

Furniture testing centre is accredited by Lithuanian National Accreditation Bureau for tests of furniture safety, furniture materials and determination of formaldehyde content
Certificate No. LA.01.060

Page 1 (6)

TEST REPORT No. BBC 17-222

20 09 2017
Vilnius

Determination of stability, strength, durability for
Work table NOVA WOOD – DNS162-W

Customer	UAB Narbutas Furniture Company
Address of customer	Šeškinės g. 55A, Vilnius
Application for test	08 09 2017
Date of selected test object	sampling was made by the Customer
Date of receive test object	08 09 2017
Manufacturer name	UAB Narbutas Furniture Company
Address of manufacturer	Šeškinės g. 55A, Vilnius
Indication of normative document	EN 527-1:2011, EN 527-2:2016, EN 1730:2012
Date of test	11 08 2017 (beginning) 19 09 2017 (end)

Conclusion

Work table NOVA WOOD – DNS162-W **complies** with the standard EN 527-1:2011 Office furniture – Work tables and desks – Part 1: Dimensions, and **complies** with the standard EN 527-2:2016 Office furniture – Work tables and desks – Part 2: Safety, strenght and durability requirements.

Test object

Work table NOVA WOOD – DNS162-W with two working places constructed in front of each other. Table tops are made of 25 mm thickness finished particle board. Legs are made of 60 mm, stretchers of 56 mm thickness ash wood. Supports of table tops with a cross-section of (40x20) mm are made of steel pipes. Table tops are fixed to supports and supports are fixed to stretchers with M6 bolts. There are four Ø25 mm helical supports fixed at the bottom of legs.

External dimensions of desk are: length 1600 mm, depth 1640 mm, height 740 mm.





Figure 1. Work table NOVA WOOD – DNS162-W

Requirements and test methods

EN 527-1:2011 Office furniture – Work tables and desks – Part 1:Dimensions;

EN 527-2:2016 Office furniture – Work tables and desks – Part 2: Safety, strenght and durability requirements;

EN 1730:2012 Furniture - Tables - Test methods for the determination of stability, strength and durability.



Unless otherwise stated, the following tolerances are applicable:

- forces $\pm 5\%$ of the nominal force;
- masses $\pm 1\%$ of the nominal mass;
- dimensions ± 1 mm of the nominal dimension;
- velocities $\pm 5\%$ of the nominal velocity;
- angles $\pm 1^\circ$ of the nominal angle.

The tolerance for the position of loading pads shall be ± 5 mm.

Test apparatuses

Apparatus 241 MP certificate No 22, apparatus 194 P certificate No 27.

Work table NOVA WOOD – DNS162-W was stored in the laboratory room before the tests was performing. The tests were carried out in normal indoor ambient conditions. During tests the temperature was (23 – 24) °C.

Test results

Table 1. Work table NOVA WOOD – DNS162-W test results

Clause, Standard	Test and method	Requirements	Test results	Pass/Fail or N/A*
Dimensions, Table 1, EN 527-1:2011		EN 527-1:2011, table 1		
4	Type C, fixed height for sitting only position			
	Height of the work surface h_1 , mm			
	- sitting only	740 \pm 20	740	pass
	- standing only	1050 \pm 20	N/A	
	Maximum desk top thickness			
	- at the front t_1 , mm	70	25	pass
	- at 500 mm from the front edge t_2 , mm	100	65	pass
	Minimum height of knee clearance for standing position only k_1 , mm	700	N/A	
	Minimum depth of knee clearance for standing position only k_2 , mm	80	N/A	
	Minimum depth of foot clearance for standing position only k_3 , mm	150	N/A	
	Minimum height of minimum foot clearance			
	- seating only and sit/stand (from 600 mm to 800 mm from the front edge) f_1 , mm	120	> 120	pass
	- standing only (from front edge to 150 mm, f_2 , mm)	120	N/A	
	Minimum legroom depth			
	- sitting only and sit/stand, g_1 mm	800	> 800	pass
	Minimum desk top depth, D mm	800	800	pass
	Minimum legroom width, W mm			
	- sitting only and sit/stand	850	1480	pass
	- standing only	790	N/A	pass



Table 1. (continued)

Clause, Standard	Test and method	Requirements	Test results	Pass/Fail or N/A*
4 Safety requirements, EN 527-2:2016		EN 527-2:2016, 4		
4.1	All parts of the table with which the user comes into contact during intended use These requirements are fulfilled when:	shall be designed so that physical injury and damage are avoided.		
	a) all accessible edges and corners	are free from burrs and rounded or chamfered, 4.1	no remarks	pass
	b) the edges and corners of the top surfaces	are chamfered not less than 1 mm by 1 mm or rounded with a radius of not less than 2 mm, 4.1	no remarks	pass
	c) the ends of feet and tubular components	are closed or capped, 4.1	no remarks	pass
	Movable and adjustable parts	shall be designed so that injuries and inadvertent operation are avoided.		N/A
	Any load bearing part of the table to come loose unintentionally	shall not be possible, 4.1	no remarks	pass
	All parts which are lubricated to assist sliding	shall be designed to protect users from lubricant stains when in normal use, 4.1		N/A
4.2 Shear and squeeze points, EN 527-2:2016		EN 527-2:2016, 4.2		
4.2.1	Shear and squeeze points when setting up and folding The edges of parts moving relative to each other and creating shear and squeeze points	Unless 4.2.2 or 4.2.3 are applicable, shear and squeeze points that are created only during setting up and folding are acceptable, because the user can be assumed to be in control of his/her movements and to be able to cease applying the force immediately upon experiencing pain, 4.2.1 shall be as specified in 4.1, 4.2.1		N/A
4.2.2	Shear and squeeze points under influence of powered mechanisms	There shall be no shear and squeeze points which close to less than 25 mm unless they are always less than 7 mm created by parts of the table operated by powered mechanisms, i.e. springs, gas lifts and motorized systems, 4.2.2		N/A
4.2.3	Shear and squeeze points during use	There shall be no shear and squeeze points which close to less than 25 mm unless they are always less than 7 mm created by forces applied during normal use or created by the user during normal movements and actions, e.g. attempting to move the table, 4.2.3	no remarks	pass



