



**Mechanical Testing Laboratory**

**TEST REPORT  
No. 00003/ 23 /2014**



Number of copies: 2  
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Sheets: 9  
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Date of issue: May 7<sup>th</sup> 2014

Applicant/Customer: **SEDASPORT s.r.o.**  
**Staromyjavská 1031/14**  
**907 01 Myjava, Slovak Republic**

Test item: **Chairs for ranked seating- folding model STEEL**

Registration number of the report of receipt of test item: **03 /23/2014**

Date of delivery of test item: **March 20<sup>th</sup> 2014**

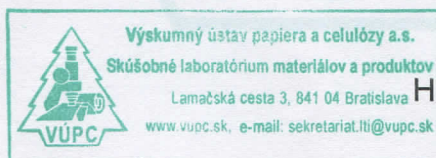
**Tests performed by:**

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*Peter Cvičela*



**Checked and approval by:**

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## **SCOPE**

Range of tests was focused according to customer requirements: An assessment in accordance with **STN EN 12227: 2002. Tab. No. 1, Type of use-general.**

## **NAME OF THE TESTS**

### ***- Safety requirements for the product***

The test procedure was performed in accordance with **STN EN 12227: 2002: Furniture. Ranked seating. Test methods and requirements for strength and durability.**

## **1. PURPOSE OF THE TEST**

Verification of basic safety features, durability of construction and stability of the product.

## **2. TEST SAMPLE DELIVERY**

The samples were delivered by the customer.



Fig.1: View of folding seat STEEL

### **3. DATE OF RECEIPT OF THE TEST ITEM**

Subject of the test was delivered by client on March 3<sup>th</sup> 2014. Report of receipt of test item: 03/23/2014 from March 20<sup>th</sup> 2014.

### **4. SUBJECTS OF THE TESTS**

Two pieces of folding seats STEEL designed for ranked seating for stadiums and sports halls were delivered to the tests.



Fig.2: Folded seat STEEL fixed to a panel.

Subject of the testing (prototype) was made of the following materials:

- Steel anchor-leg R, L
- The seat and backrest of the seat consist of a shaped perforated sheet steel and arc-shaped metal weight, PUR foam and upholstery fabrics
- A finishing of metal parts was not performed (prototype)

## 5. ASSEMBLING

Chairs came individually packed. The sample No.2 was selected for tests. It was anchored on the test panel according to a customer drawing.

## 6. START AND END DATES OF TESTS

Start date: March 24<sup>th</sup> 2014

End date: May 6<sup>th</sup> 2014

## 7. TEST PROCEDURE

The sample was tested in the Mechanical Testing Laboratory of accredited Laboratory of Materials and Products Testing, VÚPC, a.s., Bratislava, section Lignotesting in related laboratory conditions  $\varphi = 55 \pm 5\%$  (relative humidity) and  $T = 23 \pm 2 \text{ }^\circ\text{C}$  (temperature). Certified and calibrated measuring instruments and test equipments – weights were used for the tests only.

### List of test equipments and measuring instruments:

List of test equipments used:

Name of test equipment	Registration metrological number
Universal test equipment for test of durability and stability	SZ – 2.05/02
Universal test equipment for testing of furniture	SZ – 2.05/05
Test equipment for mass determination	SZ – 2.05/03

List of measuring instruments:

Name of instrument	Registration metrological number	Number of certificate
Measuring tape	DL - 01/23	0750/312.06/14
Weight	HM – 10,11,20,21,22,23,24,	027/220/12/13
Set loading pad	PSZ - 21/23	-

### 7.1 Safety requirements for the product

Subject of the testing is assembled on a horizontal pad and its evaluation according **STN EN 12727:2002** is provided.

### 7.2 Construction

The subject is placed on the floor. Overall checking of the completeness and compliance with security requirements for the construction of the chair for ranked seating are performed. All connections – welds are visually checked.

### 7.3 Edges, corners and tips

Tests of edges, corners and sharp tips are carried out visually on the test subject according to the requirements of standard **STN EN 12727: 2002**.

### 7.4 Weight of the chairs

Number of the test subject	Model	Weight
03/23/2014/ 2	STEEL	16,00 kg



Fig.3 : Weighting of sample

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**8. Tests results**

(Tab No.1 STN EN 12727: 2002)

**8.1 Loading tests**

N° of the test subject	Test	Loading	3	Measured/Found	Type of the test	Evaluation
	Use		General			
<b>2 STEEL</b>	<b>6.3.</b> Seat and Back Load Test	Seat Force N	2000 10 x	Without damage, cracks, fractures or release	AS	<u>complied</u>



Fig 4: Static loading test of the seat

N° of the test subject	Test	Loading	3	Measured/Found	Type of the test	Evaluation
	Use		General			
<b>2 STEEL</b>	<b>6.8</b> Seat durability test	seat Force N	150000 cycles 950 N	Without damage, cracks, fractures or release	AS	<u>complied</u>

