



POLSKIE CENTRUM BADAŃ I CERTYFIKACJI S.A.

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FBM 42-05

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TEST REPORT NO. *BR-164/L-401/2008*

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Subject of testing:	<i>Manually propelled wheelchair</i>	Classification according to PN-EN ISO 9999:2001 :	12 21 06
Type / Model:	<i>DOLPHIN</i>	Factory ref. no.:	<i>D - 0001</i>
Manufacturer:	<i>MOBILEX A/S, Noerskovvej 1 DK - 8660 Skanderborg</i>	Number of specimens:	<i>1</i>
Applicant:	<i>MOBILEX Sp. z o.o. 90-540 Łódź, ul. Radwańska nr.23/1</i>		
Kind of testing	<i>Testing scope according to application of Client Mechanical testing for conformity with PN-EN 12183 : 2002; PN-EN 12182:2002; PN - ISO 7176 - part 3,5,7,8,15 ISO 7176-part 1</i>		

Test started: 25.07.2008

Test finished: 20.10.2008

Performed by:

Mirosław Szymański

Checked by:

Ireneusz Czerwiński

Approved by:

WŁADYSLAW
LABORATORIUM MECHANICZNEGO

mgr inż. Andrzej Tkaczyk

Special comments / enclosures:

1) *labels, service manual*

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Test results refer only to tested units.

This test report shall be neither copied differently as in the whole nor be published without written consent of the Laboratory.

Constructional, material or technological modifications made in product require re-assessment of product conformity with requirements of above mentioned standards.



AB 010



CHARACTERISTIC OF MANUALLY PROPELLED WHEELCHAIR

Name of wheelchair: <i>DOLPHIN</i>		Factory ref. no. <i>D - 0001</i>	
Maximum load capacity: <i>120kg</i>		Overall mass of wheelchair: <i>16,75kg</i>	
Description			Comments
Dimensions:	Length:	1065mm	
	Height (max./min.):	1050mm/963mm	
	Width:	713mm	
Construction of frame:	Material:	Aluminum alloy	
	Method of fastening frame elements:	Welding	
	Folding/unfolding:	Folding	
Drive wheels	Ø external:	534mm	
	Ø pipe:	19mm	
	Material:	Aluminum alloy	
	Way of fastening to driven wheel:	Bolts, nuts	
	Number of fastening points to driven wheel:	6	
Driving wheels	Material of ring of a wheel:	Aluminum alloy	
	Dimension of tyre:	24"x1 3/8" (37x540mm)	
	Pressure:	N/A	Solid tyre
	Way of fastening wheel to construction:	Quick connector	
	Vertical adjustment (number of fixing positions)	YES 3	
	Horizontal adjustment (number of fixing positions):	NO	
	Inclination angle adjustment:	NO	
Inclination angle:	0°	Without loading of wheelchair	
Castor wheels	Ø of wheel:	198mm	
	Width:	44mm	
	Material of ring of a wheel:	Plastic	
	Material of fork:	Aluminum alloy	
	Vertical adjustment (number of fixing positions)	YES 3	
	Horizontal adjustment (number of fixing positions):	NO	
Adjustment of axis inclination angle:	YES		
Backrest	Folding/unfolding:	Unfolding	
	Backrest inclination adjustment	stepless:	NO
number of fixing positions		NO	
Tilt levers	Two singular:	YES	
	One lateral:	NO	
Push handles	Kind:	Two double	
Parking brake	Left:	YES	
	Right:	YES	
	Kind:	Lever	
	Material of lever:	Steel, plastic	
	Fastening to frame:	With clamp	
Way of adjustment:	With screws and clamp stabilizing position of break towards tyre		
Upholstery	Material:	Nylon	
	Colour:	Black	
Wheel space in forward direction position:		375mm	
Wheel space in backward direction position:		475mm	

Legrests	Common for both legs:	NO	
	Separate for each leg:	YES	
	Stationary:	NO	
	Folding:	YES	
	Vertical adjustment (number of fixing positions)	NO	
	Horizontal adjustment (number of fixing positions):	NO	
	Angle adjustment (number of fixing positions):	NO	
	Material of legrest:	Aluminum alloy Plastic	
Accessories	Seat belt	NO Possibility of fixing seat belt	Note in service manual
	Service :	YES	

PHOTO OF WHEELCHAIR





Moblix

MOBILEX A/S
Noerskovvej 1
DK - 8660 Skanderborg
Tel: +45 87 93 22 20
www.moblix-care.com

Dolphin wheelchair



Max. 120 kg

CE Produced Serial no.

