CENTRE FOR TESTING AND CERTIFICATION - MECH-TEST
Mechanical Laboratory
05-077 Warszawa-Wesoła, ul. Klonowa 22
tel.: +48 603 23-26-45, e-mail: cbc.mech.test@gmail.com, www.cbc.org.pl

Date 27.11.2017

TEST REPORT NO. *CBC-198/2017*

Subject of testing: *Walking tables*

Classification according to PN-EN ISO 9999:2011 : 12 06 12

Type / Model: *NAVIGATOR AIR*

Art no.: *ARWHL600*
SN: *(01)05901912639355*
(11)171108(21)0001

Manufacturer: *REHASENSE Sp. z o.o.*
Sulejowska 45
97-300 Piotrków Tryb.

Number of specimens: *1*

Applicant: *A-Net s.c.*
93-469 Łódź,
ul. Łaskowice174

Kind of testing *Testing scope according to application of Client*
Mechanical testing for conformity with
PN-EN ISO 11199-3:2008

Test started: *22.11.2017*

Test finished: *27.11.2017*

Approved by:
DYREKTOR
mgr inż. Andrzej Tkaczyk

Special comments / enclosures:

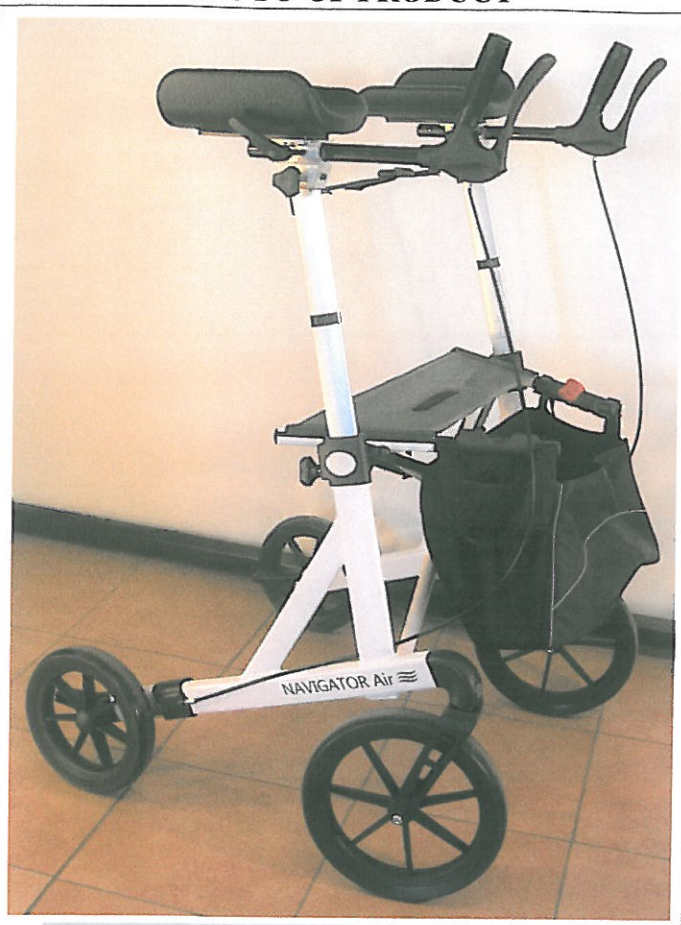
CHARACTERISTIC OF PRODUCT

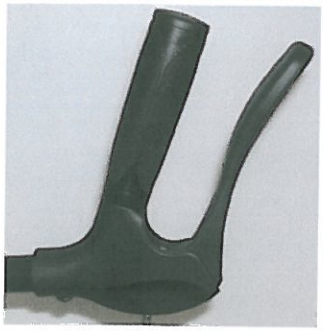
Name : ***NAVIGATOR AIR***	**Dimension of rollator:** –
Art no.: ***ARWHL600***	**SN:** *(01)05901912639355(11)171108(21)0001*
Maximum permissible user mass: ***200 kg***	**Mass of rollator:** ***12,36 kg***

