

INCLUSIVE SPINNING WHEEL USER GUIDE

V.1.0.R0.2023







1. INTRODUCTION

Thank you for choosing our product! We believe you would be satisfied using our Inclusive Spinning Wheel.

TERMA Inclusive Spinning Wheel combines outdoor fun with a therapy. Device aims to integrate nondisabled people and those with disabilities, giving them possibility of playing together. Besides integration purpose TERMA Inclusive Roundabout provides kinesiotherapy, neurological, sensory and social rehabilitation. The device complies with PN-EN 1176 standard.

The device complies with the premise of universal design, which provides ideas of accessibility to all potential users, physically able-bodied, and with movement impairments.

TERMA Inclusive Spinning Wheel is dedicated to be used outdoor, at such a places as outdoor gyms, parks, accessible recreation areas, private gardens to integrate non-disabled people and those with disabilities in playing together.

The following User Guide provides all instructions refer to correct installation process, safe use and exploitation of the device.

The Manufacturer reserves the right to change the contents of the User Guide.

Manufacturer:

Terma Sp. z o.o. 80-298 Gdansk Czaple 100 Poland email: <u>termamed@termamed.pl</u> www.termamed.pl

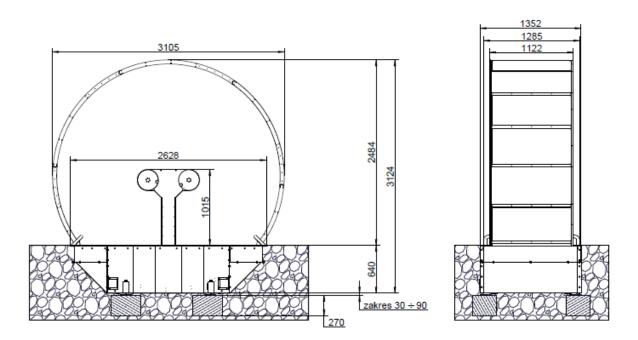


2. DEVICE STRUCTURE

Materials:

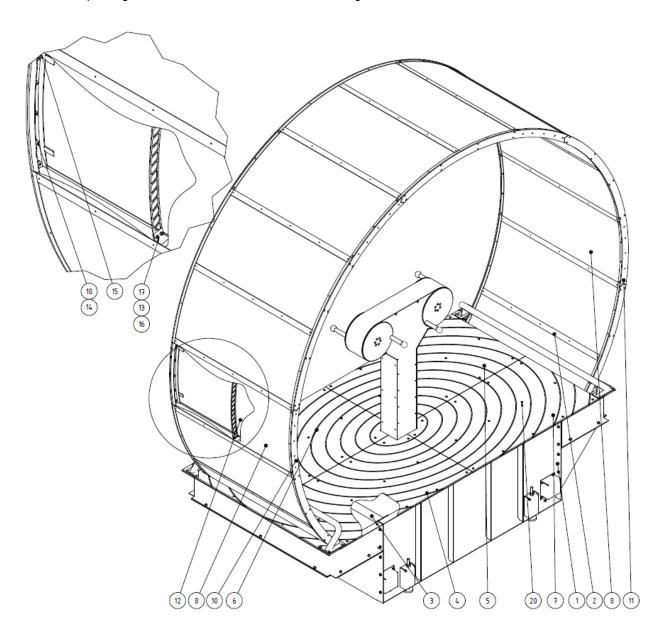
Construction: steel profiles with epoxy primer, painted and powder coated Platform: HPL board Wheel panels: polycarbonate Foundation: concrete class min. B-15

Dimensions and parameters: External device dimensions: 3105x2484x1352 mm Device height from the ground level: 2484 mm Device weight without substructure: 450 kg Free fall height: none Safety zone area dimensions: 1500 mm distance from each edge of the platform Functional area: 24,64m² Foundation depth: 940 – 1000 mm below the ground level, regulated on the height adjustment foot





Inclusive Spinning Wheel TERMA consists of the following elements:





List of elements shown in the table:

No.	Name	Ammount	Figure
1.	Main structure	1	
2.	Wheel element	6	
3.	Distancing connector	2	Contraction of the second seco
4.	Platform 1	1	
5.	Platform 2	1	



			7
6.	Platform 3	1	
7.	Platform 4	1	
8.	External panel	6	po o o o o
9.	Internal panel	6	
10.	External small covering element	12	2 2 0

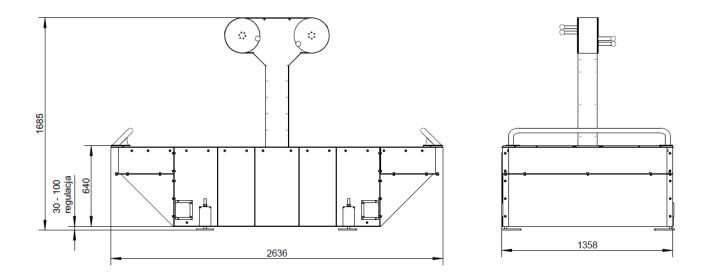


11.	Internal small covering element	12	\$ \$ \$
12.	Stiffening element	6	2000000000
13.	Washer ISO 7089 - 6	24	
14.	Washer ISO 7089 - 8	72	
15.	Hex nut ISO 4032 - M8	12	
16.	Hex nut ISO 4032 – M6	24	
17.	Hexagon socket head screw ISO 4762 - M6 x 16	24	



18.	Hexagon socket head screw ISO 4762 – M8 x 12	60	
19.	Oxidised TORX Countersunk screw M4 x 10	140	
20.	Oxidised TORX countersunk screw M6x20	56	
21.	Foundation pin M12x300	8	(()
22.	Washer ISO 7089 - 12	8	
23.	Hex nut ISO 4032 – M12	8	





The longest component dimension: Main structure of the device: 2636 x 1358 x 1685 mm

Weight of the single heaviest component: Main structure of the device: 270 kg

3. INSTALLATION GUIDE

To ensure the highest level of safety standards for users and caregivers, it is necessary to read and follow the steps of installation sequence, assembly quality and safety instructions below.

