

## TEST CERTIFICATE No 03b/16/S

### 1. Subject and scope of tests:

Conducting tests of furniture with respect to its compliance with the standards

### 2. Order number: RDM 03/A/16/S

### 3. Customer's name and address:

BEJOT Sp. z o.o.  
63-112 Brodnica near Poznań  
Manieczki, ul. Wybickiego 2a

### 4. Name and symbol of the tested product / products:

Sky\_Line SK 102 2N, Sky\_Line SK 210 2N, Sky\_Line SK 220 2N, Sky\_Line SK 270 2N, Sky\_Line SK H 1N,  
Sky\_Line SK W 720 1N, Sky\_Line SK 223 2N

### 5. Date of tests: 20 December 2015 – 09 February 2016

### 6. Identification of product / products covered by the tests:

Technical description and product design drawing

### 7. List of standards according to which tests were conducted:

PN-EN 1728:2012

PN-EN 16139:2013\_07

PN-EN 1022:2007

PN-EN 1335-1:2004

PN-EN 1335-3:2009

### 8. Test results:

The results of strength and durability tests together with the evaluation of test results are given in the following cards from 1-03b/16/S to 7-03b/16/S to test certificate No 03b/16/S.

The test results presented in the certificate relate to the examined samples exclusively. The test certificate may not be duplicated in part or in whole.

### 9. Evaluation of test results:

The aforesaid products are consistent with the requirements of the standards.

Head of the Furniture Testing Laboratory

*[Illegible signature]*

Karol Łabęda MSc Eng.

Quality Manager of the Furniture Testing Laboratory

*[Illegible signature]*

Robert Kłos, PhD Eng.

*[Stamp: "Poznań University of Life Sciences, Department of Furniture Design, Furniture Testing Laboratory, ul. Wojska Polskiego 38/42, 60-627 Poznań, tel./fax 61 848 74 75, tel. 61 848 74 79"]*

Poznań, 09 February 2015

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**Card No 1 – 03b/16/S**  
**Strength test. Furniture for seating**

Name and symbol of furniture type: Sky\_Line SK 220 2N  
Weight of furniture in N: 55  
Dimensions of furniture in mm: height: 780 width: 560 depth: 525

**Method: PN-EN 1728:2012**

**Requirements: PN-EN 16139:2013\_07 – level 1**

Standard point	Type of test	Test parameters	Test result
6.4	Seat and backrest static load test	Vertical force on seat 1600 N, 10 cycles Force perpendicular to backrest 560 N 10 cycles	Positive
6.5	Front seat edge static load test	Vertical force on backrest 1300 N 10 cycles	Positive
6.6	Backrest static load test with downward vertical force	Vertical force 600 N 10 cycles	Positive
6.7	Backrest static load test with forward horizontal force	Horizontal force 450 N 10 cycles	Positive
6.15	Front leg static load test	Horizontal force 500 N Vertical load 1000 N 10 cycles	Positive
6.16	Side leg static load test	Horizontal force 400 N Vertical load 1000 N 10 cycles	Positive
6.17	Seat and backrest fatigue test	Vertical force on seat 1000 N Force perpendicular to backrest 300 N 100,000 cycles	Positive
6.18	Front seat edge fatigue test	Vertical force on seat 800 N 50,000 cycles	Positive
6.24	Seat impact test	Drop height 240 mm 10 cycles	Positive
6.25	Backrest impact test	Drop height 210 mm 10 cycles	Positive

Tests carried out by:

Karol Łabęda, MSc Eng. *[Illegible signature]*  
Robert Kłos, PhD Eng. *[Illegible signature]*

**Card No 2 – 03b/16/S**  
**Stability test. Furniture for seating**

Name and symbol of furniture type: Sky\_Line SK 220 2N  
Height of seat in mm: 470

**Method and requirements: PN-EN 1022:2007**

Standard point	Type of test	Test parameters	Test result
6.2	Forward overbalancing, all furniture for seating	Vertical force 600 N Horizontal force 20 N 5 sec	Positive
6.4	Sideward overbalancing, all furniture for seating without armrests	Vertical force 600 N Horizontal force 20 N 5 sec	Positive
6.6	Backward overbalancing, all furniture for seating with armrests	Vertical force 600 N Horizontal force 152 N 5 sec	Positive

Tests carried out by:

Karol Łabęda, MSc Eng. *[Illegible signature]*  
Robert Kłos, PhD Eng. *[Illegible signature]*

**Card No 3 – 03b/16/S**  
**Strength test. Furniture for seating**

Name and symbol of furniture type: Sky\_Line SK W 720 1N  
Weight of furniture in N: 50  
Dimensions of furniture in mm: height: 780 width: 560 depth: 500

**Method: PN-EN 1728:2012**

**Requirements: PN-EN 16139:2013\_07 – level 1**

Standard point	Type of test	Test parameters	Test result
6.4	Seat and backrest static load test	Vertical force on seat 1600 N, 10 cycles Force perpendicular to backrest 560 N 10 cycles	Positive
6.5	Front seat edge static load test	Vertical force on seat 1300 N 10 cycles	Positive
6.6	Backrest static load test with downward vertical force	Vertical force 600 N 10 cycles	Positive
6.7	Backrest static load test with forward horizontal force	Horizontal force 450 N 10 cycles	Positive
6.15	Front leg static load test	Force on seat 500 N Horizontal force 1000 N 10 cycles	Positive
6.16	Side leg static load test	Force on seat 400 N Horizontal load 1000 N 10 cycles	Positive
6.17	Seat fatigue test	Vertical force on seat 1000 N Force perpendicular to backrest 300 N 100,000 cycles	Positive
6.18	Front seat edge fatigue test	Vertical force on seat 800 N 50,000 cycles	Positive
6.24	Seat impact test	Drop height 240 mm 10 cycles	Positive
6.25	Backrest impact test	Drop height 210 mm 10 cycles	Positive