Pattern of label with production date

07/2008

10 mm x 30 mm

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TESTING

NORMATIVE REFERENCES

	Applied
PN-EN 12182:2002 Technical aids for disabled persons – General requirements and test methods	YES
PN-EN 12183:2002 Manually propelled wheelchairs – Requirements and test methods	YES
PN-EN 12184:2002 Electrically powered wheelchairs, scooters and their chargers – Requirements and test method	NO
ISO 7176-1:1999 Wheelchairs – Determination of static stability	YES
PN-ISO 7176-2:1998 Wheelchairs – Determination of dynamic stability of electric wheelchairs	NO
PN-ISO 7176-3:1998 Wheelchairs – Determination of efficiency of brakes	YES
ISO 7176-4:1997 Wheelchairs – Energy consumption of electric wheelchairs and scooters and determination of theoretical distance	NO
PN-ISO 7176-5:2001 Wheelchairs – Determination of overall dimensions, mass and turning space	YES
PN-ISO 7176-6:1998 Wheelchairs – Determination of maximum speed, acceleration and retardation of electric wheelchairs	NO
PN-ISO 7176-7:2001 Wheelchairs – Measurement of seating and wheel dimensions	YES
PN-ISO 7176-8:2002 Wheelchairs – Requirements and test methods for static, impact and fatigue strengths	YES
ISO 7176-9:2001 Wheelchairs – Climatic test for electric wheelchairs	NO
PN-ISO 7176-10:1998 Wheelchairs – Determination of obstacle-climbing ability of electric wheelchairs	NO
PN-ISO 7176-14:2001 Wheelchairs – Power and control systems for electric wheelchairs – Requirements and test methods	NO (Electrotechnical Laboratory)
PN-ISO 7176-15: 2002 Wheelchairs – Requirements for informative disclosure, documentation and labelling	YES
PN-ISO 7176-16:2001 equivalent: PN-90/P-04823 Wheelchairs. Resistance to ignition of upholstered parts – Requirements and test methods	YES

Note: Wheelchair with adjustment elements regulated in a factory was performed

RESULT OF MECHANICAL TESTS ACCORDING TO PN-EN 12182 (unaccredited test method)

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
4.1	5.2, 5.4.2, 5.5, 6, 8.2.1, 9.4, 10, 21, 22, 24 and EN 1441	Risk analysis	-	N/T	
4.2	V/I	Expected characteristics and technical documentation	Conf.	Pos.	
4.3	EN-540	Clinic assessment	-	N/T	
4.4	V/I	Technical support which can be dismantled	Conf.	Pos.	
4.5	V/I	Single use connections	-	N/A	
5.1	PN-ISO 7176-16	Flammability	Conf.	Pos.	
5.2	PN-EN ISO 10993-1	Biological conformity and toxicity	-	N/T	
5.3	V/I	Impurities and residues	-	N/A	
5.4	24, Annex C C.5.4.1 24, Annex C C.5.4.1 EN 12442-1	Microbiological infections and contamination			
		Cleaning	Conf.	Pos.	
		Disinfection	-	N/A	
		Animal tissue	-	N/A	
7	-	Electromagnetic compatibility	-	N/A	

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Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
8	-	Electrical safety	-	N/A	
9	V/I	Overflowing, pouring out, leakage and pouring in of liquids	-	N/A	
11	EN-550, 552,554, 556, 868-1	Sterility	-	N/A	
12	V/I Measur.	Safety of moving elements	Conf.	Pos.	Comments in service manual
13	V/I Measur.	Trap prevention for parts of human body	Conf.	Pos.	Comments in service manual
14	V/I	Folding and adjusting of mechanisms	Conf.	Pos.	
15	V/I Measur.	Hand grips for transferring	-	N/A	Wheelchair is not provided with hand grips for transferring
16.1	16.2	Aids for support of users	Conf.	Pos.	
17	V/I	Portable and moving technical aids	-	N/A	
18	V/I	Surfaces, corners and edges	Conf.	Pos.	
19	C18	Hand kept technical aids	-	N/A	
20	V/I Measur.	Grips and other elements for transferring	-	N/A	Mass of wheelchair below 20 kg