The manufacturer offers the device in a set with its assembly. In the case of purchasing the device itself and providing the assembly with another entity, the assembly instructions must be strictly followed. The manufacturer is not responsible for the consequences of improperly performed installation by external entities.

Place of installation

TERMA Inclusive Spinning Wheel is dedicated to be installed on a playground. The safety zone shall be defined around the equipment which is 1500 mm from each edge of the device (from the outer edge of the wheel panels).



The safety zone of the Inclusive Spinning Wheel cannot overlap the other devices safety zones and the traffic routes.

No shock-absorbing surface is required around the TERMA Inclusive Spinning Wheel.



Ensure a comfortable and safe entry for wheelchair access from the front of device. The rigid surfaces are recommended for wheelchair access. Loose surfaces such as sand or crushed stone are excluded, grass surfaces are not recommended.



It is forbidden to install the device in geologically unfavorable conditions, i.e. in a boggy or loose ground causing subsidence of foundations or in a ground where water appears after the excavation has been made. Geological conditions should be regulated prior to installation (effective drainage). Installation in poor geological conditions may result in the loss of compliance of the device with the PN-EN 1176 standard and a deterioration of its corrosion resistance!



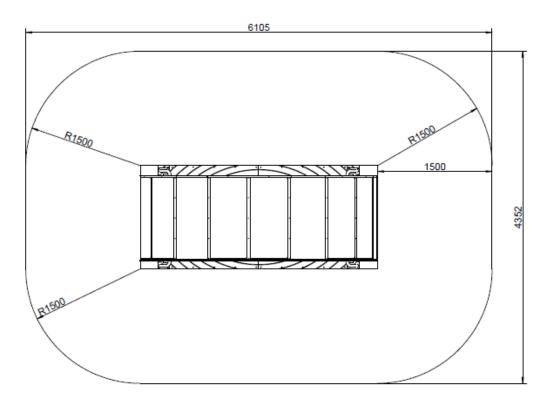


Fig. Top view with the dimension of the TERMA Inclusive Spinning Wheel safety area marked.

List of tools needed to assemble the TERMA Inclusive Spinning Wheel:

Spade 2 pieces Rake 1 piece Masonry string 20 mb Spirit level 2 m lenght 1 piece Allen key standard set TORX standard set Open-end and / or ring wrench 19 - 1 piece Open-end and / or ring wrench 24 - 2 pieces Measure: 3 mb

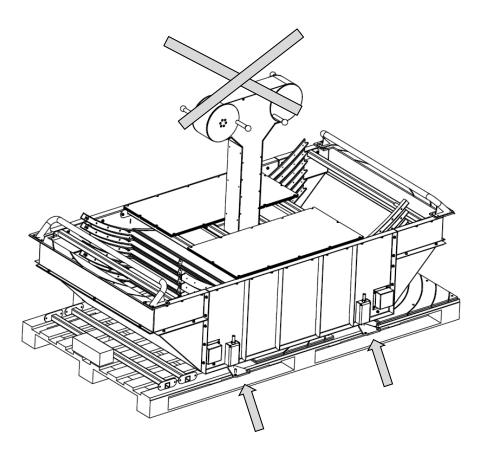
To assemble the TERMA Inclusive Spinning Wheel 2 people are needed and an excavator to dig the excavation for the foundations and the frame of Inclusive Spinning Wheel and the wheel crane to transport the device to place it in the excavated place. The amount of soil from the excavation is approximately 2,5 m3 (approximately 2 tons).



Installation

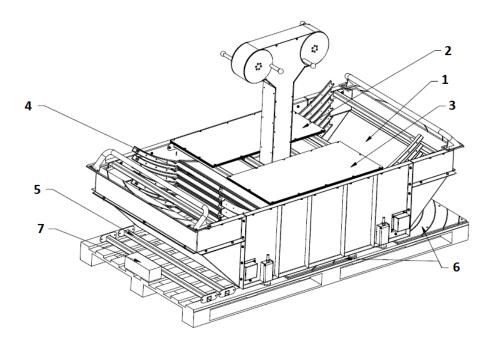
The TERMA Inclusive Spinning Wheel could be assembled by the Manufacturer or the Contractor authorized to carry out assembly activities on playgrounds.

The structure packed on a pallet should be removed from the car by grabbing the pallet, preferably with a forklift or excavator, by the belts laid under the **foundation plates** of the device. **Never lift the device by the center column!**



Unpack the load, remove all elements marked below from the main structure and put it in a place where it will not be exposed to damage. Please also check that all items listed below are included in the shipment before starting assembly.





