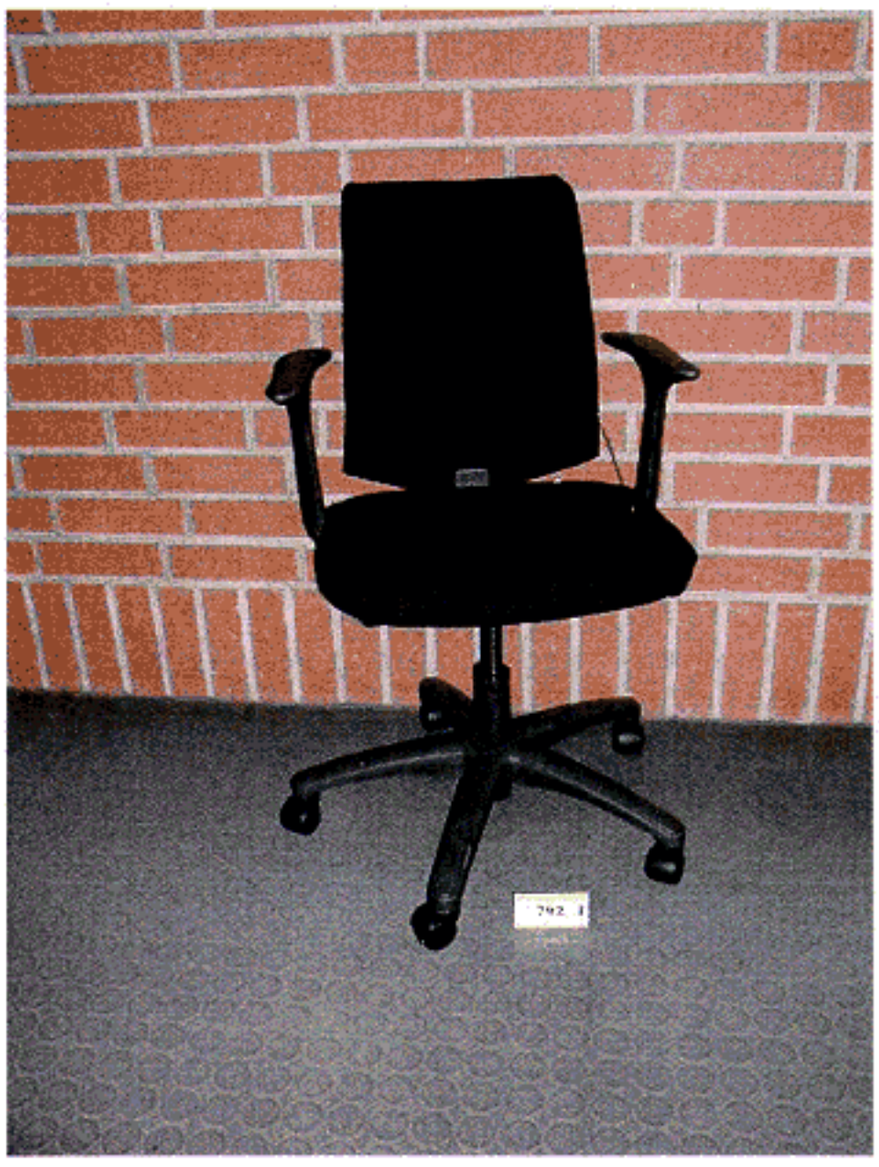
- Seat height adjustable by means of gas spring from SUSPA
  Type 17 - 04-26 DIN 4550-4 06 02
  Outer diameter of the bearing tube of the gas spring 28 mm.