TEST RESULTS according to PN-EN 12183

DESIGN REQUIREMENTS

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
6.1.1.	6.1.2	Legrests and footrests	Conf.	Pos.	
6.2.	V/I	Pneumatic tyres	-	N/A	Solid tyres
6.3.	V/I	Fastening of seat belt	Conf.	Pos.	Note in service manual
6.4.	V/I	Side and back rests	Conf.	Pos.	
6.5.	V/I	Wheelchairs to be used as seats in motor vehicle	-	N/A	
6.6.	V/I	Brakes	Conf.	Pos.	
6.7.	V/I	Mass of components Mass of the biggest component:	Conf. 8,85kg description of lifting wheelchair included in service manual	Pos.	In case of 10 kg mass hand grips for transferring or description of lifting of wheelchair in service manual are required
6.8.	V/I	Anti-tilting devices Backwards static stability:	Conf. 10°	Pos.	Anti-tilting devices are required in case of backwards stability below 7°

FUNCTIONAL PROPERTIES

7.1.	PN-ISO 7176-8	Static, fatigue and impact strength	Conf.	Pos.		
7.2.1.	7.2.3	Effectiveness of parking	Parking brake efficiency	Conf.	Pos.	Below 60 N force engaging hand-brake is required
			- force applied to hand brakes:	28N		
			- force applied to pushed in foot brake:	--	N/A	
	- force applied to pulled foot brake:	--	N/A			
	PN-ISO 7176-3 clause 7	- effectiveness of braking wheelchair facing up to the slope:	Conf.	Pos.	No rotation or wheel spin when wheelchair is on inclined plane of 7° slope	
- effectiveness of braking wheelchair positioned sideward down the slope		Conf.	Pos.			
- effectiveness of braking wheelchair facing down the slope:		Conf.	Pos.			
7.2.2.	7.2.4	Fatigue strength of parking brake	Conf.	Pos.	60000 cycles	
7.3	PN-ISO 7176-16	Resistance to ignition of upholstery parts	Conf.	Pos.		
7.5.1.	7.5.2	Push force	Conf. 29N	Pos.	Force below - 40N required	
7.6.1.	7.6.2	Characteristics of tracks of wheelchair wheels	Conf. 120 mm	Pos.	Average of 5 measurements below 500mm	
8.2.	V/I	Service manual	Conf.	Pos.		
8.3.	V/I	Marking	Conf.	Pos.		



TEST RESULTS according to ISO 7176-1 (unaccredited test method)

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
PN-EN 12183	9.	Static stability of wheelchair facing up to the slope (backwards)	10°	N/R	When static stability backwards is below 7° anti-overturn supports are required
	10.	Static stability of wheelchair positioned backwards up to the slope	21°	N/R	
	12.	Static stability of wheelchair positioned sideward up to the slope	23°	N/R	

TEST RESULTS according to PN-ISO 7176-2

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
4.	7.1.	Stability during start and stop when wheelchair drives forwards up to the slope Force required to operate hand (or foot) steering mechanism	-	N/A	Testing relates electrically powered wheelchairs
4.	7.2.	Stability of braking during drive forwards and backwards down the slope	-	N/A	
4.	7.3.	Stability during turning	-	N/A	

TEST RESULTS according to PN-ISO 7176-3

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments	
PN-EN 12183 p. 7.2.1	7.1 V/I Measur.	Parking brake	Effectiveness of parking brake of wheelchair positioned forwards down the slope	Conf. 13° Wheel rotate	Pos.	No rotation or wheel spin when wheelchair is on inclined plane of 7° slope (requirements of PN-EN 12183 p. 7.2.1)
PN-EN 12183 p. 7.2.1	7.1 V/I Measur.		Effectiveness of parking brake of wheelchair positioned backwards down the slope	Conf. 10° Wheelchair loses stability	Pos.	
PN-EN 12183 p. 7.2.1	PN-EN 12183 p. 7.2.3 Measur.		Measurement of force acting on brake lever	Conf. 28N	Pos.	
7.2.1.a	V/I Measur.	Service brake	Braking distance during drive with maximum speed forwards on horizontal plane	-	N/A	Testing relates electrically powered wheelchairs
7.2.1.b	V/I Measur.		Braking distance during drive backwards on horizontal plane	-	N/A	Testing relates electrically powered wheelchairs
7.2.1.c	V/I Measur.		Braking distance of wheelchair during drive forwards on slope of 5°	-	N/A	Testing relates electrically powered wheelchairs
7.2.2.	V/I Measur.	Resistance of braking system to increased temperature caused by long braking during drive forwards on horizontal plane		-	N/A	Testing relates electrically powered wheelchairs
7.2.3.a	V/I Measur.	Automatic brake	Braking distance of wheelchair during drive with maximum speed forwards on horizontal slope	-	N/A	Testing relates electrically powered wheelchairs
7.2.3.b	V/I Measur.		Braking distance of wheelchair during drive with maximum speed forwards on slope of 5°	-	N/A	Testing relates electrically powered wheelchairs