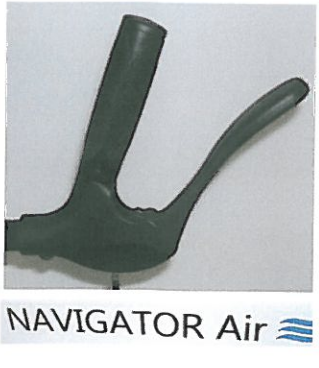
Description

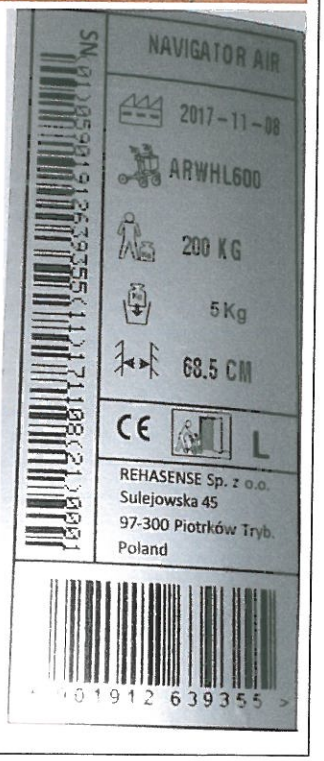
Elements/parameters/materials/dimensions			Comments
Dimensions od walking rollator (fig. 2 PN-EN ISO 11199-2)	Distance between handgrips (dimension 2)	*520 mm*	
	Angle between of handgrip axis and direction of movement (α)	*0^0*	
	Height of rollator (dimension 6)	*1070 mm*	*min.*
		1200mm	*max.*
	Support height (dimension 5)	*965 mm*	*min.*
		1095 mm	*max.*
	Width of rollator (max.) (dimension 4)	*705 mm*	
	Turning width (dimension 1)	*960 mm*	
	Length of rollator (max.) (dimension 3)	*765 mm*	
Dimensions of folded rollator (mm)		*955 x 765 x 330*	
Fig. 3	Handgrip - diameter	*31 mm*	
	Handgrip - length	*100 mm*	
Wheels of rollator	Front wheels– quantity	*2*	*castor wheels*
	Front wheels - diameter	*281 mm*	
	Front wheels – width	*43/42 mm*	
	Front wheels - brake	*Not any*	
	Rear wheels – quantity	*2*	*castor wheels*
	Rear wheels - diameter	*231 mm*	
	Rear wheels - width	*43/42 mm*	
	Rear wheels - brake	*Included*	
Tip	Diameter	*Not any*	
	Material		
	Colour		
Material of rollator (fig. 1)	Front legs	*Aluminum, Steel, Hard plastic, Bolts, nuts*	
	Bracing member (no. 8)		
	Rear legs		
	Height adjusting device (no. 4)		
	Handgrip (no 5), Brake elements	*Hard plastic*	

PHOTO OF PRODUCT









RESULT OF TESTS ACCORDING TO PN-EN ISO 11199-3:2008

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters		Real value	Test result	Comments
4.1	Stability					
	5.4	product used only in premises	Forward-direction stability	--	*N/A*	*≥ 10,0 °*
	5.5		Backward-direction stability	--	*N/A*	*≥ 4,0 °*
	5.6		Sideway-direction stability	--	*N/A*	*≥ 3,5 °*
	5.4	product also used outside	Forward-direction stability	*15,0° Conf.*	*Pos.*	*≥ 15,0 °*
	5.5		Backward-direction stability	*12,9° Conf.*	*Pos.*	*≥ 7,0 °*
	5.6		Sideway-direction stability	*5,5° Conf.*	*Pos.*	*≥ 4,5 °*
4.2	**Brakes**					
	V/I	Ease service of running brakes while driving in the products used outside and equipped with more than 2 wheels		*Conf.*	*Pos.*	
	V/I	The presence of the parking brakes in all tables for walking and the simplicity of their handling		*Conf.*	*Pos.*	
	V/I	Adjustable brakes if their performance deteriorates		*Conf.*	*Pos.*	
4.2	Meas.,5.8.2.2	Brake grip distance (fig. 8)		*72mm Conf.*	*Pos.*	*≤ 75 mm*
	5.8.2.3	Running brake effectiveness		*Conf.*	*Pos.*	*Movement of rollator ≤ 10 mm in 1 minute*
	Meas., 5.8.3.2	Force to set parking brake		*30 N Conf.*	*Pos.*	*≤ 60 N manual*
	Meas., 5.8.3.2	Force to release parking brake		*15 N Conf.*	*Pos.*	*≤ 40 N manual*
	5.8.3.3	Parking brake effectiveness, test to forward		*Conf.*	*Pos.*	
	5.8.3.4	Parking brake effectiveness, test to reverse		*Conf.*	*Pos.*	
	V/I	Brake not adversely affected by folding, unforlding or adjusting actions of mechanisms		*Conf.*	*Pos.*	
	V/I	Adjustable brake without the use of tools, where adjusting other mechanisms of the product forces the re-adjustment of the brakes		--	*N/A*	
4.3	**Mechanical durability**					
	5.9.2	Static loading resistance of resting seat		*Conf.*	*Pos.*	*loading – 1,2 x mass of user (240kg,) 1mn.*
	5.10	Static loading resistance of product		*Conf.*	*Pos.*	*loading – 1,5 x mass of user, 5 s*
	5.11	Fatigue loading resistance of product		*Conf.*	*Pos.*	*loading – 0.8 x mass of user, 200 000 cycles, f ≤ 1 Hz*
4.4	**Manoeuvrability**					
	Measur.	Diameter of wheels (front/rear)		*281/231 mm Conf.*	*Pos.*	*≥ 75 mm*
	Measur.	Diameter of wheels of the product used outside (front/rear)		*281/231 mm Conf.*	*Pos.*	*≥ 180 mm*
	Measur.	Width of wheels (front/rear)		*42 mm Conf.*	*Pos.*	*≥ 22 mm, 5 mm above ground*
4.5	**Handgrip**					
	Measur.	Handgrip - diameter		*31mm Conf.*	*Pos.*	*≥ 20 mm i ≤ 50 mm*
	V/I	Confidence to handle mounting for handgrip		*Conf.*	*Pos.*	
	V/I	Ease to change or ease of cleaning		*Conf.*	*Pos.*	
4.6	**Leg section and tip**					
	V/I	Puncture resistant tip		--	*N/A*	
	V/I	Convertibility of the tip		--	*N/A*	
	V/I	No staining of the ground		--	*N/A*	
	Measur.	Diameter of the tip		--	*N/A*	*≥ 35 mm*
	V/I	Safe clamping of the tip		--	*N/A*	
4.7	**Adjusting devices**					
	V/I	Confidence of mounting of adjustable handles		*Conf.*	*Pos.*	
	V/I	Marking the maximum allowable extension of adjusting devices		*Conf.*	*Pos.*	
	V/I	Reliability of the activity of adjusting mechanisms after the fatigue test		*Conf.*	*Pos.*	
	V/I	Locking of folding tables for walking in a working position		*Conf.*	*Pos.*	
4.8	**Resting seat**					
	5.9	Resting seat – static loading durability		*Conf.*	*Pos.*	*loadmg 240 kg, 1 min.*
4.9	**Materials and finish**					
	ISO 10993-1	Biocompatibility of material with human body		--	*N/T*	
	V/I	Free of discolouring of skin or clothing in contact with product materials		*Conf.*	*Pos.*	
	V/I	No burrs, sharp edges and protrusions		*Conf.*	*Pos.*	