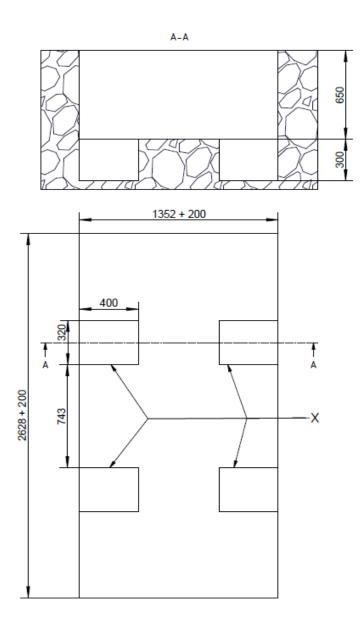
No.	Name of the element	Number of pieces
1	Main structure	1
2	External panels	6
3	Internal panels	6
4	Wheel element with 2 internal and 2 external panels already installed	6
5	Distancing elements	2
6	Platform	4
7	Box with bolts, nuts and washers	1



List of the following assembly steps:

1. Marking out the excavation site for the foundations

Mark out the place according to the drawing below. The recommended dimensions of the excavation for both the construction of the device and the additional space needed to reach the leveling bolts on which the foundation sheets of the structure will be placed are presented.



X – deepening for the foundation block



2. Excavation and foundation placement

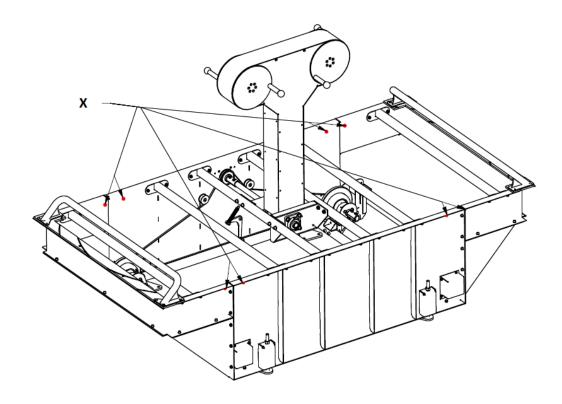
Place the foundation blocks in the excavation and level them against each other. Make sure that the blocks are firmly seated. Their subsequent movement in loose or muddy ground may cause uneven operation of the device.

3. Screwing in the distancing elements

	List of elements			
Name	Number of pieces	Figure		
Distancing element	2	Contraction of the second seco		



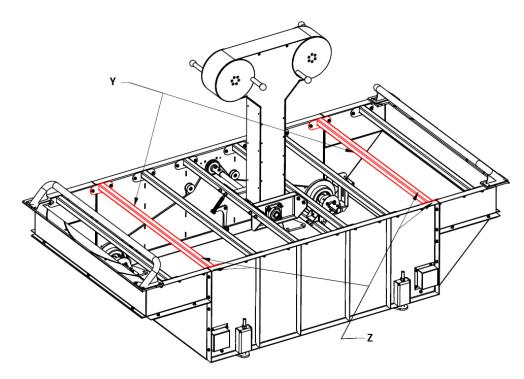
Unscrew the mounting screws marked in the figure below:



X – mounting screws



Using the same screws, fasten the distancing elements. **Particular attention should be paid to the need to flush the surface of the fastener profile with the external sheets. Check their level with a spirit level!**



- Y distancing element
- Z flush the surfaces

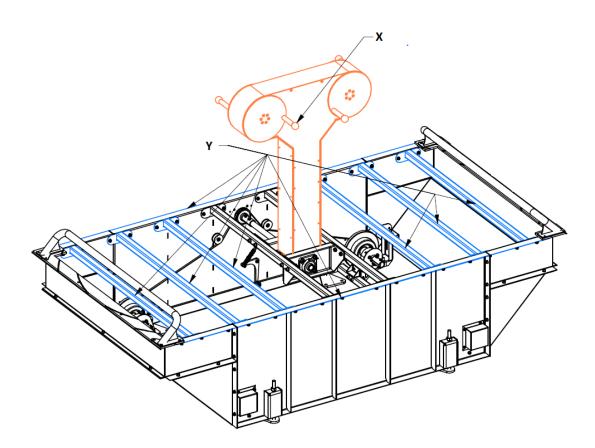
4. Placing the main structure on the foundation

	List od the elements			
Name	Number of pieces	Figure		
Main structure	1			



Foundation pin M12x300	8	
Washer ISO 7089 - 12	8	
Hexagon nut ISO 4032 – M12	8	

It is forbidden to lift the structure of the device by the central column. If it is necessary to move the structure in the excavation, it should be lifted by the side plates or spacers indicated in the drawing below.





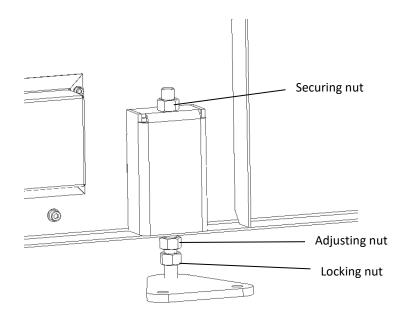
X – lifting forbidden

Y – lifting allowed

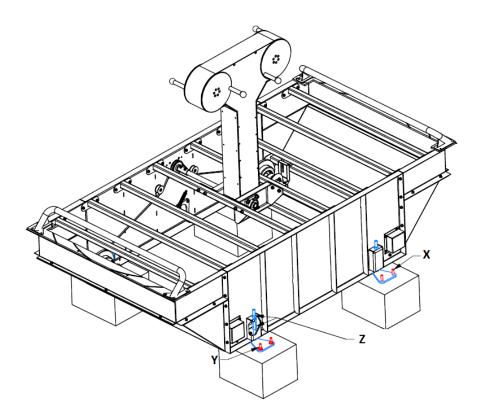
After setting the structure on the foundations, in the holes in the leveling feet, insert M12 pins in the foundation blocks or concrete screed in place of the blocks, using chemical anchors.

Then, screw the leveling feet to the foundation blocks and then, using the adjusting nuts, level the device. The upper surface of the floor should be aligned with the level of the surface adjacent to the device (it must be a non-threshold connection, friendly to people in wheelchairs!).