TEST RESULTS according to ISO 7176-4 (unaccredited test method)

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
PN-EN 12184 Table 2	7	Theoretical energy range	-	N/A	Testing relates electrically powered wheelchairs



TEST RESULTS according to PN-ISO 7176-5

Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
5.1	Overall length of wheelchair with legrest and footrest	1065mm	N/R.	According to PN-EN 12183 A.2 and PN-ISO 7193 recommended max overall dimensions length: 1200mm width: 700mm height: 1090mm
	Overall width	713mm	N/R.	
	Overall height with backrest in its prima position (without headrest/with headrest)	1050/963mm	N/R.	
	Overall length of wheelchair without legrest	774mm	N/R.	
5.2.	Minimum length of folded wheelchair	774mm	N/R.	
	Minimum overall width of folded wheelchair	320mm	N/R.	
	Minimum height of folded wheelchair	963mm	N/R.	
	Minimum volume of folder wheelchair	0,24m ³	N/R.	
6.	Mass	16,75kg	N/R.	
7.1	Minimum turning radius	800mm	N/R.	
7.2	Width of U-turn limited by spacing of walls	1250mm	N/R.	

TEST RESULTS according to PN-ISO 7176 –6

Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
7.1.	Maximum speed during drive forwards	-	N/A	Testing relates electrically powered wheelchairs
7.2.	Maximum speed during drive backwards	-	N/A	
8.1.	Maximum acceleration	-	N/A	
8.2.	Maximum deceleration	-	N/A	

TEST RESULTS according to PN-ISO 7176 –7

Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
7.3.2.	Angle of seat plane	10,4°	N/R.	
7.3.3.	Effective depth of seat	440mm	N/R.	
7.3.4.	Width of seat	475mm	N/R.	
7.3.5.	Effective width of seat	530mm	N/R.	
7.3.6.	Height of front edge of seat plane	500mm	N/R.	
7.3.7.	Angle of backrest	12,5°	N/R.	
7.3.8.	Height of backrest	440mm	N/R.	
7.3.9.	Width of backrest	420mm	N/R.	
7.3.10.	Moving forward of headrest	-	N/A	
7.3.11.	Height of headrest over the seat	-	N/A	
7.3.12.	Distance of footrest from seat	480mm	N/R.	
7.3.13.	Clearance of footrest	70mm	N/R.	
7.3.14.	Length of footrest	160mm	N/R.	
7.3.15.	Angle of footrest	93°	N/R.	
7.3.16.	Angle of legrest	107°	N/R.	
7.3.17.	Height of armrests	235-310mm	N/R.	4 levels of adjustment
7.3.18.	Moving forward of armrests	355mm	N/R.	
7.3.19.	Length of armrests	280mm	N/R.	
7.3.20.	Width of armrests	49mm	N/R.	
7.3.21.	Angle of armrests	4°	N/R.	
7.3.22.	Distance between armrests	500mm	N/R.	
7.3.23.	Position of the front of armrests	355mm	N/R.	
7.3.24.	Diameter of drive wheel	534mm	N/R.	
7.3.25.	Diameter of driving wheel	596mm	N/R.	
7.3.26.	Displacement of wheel axis horizontally	65mm	N/R.	
7.3.27.	Displacement of wheel axis vertically	120mm	N/R.	
7.3.28.	Diameter of castor/front wheel	198mm	N/R.	