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
4.10	**Marking and labelling of product**				
	6.2, V/I	**Information to be included on the product and / or accessories:**			
		- Maximum permissible user weight	*Included*	*Pos.*	
		- Maximum load of accessories	*Included*	*Pos.*	
		- Manufacturer`s name or trade name and address	*Included*	*Pos.*	
		- The name and / or id. number of the product	*Included*	*Pos.*	
		- Month and year of production	*Included*	*Pos.*	
		- Marking of maximum extension of the height adjustment	*Included*	*Pos.*	
		- Max. limit of range adjustment	*Included*	*Pos.*	
		- Maximum width of the walking bicycl	*Included*	*Pos.*	
		- Product intended for outdoor/indor use	*Included*	*Pos.*	
4.10	**6.3, V/I**	**The content of the documentation:**			
		- Maximum supporting height	*Included*	*Pos.*	
		- Minimum supporting height	*Included*	*Pos.*	
		- Maximum width of the turning	*Included*	*Pos.*	
		- Maintenance instructions including brake adjustment as a result of wear and the required terms of control	*Included*	*Pos.*	
		- manual cleaning	*Included*	*Pos.*	
		-Instructions for assembly, adjustment of all kinds, folding and unfolding	*Included*	*Pos.*	
		-Warnings and advice about precautions relating to safe distances between moving and stationary parts (see EN 12182, Clauses 12 and 13)	*Included*	*Pos.*	

Pos. – positive; Neg – negative; N/T – not tested; N/A – not applicable; N/R – not required , N/O – not occurred , V/I.- visual inspection, Conf.- conformed

TEST CONDITIONS		
Ambient temperature	*21°C*	*Required temperature 21°C ±5°C*
Relative humidity of air Humidity	*60%*	*N/R*
Comments:		
All tests were performed at maximum height of walking stick.		
All tests performend in the least stabble position of self-adjusting wheels.		
Sequence of tests: stability test, static loading test, fatigue test.		
One verticalizer was tested.		
During visual inspection before testing any visible defects that could have influence on test results were not stated		

Pos. – positive; Neg – negative; N/T – not tested; N/A – not applicable; N/R – not required , N/O – not occurred , V/I.- visual inspection, Conf.- conformed

NOTE 1. Conformity assessment of product according to standard requirements refer to the scope of mechanical ordered by client

NOTE 2: During visual inspection before testing any visible defects that can have an effect on test results were not stated.

NOTE 3: Sample/object for testing was delivered to the Laboratory by the Orderer.

CONCLUSIONS:

*Test object **conforms** with requirements of PN-EN ISO 11199-3:2008 within mechanical testing ordered by client excluding testing of material biocompatibility with human body according to PN-EN ISO 10993-1:2010.*

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