Secure the adjusting nut with the locknut as shown in the figure below.







- $X-foundation \ pin\ M12$ with chemical anchors
- Y foundation feet screwed to the foundation blocks
- Z adjusting nuts

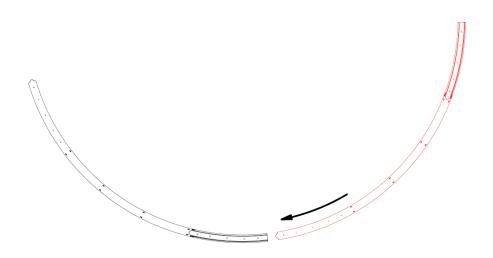


5. First two wheel elements assembly

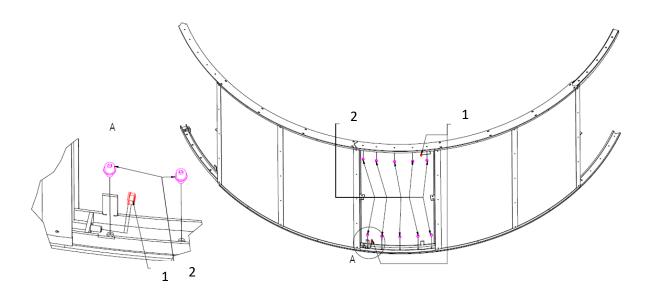
	List of elements		
Name	Number of pieces	Figure	
Wheel element	2		
Hexagon socket head cap screw ISO 4762 – M8 x 12	10		
Washer ISO 7089 - 8	12		
Hexagon nut ISO 4032 – M12	2		

In a safe place, where there is no risk of damage to the surface coating, place the wheel element marked with sticker No. 1 and insert the element marked with sticker No. 2 into it, according to the diagram below.





First tighten the nuts marked below 1. Tighten the nuts alternately on both sides of the wheel. After positioning the wheel elements with the nuts 1. tighten all the screws marked below 2.



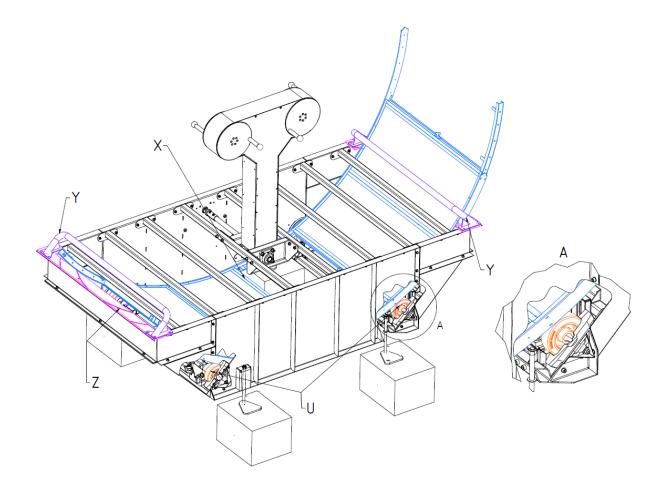


6. Assembly of wheel elements in the main structure

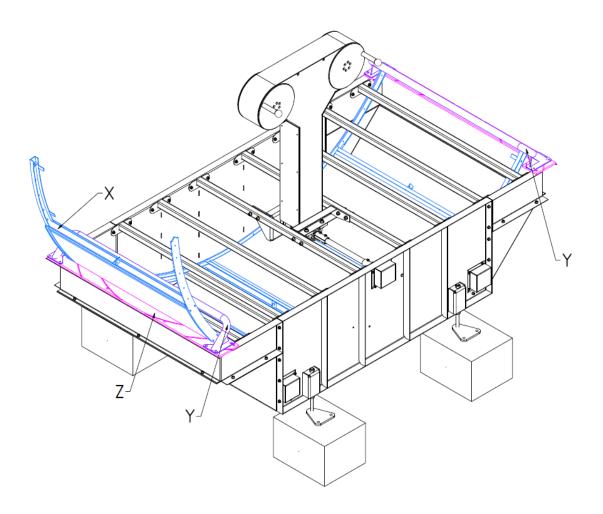
The previously prepared first two elements of the wheel should be placed in the anchored and leveled main structure, according to the figure presented below.

Folded elements of the wheel should be carefully inserted between the guard rail and the edge of the floor. Place the wheel elements stably on the castors supporting the wheel, making sure that the rollers are cleaned of sand and other impurities that may have settled on them during the previous assembly steps.

During this operation, special care should be taken not to damage the coating on the wheel components and the main structure.







- X-2 wheel elements prepared in advance, screwed together in the previous assembly step
- Y protective barrier
- Z floor edge
- U rollers supporting/driving the main wheel

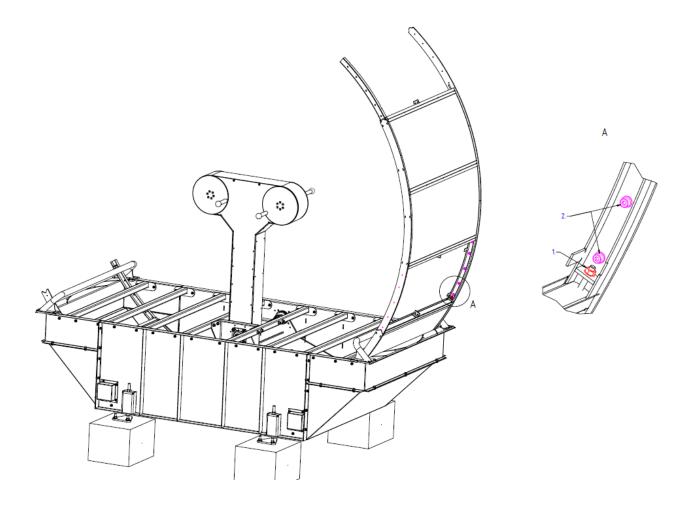


7. Placing subsequent elements of the wheel

		of elements
Name	Number of pieces	Figure
Wheel element	4	
Hexagon socket head cap screw ISO 4762 – M8 x 12	50	
Washer ISO 7089 - 8	60	
Hexagon nut ISO 4032 – M12	10	

Add element No. 3 to the element of the wheel No. 2 and screw it according to the diagram from point 5 (first positioning, by tightening the nuts 1, then screwing with the screws 2).