TEST RESULTS according to PN-ISO 7176-8

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
4.	8.4.	Armrest – resistance to forces acting downwards	Conf.	Pos.	loading 940N
4.	8.5.	Footrests - resistance to forces acting upwards	Conf.	Pos.	loading 1250N
4.	8.6.	Anti-tip levers	Conf.	Pos.	loading 1250N
4.	8.7.	Grips	Conf.	Pos.	loading 750N
4.	8.8.	Armrest – forces acting upwards	Conf.	Pos.	loading 1120N Front snap fastener is unfastened. Rear fastening of armrest is damaged
4.	8.9.	Footrest – forces acting upwards	--	N/A	
4.	8.10.	Handle grips for pushing – load acting upwards	Conf.	Pos.	loading 1100N
4.	9.3.	Backrest – impact strength	Conf.	Pos.	25kg pendulum impact
4.	9.4.	Driving wheel – impact strength	Conf.	Pos.	10kg pendulum impact
4.	9.5.	Castor/front wheel – impact strength	Conf.	Pos.	10kg pendulum impact
4.	9.6.3.	Footrest – side impact	Conf.	Pos.	10kg pendulum impact
4.	9.6.4.	Footrest – in-line impact	Conf.	Pos.	10kg pendulum impact
4.	9.7.2.	Frontal part of wheelchair – directly impact	Conf.	Pos.	10kg pendulum impact
4.	9.7.3.	Frontal part of wheelchair – displaced impact	Conf.	Pos.	10kg pendulum impact
4.	10.4.2.	Testing of manually propelled wheelchair on two-drum machine	Conf.	Pos.	200 000 of cycles with full loading of wheelchair (120kg)
4.	10.4.3.	Measurement of initial current for electrically powered wheelchair	-	N/A	
4.	10.4.4.	Testing of electrically powered wheelchair on two-drum machine	-	N/A	
4.	10.5.	Drop testing	Conf.	Pos.	6666 drops of wheelchair with full loading (120kg) from height of 50mm

TEST RESULTS according to ISO 7176 -9 (unaccredited test method)

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
8	7.3	Water resistance	-	N/A	Testing concerns electrically powered wheelchairs

TEST RESULTS according to PN-ISO 7176 -10

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
PN-EN 12184:2002 Table 2	7.1.	Ability to overcome obstacle during drive forwards	-	N/A	Testing concerns electrically powered wheelchairs
	7.2.	Ability to overcome obstacle during drive backwards	-	N/A	Testing concerns electrically powered wheelchairs

TEST RESULTS according to PN-ISO 7176 -14

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments

NOTE. Testing concerns electrically propeller wheelchairs – performed by Electrotechnical Laboratory



TEST RESULTS according to PN-ISO 7176 –15

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
7.3		Content of service manual			
7.3.a	V/I	Data concerning guarantee	Included	Pos.	
7.3.b	V/I	General characteristics: - description of wheelchair with photos or drawings and description of utilization - description of user with maximum mass stated - description of environment of intended utilization - value of recommended pressure in pneumatic tyres	Included Included Included Included	Pos. Pos. Pos. Pos.	
7.3.c	V/I	When wheelchair is sold in elements for individual assembly - list of components - information on tools necessary to fold wheelchair - instruction of bringing lacking or damaged parts - assembly, installation and disassembly instruction of parts delivered by manufacturer - instructions for preparing wheelchair to storage, transport	- - - -	N/A N/A N/A N/A	
7.3.d	V/I	Service manual of wheelchair • Full instructions of safety service: - use of wheelchair on surfaces where user moves - get on and get off wheelchair - illustrations explaining these instructions • Descriptions of feasible improper use of wheelchair	Included Included Included Included	Pos. Pos. Pos. Pos.	
7.3.e	V/I	Maintenance instruction • Details of maintenance: - service, maintenance/detection of damages, for which user is responsible - tools necessary for repair and service of wheelchair - maintenance frequency - list of parts (with numbers) and way of its purchase - conditions when manufacturer, supplier takes action • Ways of cleaning • Elements intended to easy replacement: - information on orders - instruction of disassembly - information on replacement and testing of parts - illustration of parts and their placement • Ways of performance dangerous activities	Included Included Included Included Included Included Included Included Included Included Included	Pos. Pos. Pos. Pos. Pos. Pos. Pos. Pos. Pos. Pos. Pos.	
7.3.f	V/I	Performing of parameters control	Included	Pos.	
7.3.g	V/I	Repair of wheelchair • Identification of parts to be repaired by user • Identification of parts operated by manufacturer or service to maintain guarantee • Identification of parts removable and sent to manufacturer/service • Conditions under which manufacturer/service is obliged to perform repair • List of authorized service workshops • Information if spare parts can be purchased • Way of package and transport, if necessary	Included Included Included Included Included Included Included	Pos. Pos. Pos. Pos. Pos. Pos. Pos.	