- Seat mechanism with tilt action
- Seat and back padded and upholstered

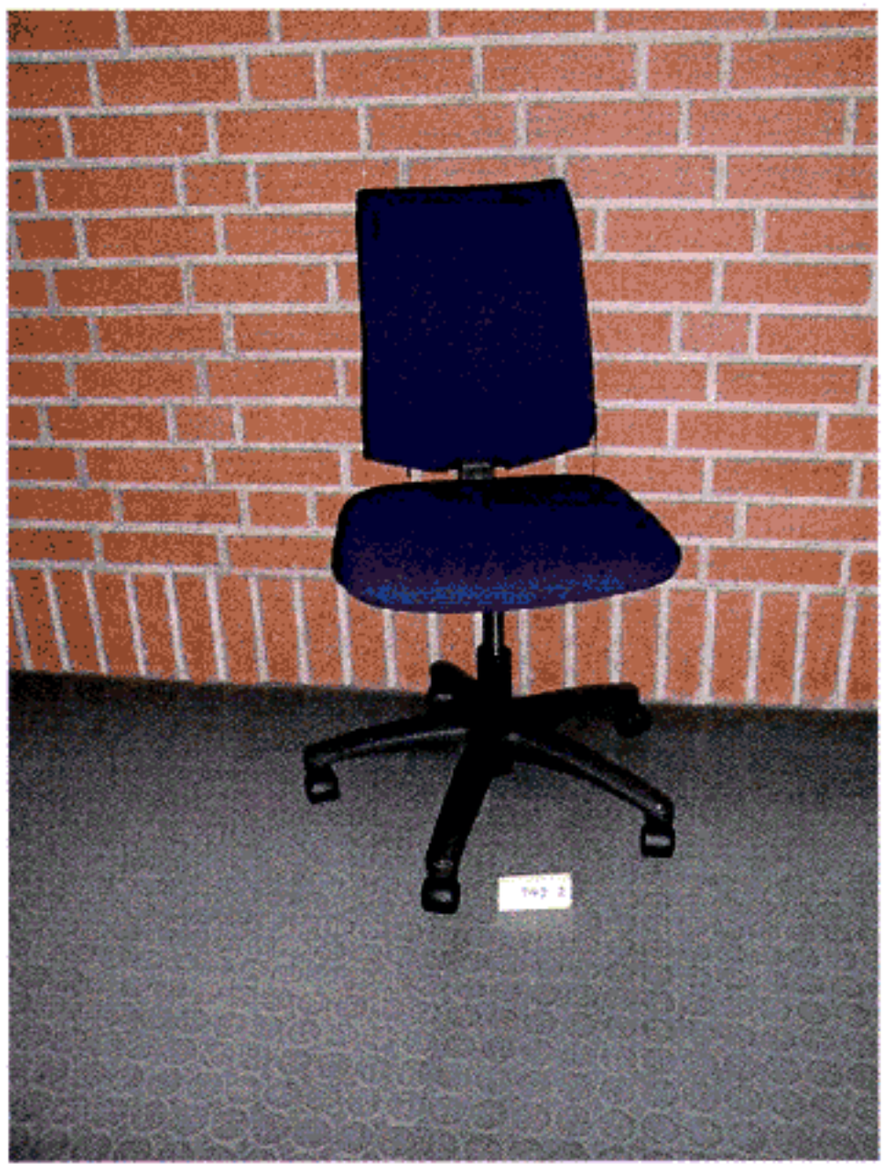
- Armrests made of plastic (PA6GF), inserted and screwed (M8x35) at the seat.

- Chair base made of plastic (PAGF)
- 5 break unloaded twin wheel casters Type H for textile floor covering
- Marking on casters: GR
- Caster manufacturer: Guy Raymond





Model 5472



Model 5372

Prüfkriterium / Anforderung			Ergebnis	+ positiv – negativ ./.entfällt
Technical tests				
Functional dimensions (mm) (EN 13761 P. 4)			Requirements met	
Seat height (measured with template to EN 1335 - 1)	a	400 to 500 mm	375 - 471	+
Seat depth: (measured 230 mm above loaded seat)	b	380 to 470 mm	416	+
Seat width:	d	min. 400 mm	425	+
Distance between armrests			463	+
Workmanship			Requirements met	
- Accessible corners and edges without burrs; cut off or rounded (haptic test);				+
- wooden chairs shall not have depreciating knots, insect bites, rotting and tree edges				./.
- all visible parts during normal use made of metal shall be corrosion resistant				+
Rolling resistance DIN EN 1335-3, cl. 6.1			Requirement met Type "H" 18 N	+

Prüfkriterium / Anforderung	Ergebnis	+ positiv – negativ ./.entfällt
Corrosion test	Not applicable	./.
Test conditions Test to DIN 50 017, ed. 10.1982 Duration of 1 cycle: 24 hours Test climate: 1st step, 8 hours (40 ± 3 °C) about 100 % relative humidity inc. warming up of the sample 2nd step, 16 hours cooling to standard climate Number of cycles: 2 - assessment after cleaning the sample with running water to DIN 53 209 and DIN 53 210		
Requirements - Corrosion level 0; no bubbles occurring in the paint		+
Stability	Requirements met	
Test conditions Test to DIN EN 1022, ed.. 01.1997 EN 1335-3 cl. 5		
Tipping over front corner Front edge overturning Sideways overturning Rearward overturning		+ + + +
Requirements no overturning of the chair during test		

Prüfkriterium / Anforderung	Ergebnis	+ positiv – negativ ./.entfällt
Static and dynamic strength test (EN 1728)	Requirements met	
Test conditions		
6.2.1 Static load of seat and back 10 cycles Seat load 1600 N, Back rest load 560 N, reduced to 410 N		+
6.2.2 Static load of seat, 80 mm behind the front edge 10 cycles Seat load 1300 N,		+
6.5 Static horizontal load of arm rests and head rest 10 cycles Load 400 N		+
6.6 Vertical downward load of arm rests 10 cycles Load 700 N		+
6.15 Seat impact test Drop height 180 mm 10 cycles		+
6.7 Combined seat and back durability test Load 1000 N/330 N 100 000 cycles		+
6.8 Seat front edge durability test 1000 N 50 000 cycles		+
Requirements		
No fractures or deformations may occur that could affect the safe use of the chair.		+

Prüfkriterium / Anforderung	Ergebnis	+ positiv – negativ ./.entfällt
User's information (EN 1335-2 cl. 5)	Requirements met	
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		+
Marking of the chair (DIN 4551 cl.. 8)	Requirements met	
Name or label of manufacturer		+
Type designation		+
Year of construction		+
Marking of gas spring (DIN 4550 cl. 7)	Requirements met	
Manufacturer		+
Type designation		+
Classification		+
Date of production - week/year		+