Similarly, add and twist the next elements of the wheel. Match the last element No. 6 with element No. 1.

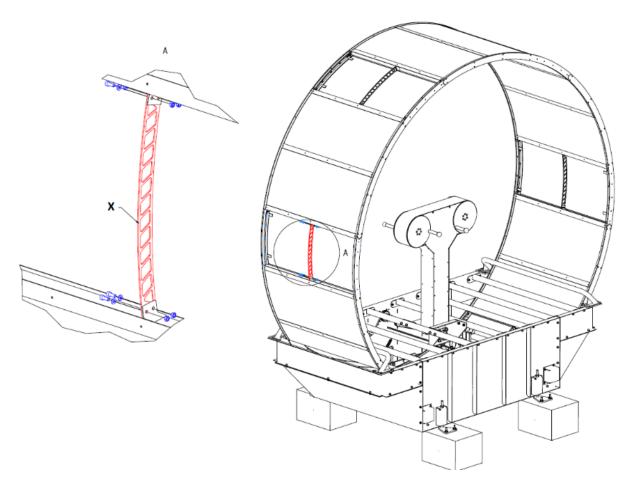


8. Tighten the wheel stiffener

	List of elements			
Name	Number of pieces	Figure		
Wheel stiffening element	6	2000000000000000		
Hexagon socket head cap screw ISO 4762 - M6 x 16	24			
Washer ISO 7089 - 6	24			
Hexagon nut ISO 4032 – M6	24			

The wheel stiffening elements in all places mounting with the wheel elements should be tightened to the folded wheel, according to the diagram below.





X – Stiffening element



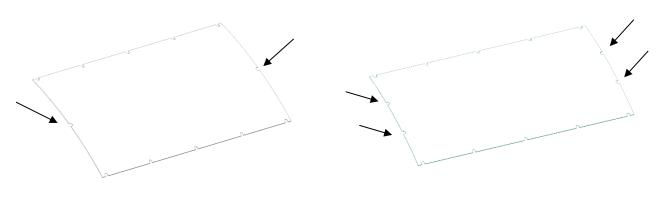
9. Panels installation

	List of	the elements
Name	Number of pieces	Figure
External panel	6	po o o o
Internal panel	6	
Extrenal small covering element	12	<i>a</i>
Internal small covering element	12	0 0
Oxidised TORX countersunk screw M4x20	140	

Prepare the remaining inner and outer wheel panels to be installed, making sure that they are cleaned of any potential contaminants present in the assembly area (sand, dust, etc.).



ATTENTION! External and internal panels are marked by the manufacturer with an information sticker. In addition, they differ in the size and location of the holes.



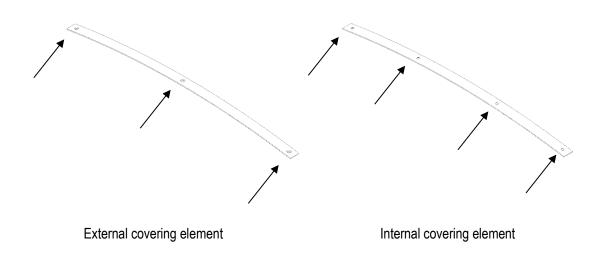
External panel

Internal panel

The appropriate colored internal and external panels should be fitted into the space of connecting the wheel elements, in accordance with the number of the sticker on the wheel frame. To install them, loosen the screws of the large covering elements (marked in the figure below) and then slide the panel into the slot of the large covering elements above and below the panel.

Tighten the panel through the small covering elements, internal and external, respectively, and then tighten the previously loosened large covering elements.

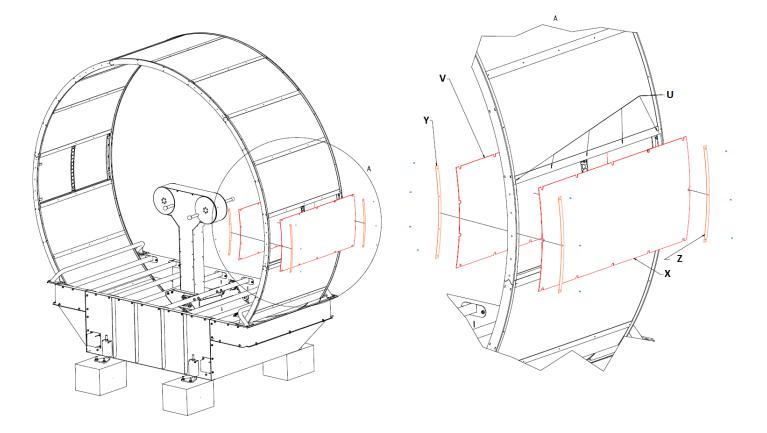
The outer covering elements differ from the inner covering elements in the number of holes indicated in the diagram below.