Requirements according to clause	Test method according to clause	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
Content of specification sheets of manufacturer					
Annex A	V/I	Manufacturer	Included	Pos.	
Annex A	V/I	Address	Included	Pos.	
Annex A	V/I	Model	Included	Pos.	
Annex A	V/I	Maximum mass of user	Included	Pos.	
Annex A	V/I	Overall length with legrest	Included	Pos.	
Annex A	V/I	Overall width	Included	Pos.	
Annex A	V/I	Length after assembly	Included	Pos.	
Annex A	V/I	Width after assembly	Included	Pos.	
Annex A	V/I	Height after assembly	Included	Pos.	
Annex A	V/I	Total mass	Included	Pos.	
Annex A	V/I	Mass of the heaviest part	Included	Pos.	
Annex A	V/I	Static stability downhill	Included	Pos.	
Annex A	V/I	Static stability uphill	Included	Pos.	
Annex A	V/I	Side static stability	Included	Pos.	
Annex A	V/I	Energy range	-	N/A	
Annex A	V/I	Dynamic stability uphill	-	N/A	
Annex A	V/I	Determination of obstacles	-	N/A	
Annex A	V/I	Maximum speed forward	-	N/A	
Annex A	V/I	Minimum braking distance at maximum speed	-	N/A	
Annex A	V/I	Seat plane angle	Included	Pos.	
Annex A	V/I	Effective depth of seat	Included	Pos.	
Annex A	V/I	Effective width of seat	Included	Pos.	
Annex A	V/I	Height of seat to front edge	Included	Pos.	
Annex A	V/I	Backrest angle	Included	Pos.	
Annex A	V/I	Height of backrest	Included	Pos.	
Annex A	V/I	Distance of seat from footrest	Included	Pos.	
Annex A	V/I	Angle between seat plane and legs	Included	Pos.	
Annex A	V/I	Height of armrest from seat	Included	Pos.	
Annex A	V/I	Distance of front part of armrest from rear rest	Included	Pos.	
Annex A	V/I	Diameter of drive wheel	Included	Pos.	
Annex A	V/I	Position of wheel axis horizontally	Included	Pos.	
Annex A	V/I	Width of turning	Included	Pos.	

TEST RESULTS according to PN-ISO 7176-16 – equivalent PN-90 P-04823

Following test results refer only to inflammability of material compound in special test conditions. They are not intended as criteria for assessment of full potential inflammability risk of ready wheelchair.

Identification data, characteristics, description of the sample of durable covering:	Upholstery made of durable, strengthened nylon in black colour				
Manufacturer of durable covering:	No data				
Identification data, characteristics, description of the sample of foam material/filling:	Foam material, thickness 9mm, white colour				
Manufacturer of foam material/filling:	No data				
Test method:	Method A – smouldering cigarette.				
Conditioning of sample:	Temperature:	Measurement	22°C	Requirements	23°C ± 2°C
	Relative humidity of air:		50%		50% ± 5%
	Time:		20 h		16 h
Conditioning of cigarette:	Temperature:	Measurement	22°C	Requirements	23°C ± 2°C
	Relative humidity of air:		50%		50% ± 5%
	Time:		20 h		16 h
Test conditions:	Temperature:	Measurement	22°C	Requirements	10°C – 80°C
	Relative humidity of air:		50%		15% - 80%
Time of smouldering cigarette:	18 min.		17 min.		18 min.

More important effects noted during testing: (e.g. ignition of sample, extinguishing of sample, partition of covering product etc.)	1) Partial melting of upholstery product			
	2)			
	3)			
	4)			
Times of occurrence of the more important effects:	1)	18 min.	17 min.	18 min.
	2)			
	3)			
	4)			
Scope of failure of horizontal part of upholstery arrangement in mm:	Length:	50	43	50
	Width:	15	14	20
	Depth:	3	3	4
Scope of failure of vertical j part of upholstery arrangement in mm:	Length:	49	43	50
	Width:	13	12	14
	Depth:	2	3	3
Testing performed by:	Mirosław Szymański			
Date and time of starting test:	8.10.2008 r., godz. 10 ⁰⁰			

Requirements according to PN-ISO 7176-16	Test method according to PN-90 P. 04823	Checked characteristics/assemblies/parameters	Real value	Test result	Comments
4.1.	2.4.1. 2.7. 2.8. 3.	Progressive smouldering and burning when upholstered parts of wheelchair are of hard covering with filling. Method A – smouldering cigarette.	Conf.	Pos.	Did not burn into flame
4.2.	2.4.1. 2.7. 2.8. 3.	Progressive smouldering and burning when upholstered parts of wheelchair are of foamed material with skin. Method A – smouldering cigarette.	-	N/A	

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.