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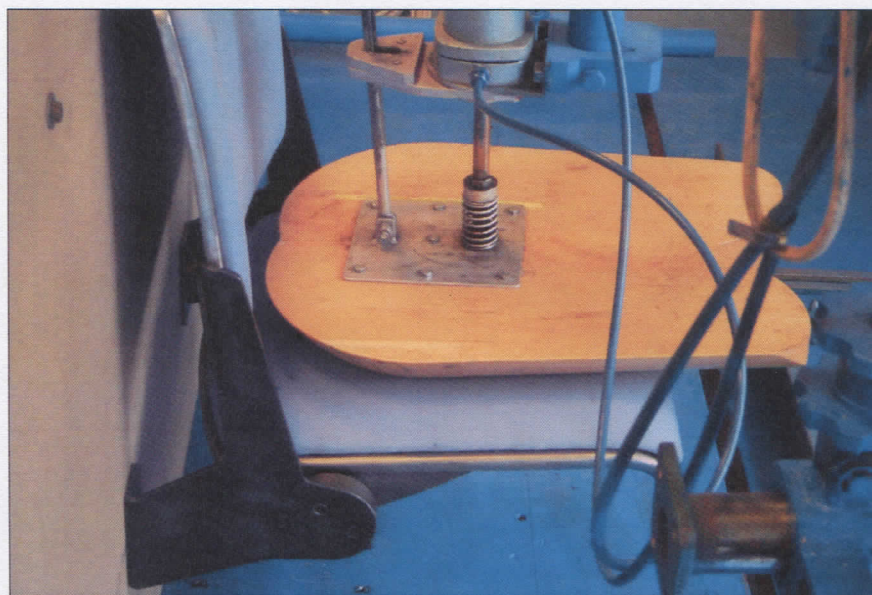


Fig.5: View of the seat testing

N° of the test subject	Test	Loadin g	3	Measured/Found	Type of the test	Evaluation
	Use		General			
<b>2 STEEL</b>	6.9 Seat front edge durability test	seat Force N	150000 cycles 950 N	Without damage, cracks, fractures or release	AS	<u>complied</u>

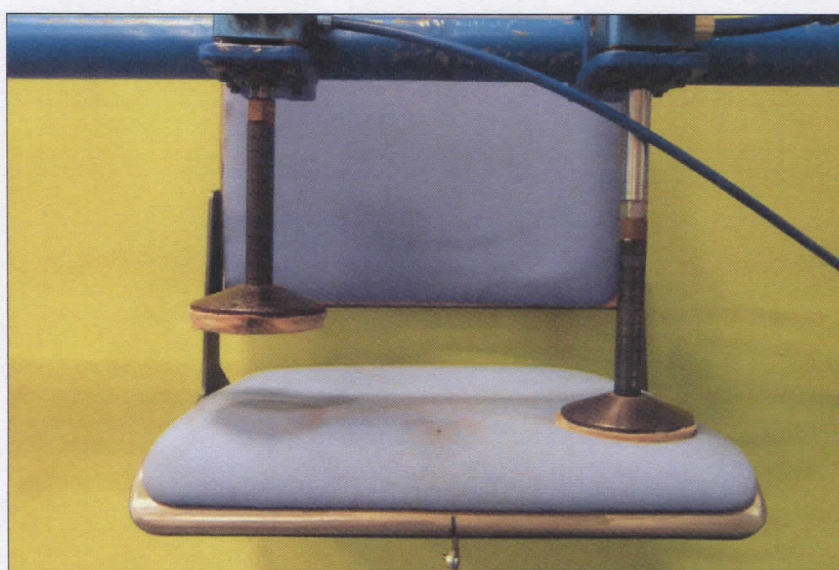


Fig.6: View of the front edge durability test

N° of the test subject	Test	Loading	3	Measured/Found	Type of the test	Evaluation
	Use		General			
<b>2 STEEL</b>	<b>6.11 Seat impact test</b>	drop height	300 mm 10 x	Without damage, cracks, fractures or release	AS	<u>complied</u>

N° of the test subject	Test	Loading	3	Measured/Found	Type of the test	Evaluation
	Use		General			
<b>2 STEEL</b>	<b>6.14 Tipping seat operation test</b>	Cycles	50000 cycles	Without damage, cracks, fractures or release	AS	<u>complied</u>

Tests 6.13, 6.15, 6.16 have not been carried out because the seats have no armrests and no additional table.



Fig.7. and 8: Test of tipping mechanism of the chair



Identification of the type of test:

**AS** – test in range of accreditation of testing laboratory of VÚPC a.s., section Lignotesting

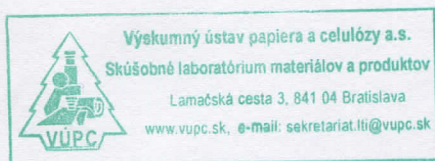
**NS** – test out of range of accreditation performed on own testing laboratory of VÚPC a.s., section Lignotesting

**Note:** Uncertainties of instruments and measurement were taken into account when an evaluation comes into force.

**Warning:** The test results do not replace any other documents required by the authorities of the state supervision in accordance with relevant regulations.

**Copy sent to:**

1. Customer
2. Laboratory of Materials and Products Testing Lignotesting



**Ing. Vladimír Ihnát, PhD.**  
**Head of Laboratory of Materials and Products Testing**

*Ihnát*

\* \* \*

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