ATTENTION! When installing the panels, be especially careful not to damage the edges of the polycarbonate panels and the colored surface of the panel!

ATTENTION! The inner and outer panel marked with the same number sticker has the same color!



- V Internal panel
- X External panel
- Y Internal small covering element
- Z Externall small covering element
- U bolts to be loosen

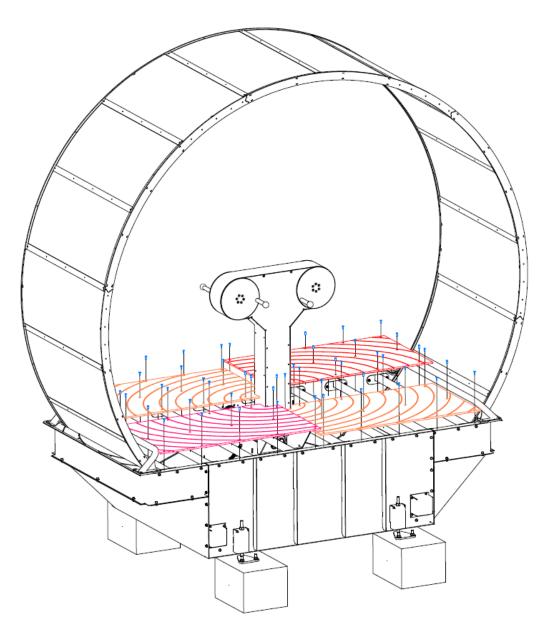


10. Installing the floor elements

List of elements			
Name	Number of pieces	Figure	
Patform 1	1		
Patform 2	1		
Patform 3	1		
Patform 4	1		
Oxidised TORX countersunk screw M6x20	56		

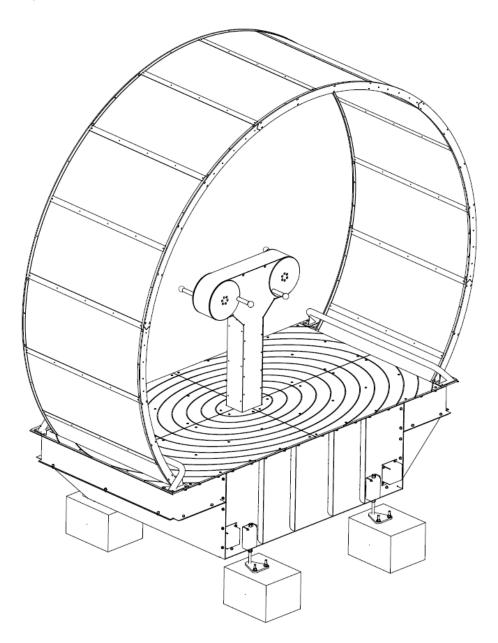


Arrange the floor elements in accordance with the numbering on the floor elements and the stickers on the connectors of the main structure.





View of the ready-to-use, mounted device.





FUNCTIONAL TESTS AFTER ASSEMBLY

After completing the assembly of the device in accordance with the instructions, perform the following functional tests to confirm that the device is installed and operating correctly.

Check:

- stability of structural elements,
- tightness of the screws of the wheel panels,
- the width of the gaps in places where the wheel hides in the floor must not exceed 8 mm!
- whether disturbing sounds are audible, such as: crackling, scratching during normal use of the device
- stability of rotor handle assembly
- stability of the assembly of the floor panels

4. Maintenance, inspection, repair

It is recommended to keep a book of inspections of devices.

There are three types of inspection recommended:

- **Routine inspection** carried out every 1-7 days. Relates to the checking device and the adjacent area for vandalism which may result in malfunction of the device and contamination of area, which could endanger the safety of users,
- **Functional inspection,** carried out every 3 months. It refers to verify the correct operation of the device in terms of functionality.

Check:

- stability of structural elements,
- tightness of wheel panel screws,
- possible effects of acts of vandalism visible on the surface of the wheel panels,
- tightness of the protective barriers,
- if any disturbing sounds, crackles, or scratching during normal use of the device can be heard,
- stability of the floor plates.

In case of any irregularities, action should be taken to eliminate the defects. Minor faults, such as unscrewing the screws, the playground administrator may repair by itself.

In the case of irregularities resulting in incorrect operation of the device, the Manufacturer must be notified in order to determine the best method of repair.



The device should be secured against the users until the damage is removed by fencing it with a construction signal tape with a sign informing about the damage, eg: "WARNING DEVICE FAILURE".

- Annual inspection carried out once a year.

Check:

- 1. stability of structural elements,
- 2. tightness of wheel panel screws,
- 3. possible effects of acts of vandalism visible on the surface of the wheel panels,
- 4. tightness of the protective barriers,
- 5. if any disturbing sounds, crackles, or scratching during normal use of the device can be heard,
- 6. stability of the floor plates..

MAINTENANCE

The Inclusive Spinning Wheel does not require any maintenance.



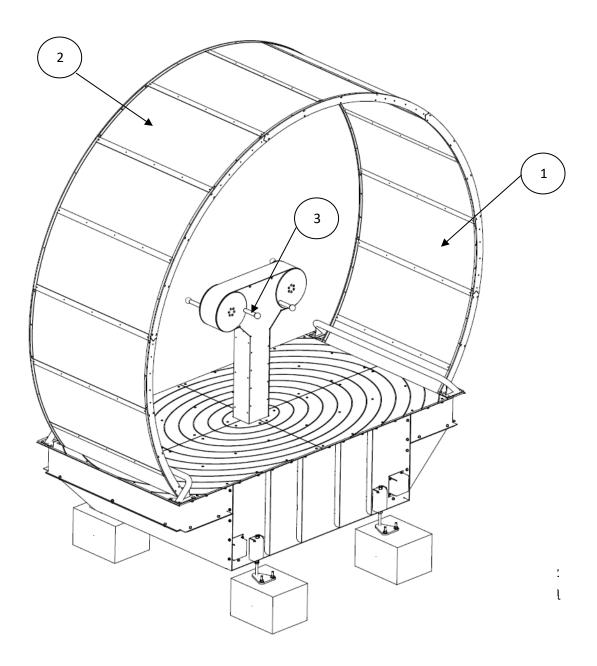
SPARE PARTS

Below is a list of items available as spare parts.