Final assessment	
PN-EN 12182:2002	Pos.
PN-EN 12183:2002	Pos.
PN-EN 12184:2002	N/A
ISO 7176-1:1999	Tested*
PN-ISO 7176-2:1998	N/A
PN-ISO 7176-3:1998	Pos.
ISO 7176-4:1997	N/A
PN-ISO 7176-5:2001	Tested*
PN-ISO 7176-6:1998	N/A
PN-ISO 7176-7:2001	Tested*
PN-ISO 7176-8:2002	Pos.
ISO 7176-9:2001	N/A
PN-ISO 7176-10:1998	N/A
PN-ISO 7176-14:2001	N/A
PN-ISO 7176-15: 2002	Pos.
PN-ISO 7176-16:2001	Pos.

*) The standard does not specify requirements towards tested parameters of product

Note: Conformity assessment of product according to standard requirements refer to the scope of mechanical tests ordered by client



MARKING VERIFICATION

Name of product: Manually propelled wheelchair *DOLPHIN*

Applicant: *MOBILEX Sp. z o.o.*
90-540 Łódź,
ul. Radwańska nr.23/1

Requirement according to PN-ISO 7176-15:2002		Durable marking on wheelchair
8.1.a	Name and address of manufacturer	YES
8.1.b	Identification of model and serial number	YES
8.1.c	Year of production	YES
8.1.d	Information on likely driver constraints	N/A
8.1.e	Maximum mass of user	YES
8.2	Marking of dimension on tyres	YES
Requirement according to PN-EN 12183:2002		Durable marking on wheelchair
8.2	Marking of adjustment device, which causes static stability lower than 10°	N/A
CE marking*		YES

N/A – not applicable

*) CE marking placed on product and in documentation should meet the requirements of Annex XII to directive 93/42/EEC and clause 2 of the Act of 20 April 2004 on medical products (Journal of Laws no. 93)

CONCLUSIONS:

Assessment result of marking product specified above:

Non-conformities with requirements of PN-EN 12183-2002 i PN-ISO 7176-15:2002 were not stated.

- END -



MANUFACTURER: MOBILEX A/S.
 ADDRESS: Noerskovvej / DK – 8660 Skanderborg

SPECIFICATION SHEETS OF MANUALLY PROPELLED WHEELCHAIR - DOLPHIN

Test data (ISO)		
Lp.	Characteristics/parameters	Value
1	Maximum mass of user	120kg
2	Overall length of wheelchair with legrest and footrest	1065mm
3	Overall width	713mm
4	Minimum length of folded wheelchair	774mm
5	Minimum overall width of folded wheelchair	320mm
6	Minimum height of folded wheelchair	963mm
7	Overall mass of wheelchair	16,75kg
8	Mass of the biggest component	8,85 kg
9	Static stability of wheelchair positioned backwards up to the slope	21°
10	Static stability of wheelchair facing up to the slope (backwards)	10°
11	Static stability of wheelchair positioned sideward up to the slope	23°
12	Angle of seat plane	10,4°
13	Effective depth of seat	440mm
14	Effective width of seat	530mm
15	Height of front edge of seat plane	500mm
16	Angle of backrest	12,5°
17	Height of backrest	440mm
18	Distance of footrest from seat	480mm
19	Angle of legrest	107°
20	Height of armrests	235-310mm
21	Position of the front of armrests	355mm
22	Diameter of drive wheel	534mm
23	Diameter of driving wheel	596mm
24	Diameter of castor/front wheel	198mm
25	Displacement of wheel axis horizontally	65mm
26	Width of U-turn limited by spacing of walls	1250mm

The propelled wheelchair meets the requirements of the following standards:

- PN-EN 12182
- PN-EN 12183
- ISO 7176-1
- PN-ISO 7176-3
- PN-ISO 7176-5
- PN-ISO 7176-7
- PN-ISO 7176-8
- PN-ISO 7176-15
- PN-ISO 7176-16