Tests carried out by:

Karol Łabęda, MSc Eng. *[Illegible signature]*

Robert Kłos, PhD Eng. *[Illegible signature]*

**Card No 4 – 03b/16/S**  
**Stability test. Furniture for seating**

Name and symbol of furniture type: Sky\_Line SK W 720 1N  
Height of seat in mm: 445

**Method and requirements: PN-EN 1022:2007**

Standard point	Type of test	Test parameters	Test result
6.2	Forward overbalancing, all furniture for seating	Vertical force 600 N Horizontal force 20 N 5 sec	Positive
6.4	Sideward overbalancing, all furniture for seating without armrests	Vertical force 600 N Horizontal force 20 N 5 sec	Positive
6.6	Backward overbalancing, all furniture for seating with armrests	Vertical force 600 N Horizontal force 159 N 5 sec	Positive

Tests carried out by:

Karol Łabęda, MSc Eng. *[Illegible signature]*  
Robert Kłos, PhD Eng. *[Illegible signature]*

**Card No 5 – 03b/16/S**  
**Strength test. Furniture for seating**

Name and symbol of furniture type: Sky\_Line SK 102 2N  
Weight of furniture in N: 75  
Dimensions of furniture in mm: height: from 750 to 840 width: 565 depth: 535

**Method: PN-EN 1335-3:2009**

**Requirements: PN-EN 16139:2013\_07, PN-EN 1022:2007**

Standard point	Type of test	Test parameters	Test result
7.1.2	Stability test. Forward overbalancing	Vertical load 60 kg Horizontal force 20 N	Positive
7.1.5	Stability test. Sideward overbalancing	Vertical load on seat 35 kg on armrests 25 kg Horizontal force 20 N	Positive
7.1.7	Stability test. Backward overbalancing. Furniture with reclining backrest	Load 13 rings (130 kg)	Positive
7.2.1	Front seat edge static load test	Vertical force on seat 1600 N 10 cycles	Positive
7.2.2	Seat and backrest static load test	Vertical force on seat 1600 N, 10 cycles Force perpendicular to backrest 560 N 10 cycles	Positive
7.2.3	Armrest downward static load test	Vertical force 900 N 10 cycles	Positive
7.2.4	Armrest downward static load test. Front armrest edge test	Vertical force 450 N 5 cycles	Positive
7.2.5	Armrest outward static load test	Horizontal force 400 N 10 cycles	Positive

Tests carried out by:

Karol Łabęda, MSc Eng. *[Illegible signature]*  
Robert Kłos, PhD Eng. *[Illegible signature]*

**Card No 6 – 03b/16/S**  
**Strength test. Furniture for seating**

Name and symbol of furniture type: Sky\_Line SK 102 2N

Continued

**Method: PN-EN 1335-3:2009**

**Requirements: PN-EN 16139:2013\_07, PN-EN 1022:2007**

7.3.1	Seat fatigue test. In point A	Vertical force on seat 1500 N 120,000 cycles	Positive
7.3.1	Seat and backrest fatigue test. In points C-B	Vertical force on seat 1200 N 100,000 cycles Force perpendicular to backrest 320 N 100,000 cycles	Positive
7.3.1	Seat and backrest fatigue test. In points J-E	Vertical force on seat 1200 N 20,000 cycles Force perpendicular to backrest 320 N 20,000 cycles	Positive
7.3.1	Seat and backrest fatigue test. In points D-G	Vertical force on seat 1200 N 20,000 cycles Force perpendicular to backrest 320 N 20,000 cycles	Positive
7.3.2	Armrest fatigue test	Vertical force 300 N 50,000 cycles	Positive

Tests carried out by:

Karol Łabęda, MSc Eng. *[Illegible signature]*

Robert Kłos, PhD Eng. *[Illegible signature]*

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**Card No 7 – 03b/16/S**

**Determination of functional dimensions. Furniture for seating**

1. Name and symbol of furniture type: Sky\_Line SK 102 2N

**Method and requirements: PN-EN 1335-1:2004**

<b>Standard point</b>	<b>Name of component</b>	<b>Dimensions</b>	<b>Measurement result</b>
6.1	Height of seat, a	Min. 450 mm Max. 530 mm	Positive
6.2	Depth of seat, b	480 mm	Positive
6.3	Depth of seat surface, c	450 mm	Positive
6.4	Width of seat, d	430 mm	Positive
6.5	Inclination of seat, e	-6°	Positive
6.6	Height of back support points above seat level, f	200 mm	Positive
6.7	Height of backrest pillow, g	135 mm	Positive
6.8	Height of upper backrest edge above seat level, h	330 mm	Positive
6.9	Width of backrest, i	380 mm	Positive
6.10	Curvature radius of backrest, k	350 mm	Positive
6.11	Adjustment range of backrest inclination, l	-	Positive
6.12	Usable length of armrests, n	160 mm	Positive
6.13	Usable width of armrest, o	30 mm	Positive
6.14	Usable width of armrests above seat, p	220 mm	Positive
6.15	Distance from usable armrest front to front seat edge, q	30 mm	Positive
6.16	Width of clearance between armrests, r	490 mm	Positive

Tests carried out by:

Karol Łabęda, MSc Eng. *[Illegible signature]*

Robert Kłos, PhD Eng. *[Illegible signature]*