	List of the elements		
No.	Name	Number	Figure
		of	
		pieces	
1	Internal panel	18	
2	External panel	18	r v v
3	Rotor handles – 2 pieces sert	2	



Location of the spare parts in the device:





7. USER GUIDE

The Inclusive Spinning Wheel is dedicated for both non-disabled and disable (those with physical disabilities, using wheelchairs) users.

The device is intended to be played by users aged 3 years and over. The maximum single load of the device on both sides is 500 kg.

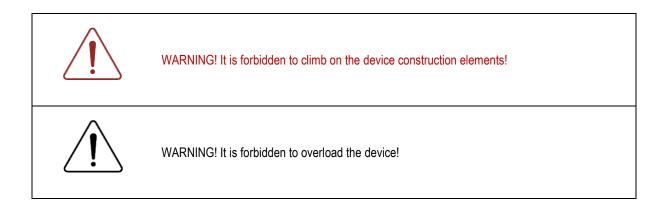
The device complies with the PN-EN 1176 standard.



ATTENTION! The Inclusive Spinning Wheel should be used under the supervision of an adult!

Options of using the Inclusive Spinning Wheel:

- one person with a disability (in terms of individual mobility),
- one person with a disability and one non-disabled person at the same time
- two non-disabled people.





Before using the device, it is absolutely necessary to read this User Guide and follow the guidelines. TERMA Sp. z o.o. or a service designated by the manufacturer are the only entity that can perform repairs and inspections. The manufacturer is not responsible for modernization and repairs made by other entities. In the case of any device damage or any user injury, report the incident to the manufacturer immediately. Additionally, please complete the "Incident Report Form" and send it to the Manufacturer by e-mail or letter. The "Incident Report Form" is included in this User Guide and on the website www.termamed.pl in the "Download" tab.

7.WARUNKI GWARANCJI Terma Sp. z o.o. guarantees good condition and efficient operation of the device mentioned in the Warranty Card, hereinafter referred to as Product, according to the technical and exploitation details described in the user guide.

Warranty confirms the responsibility of the entity who introduced the product to the market to free of charge removal of any faults of the product that was sold. The warranty does not limit or suspend buyer's rights resulting from nonconformity of the goods with the contract.

Materials groups	Damages covered by the warranty	Warranty period	Exclusions from the warranty
Main structure made of black carbon steel. Fixed structural elements. Load-bearing elements	Failure of the structure	10 years	Mechanical damage caused during transport, assembly, as well as those resulting from vandalism and natural wear and tear due to impacts of elements from loose surfaces. Structural overloading other than as a result of its intended use
Galvanized black carbon steel construction elements	Failure of the structure, corrosion	10 years	Mechanical damage during transport, assembly, as well as vandalism and natural wear due to impacts of elements from loose surfaces



Welds	Broken or cracked welds from normal use	10 years	Mechanical damages caused by vandalism
Aluminium elements	Brakes and crack from normal use	15 years	Mechanical damages caused by vandalism or natural use
Stainless steel elements	Brakes and crack from normal use	15 years	Mechanical damages caused by vandalism or natural use
Steel chains	Brakes and crack from normal use	10 years	Mechanical damages, vandalism, natural damage during normal use, results of control and preservation neglection
Foundation blocks	Cracks of the complete width and lenght of the block	5 years	Installation in poor geological conditions, damage during transport or assembly
Coating: chemical anticorrosion protection, epoxy primer, poliester powder coating	Cracks, peeling off, corrosion	5 years	Mechanical damage during transport, assembly, as well as vandalism and natural wear due to impacts of elements from loose surfaces
Moving steel parts: bearings, hinges, guides	Excessive wear caused by normal use	2 years	Mechanical damages during transport, assembly, vandalism, natural damage during normal use, results of control and preservation neglection
Movable and sliding elements made of plastic	Excessive wear caused by normal use	2 years	Mechanical damages during transport, assembly, vandalism, natural damage during normal use, results of control and preservation neglection
Rubber elements	Material degradation caused by UV, cracking	2 years	Mechanical damages during transport, assembly, vandalism, theft
Silicone elements	Material degradation caused by UV, cracking	2 years	Mechanical damages during transport, assembly, vandalism, theft
Textile elements: safety belts	Break in the material, damage to the buckle	2 years	Mechanical damages during transport, assembly, vandalism, theft