Table 1. (continued)

Clause, Standard	Test and method	Requirements	Test results	Pass/Fail or N/A*
5 Strength and durability, table 1, EN 527-2:2016		EN 527-2:2016, 5.2		
8, EN 1730:2012	1. Durability of height adjustment mechanisms - mass on the table top of 50 kg; Location of the centre of the loading point and loading on the table top: - A: 20 kg at 200 mm from the front and side edges. The remaining load shall be at the geometric centre of the table top, 1250 cycles; - B: 50 kg or the maximum load specified shall be at the geometric centre of the table top, 2500 cycles; - C: 20 kg positioned at a rear corner 200 mm from the rear edge and the side edge. The remaining load shall be at the geometric centre of the table top, 1250 cycles.	The strength and durability requirements are fulfilled when after testing in accordance with Table 1: a) there are no fractures of any member, joint or component; b) there are no loosening of joints intended to be rigid; c) the work table fulfils its functions after removal of the test loads; d) when tested according to Table 1, test number 5, the stiffness of the structure, both D1 and D2 divided by the height to the top of the table top shall be ≤ 17 mm/m, 5.2		N/A
6.2, EN 1730:2012	2.1. Horizontal static load test - load on the table top of 50 kg; - specified force of 450 N; - minimum specified force of 300 N; - directions $F_1 - F_2$ and $F_3 - F_4$; - 10 cycles		$F_1 - F_2=450$ N; $F_3 - F_4=450$ N, no remarks	pass
6.2, EN 1730:2012	2.2. Additional horizontal static load test for adjustable tables with a height more than 950 mm - load on the table top of 50 kg; - moment of 285 Nm; - directions $F_1 - F_2$ and $F_3 - F_4$; - 10 cycles			N/A
6.3.1, EN 1730:2012	3.1 Vertical static load tests - force of 1 000 N; - 10 cycles		no remarks	pass
6.3.1, EN 1730:2012	3.2 Additional vertical static load test for adjustable tables with a height more than 950 mm - force of 500 N; - 10 cycles			N/A
6.4.1, 6.4.2 EN 1730:2012	4. Horizontal durability test - load on the table top of 50 kg; - force of 300 N; - directions $F_a - F_b$ and $F_c - F_d$; - 10 000 cycles		$F_a - F_b=300$ N; $F_c - F_d=300$ N, no remarks	pass



Table 1. (end)

Clause, Standard	Test and method	Requirements	Test results	Pass/Fail or N/A*
5 Strength and durability, table 1, EN 527-2:2016		EN 527-2:2016, 5.2		
6.4.1, 6.4.3 EN 1730:2012	5. Stiffness of the structure - load on the table top of 0 kg; - force of 200 N	The strength and durability requirements are fulfilled when after testing in accordance with Table 1: a) there are no fractures of any member, joint or component; b) there are no loosening of joints intended to be rigid; c) the work table fulfils its functions after removal of the test loads; d) when tested according to Table 1, test number 5, the stiffness of the structure, both D1 and D2 divided by the height to the top of the table top shall be ≤ 17 mm/m, 5.2	$D_1 = 4,29$ mm (12,2 mm/m); direction $F_c - F_d$ load on the table top of 20 kg, $D_2 = 2,27$ mm, (4,2 mm/m) does not exceed 17 mm/m measured at height of 740 mm	pass
6.5, EN 1730:2012	6. Vertical durability test - force of 400 N; - 10 000 cycles		N/A	
6.8, EN 1730:2012	7. Durability of tables with castors - load on the table top of 50 kg; - 2 000 cycles		N/A	
6.6, EN 1730:2012	8. Vertical impact test - drop height of 140 mm; - 10 cycles		no remarks	pass
6.9, EN 1730:2012	9. Drop test - nominal drop height of 100 mm - force required to lift one end of the table of 320 N		no remarks	pass
4.3 Stability requirements, table 1, EN 527-2:2016		EN 527-2:2016, 4.3		
7.2, EN 1730:2012	10. Stability under vertical load - force of 750 N	The table shall not overturn when tested according to tests 10 and 11 of Table 1, 4.3	no remarks	pass
7.3, EN 1730:2012	11. Stability for work tables extension elements - load in drawers of N - force of 400 N			N/A
Remarks, comments				

*N/A: not applicable

Head of furniture testing centre

Manvydas Mickus

Tests were carried by engineer

Mindaugas Mickus



The test results is relate only to the tested items.

This test report shall not be reproduced except in full, without approval of the furniture testing centre.