Platforms and floors made of HPL	Brakes, cracks, fading	5 years	Abrasion of the top surface as a result of normal use and contact with sand and loose surfaces, trampling. Mechanical damages during transport, assembly, vandalism, theft
HPL covering and decorative elements	Brakes, cracks, fading	5 years	Mechanical damages during transport, assembly, vandalism, theft
Bolts and nuts made of black galvanized steel	Corrosion	5 years	Mechanical damages during transport, assembly, vandalism, theft
Bolts and nuts made of stainless steel	Corrosion	5 years	Mechanical damages during transport, assembly, vandalism, theft
Durable plastic caps	Mechanical damage to pads before installing the device in the field	2 years	Mechanical damages during transport, assembly, vandalism, theft
HDPE panels	Fading, brakes	5 years	Fading, mechanical damages during transport, assembly, vandalism, theft
Polycarbonate elements	Fading, brakes	3 years	Fading, mechanical damages during transport, assembly, vandalism, theft
POM elements	Brakes, wytarcie	2 years	Mechanical damages during transport, assembly, vandalism, theft
Impregnated wooden elements	Rotting	5 years	Fading, algae fouling, damage due to lack of maintenance, deformation, vandalism, theft
Composite elements	Fading, brakes	5 years	Fading, damage due to lack of maintenance, deformation, vandalism, theft



EPDM tiles	Fading, brakes	2 years	Fading, damage due to lack of maintenance, deformation, vandalism, theft
Information stickers	Peeling off	2 years	Fading, damage due to lack of maintenance, deformation, vandalism, theft
Printed dibond boards	Peeling off the printing, fading	2 years	Mechanical damages during transport, assembly, vandalism, theft

- 1. The free warranty repair shall be understood as the performance by the Guarantor during the warranty period of the specific activity appropriate for removing the defect covered by the warranty. This warranty covers Product defects caused by defective parts or defects in production. Warranty liability covers only defects caused by the underlying causes of the sale.
- 2. The condition for the Buyer to use the rights given by warranty is to present at the time of the service request a total of:
 - a. Deffective product,
 - b. A proof of purchase.
- 3. The warranty will be done by the service during 14 working days from the date of acceptance the product to be repaired or from delivering it to the manufacturer's service to the address:
 - Terma Sp. z o.o. Czaple 100, 80-298 Gdansk, Poland 58 694 06 04, serwis-medvo:
 - 58 694 06 04, serwis-medyczne@termagroup.pl
- 4. The scope of warranty service does not cover the installation, commission and maintenance activities which, in accordance with the user guide, is required to performed by the user of the Product on his own. Warranty repairs do not include periodic maintenance and product reviews, and in particular: cleaning, regulation, performance control, correction of operating errors or parameter programming, and other actions that the user is responsible for.
- 5. The warranty excludes cases of random damage of the device and coating, independent of operating conditions (for example: thefts, accidents, fires, floods) and mechanical damage caused by improper use.
- 6. The Buyer, by submitting the Product to the Service, and in particular by sending it to third parties, shall provide him with a secure package. Any damage or damage to the Product resulting from its improper packaging shall be covered by the Buyer.
- 7. Along with the Product, the Buyer shall include the exact description of the defect that causes the need of repair. The person submitting the complaint should provide his / her personal details: name, address,



telephone number (legal basis: art. 23 section 1 point 3 of the Act of August 29, 1997 on the protection of personal data, Journal of Laws of 2002, No. 101, item 926).

- 8. Guarantor chooses the best way to remove the defect. The Guarantor undertakes to remove physical defects free of charge by repair or replacement of the Product free of defects. Regardless of how defects are removed, the warranty continues.
- 9. Any faulty Products or parts exchanged under the guarantee become the property of Terma Sp. o.o.
- 10. If only a part of the Product is defective and can be detached from the Product in accordance with the technical and operating conditions described in the user guide, the Buyer's right under these Warranty Terms shall be limited to the repair of the defective part of the Product only.
- 11. The Buyer has the right to exchange the Product for the new one, free from defects, if:
 - a. During the warranty period referred to in Section 1, the Service will carry out five warranty repairs and the Product will still reveal defects that prevent it from being used for its intended purpose, or
 - b. The service will confirm in writing that removal of the defect is impossible.
- 12. User loses warranty rights in case of:
 - c. The statements made in the Product unauthorized construction changes or adjustments not covered in the User Guide.
 - d. The statements made attempts to repair and interference by third parties.
 - e. statements of parts and supplies not recommended by the manufacturer and guarantee.
- 13. The warranty does not support:
 - a. Damage resulting from improper storage, transport, failure to perform maintenance procedures, periodic inspections.
 - b. Damages resulting from maintenance and repair activities performed by the user contrary to the operating instructions.
 - c. Damage caused by the user's fault or ignorance.
 - d. Product damage resulting from natural wear and tear as a consequence of its use.
 - e. Damage caused by vandalism.
 - f. Damages resulting from the use of non-original spare parts or the use of consumables not intended for use with the Product.
 - g. Products whose Warranty Card or serial numbers have been altered, obliterated or obliterated in any way.
 - h. Defects resulting from incorrect (inconsistent with the instructions or art) assembly by an external entity commissioned by the Guarantor for assembly
- 14. Warranty does not cover parts and materials whose consumption is a natural consequence of work, and these are, in particular, consumable items that are clearly consumed during the operation of the Product.
- 15. Warranty rights do not include the buyer's right to demand the return of the lost profits in connection with the failure and repair of the Product.
- 16. The manufacturer is not responsible for the quality of the installation of the device performed by an external entity. Before putting the device into use, perform a functional inspection and check the device for possible mechanical damage and assembly that ensures compliance with the standard.



8.INCIDENT APPLICATION FORM

In the event of an incident that results in damage to the equipment or injury to the patient, manufacturer must be immediately reported. After filling the "Incident application form," given below, it should be provided to the manufacturer by e-mail termamed@termamed.pl or by Post Office service.

Name of institution:	
Address:	
Institution contact details:	
Name and surname of person involved in the incident:	
Contact details of the person involved in the incident, e-mail phone number	
Date of the incident:	
Date of the notification:	
Description of the incident:	
Consequences of the incident:	



Taken remedial measures:	
Additional information	