

## Risk assessment of:

The positioning belt type MJ-Five point belt, MJ-Magnetic Belt, MJ Easy Travel Belt and MJ-Bus Seatbelt

Manufacturer: **MJ Autosadelmager, Holmstrupgårdvej 250, 8210 Århus V, Denmark**

### Identifikation af farekilder

Council Directive 2016/425/EU, Cat. II	Hazard Source	Risk Reduction
--	---------------	----------------

### Objective

Subsequent risk assessment aims to classify the product up to the applicable European Directives and standards, and based on these directives and standards, to conduct a risk analysis and -assessment.

### Description of the product.

The positioning belt type MJ-Busbelt, type MJ-Magnetic belt, MJ-5-point belt and MJ-Easy Travel belt is designed for use in the positioning of PWD that causes uncontrolled movements, or for active persons who run the risk of leaving the seat in a vehicle, -the standard safety belt which may cause a risk of falling or ejection during transport.

- The belts are designed and tested in accordance with DS/EN ISO 10525:2007 Personnel lifting for disabled persons – Requirements for test methods.
- The test is performed as a static test, the specified person weight for use is 110 kg.

The position belt is not an automobile seat safety belts, which are used as personal safety against harsh braking or/an accident.

When driving in the car, the vehicle's seat belts shall be used always.

The positioning belt are to be used on children, aged 2 to 16 years and height between 91 cm. to 170 cm. and to adults.

### EU directives.

The position belt is designed for use as positioning of PWD children and adults to a safe and good seating position in the car seat or in wheelchair.

Position Belt is a safety equipment to ensure that the PWD and active person has the correct location on the seat, relative to the vehicle's seat safety belts. In addition, the position belt also ensure that the person does not slip out of the vehicle safety seat belt.

## **Regulation (EU) 2016/425 of the Parliament and the Council of 9 March 2016 on personal protective equipment Cat II.**

### Article 1.

This Directive applies to personal protective equipment, hereinafter referred to as PPE.

Subsection. 2. For the purposes of this Directive, PPE shall mean any device intended to be worn or keep a person in order to protect him against one or more risks to his health and safety.

### Article 8 paragraph. 3

Excluded from the EC-type examination is uncomplicated PPE, where the manufacturer must assume that the user can assess whether they are effective against small risks, the effect of which, when they are gradual, can be perceived by users in a timely manner and without danger.

This category shall cover exclusively PPE intended to protect the user against:

- Mechanical influences are superficial effect.

## Risk assessment of:

The positioning belt type MJ-Five point belt, MJ-Magnetic Belt, MJ Easy Travel Belt and MJ-Bus Seatbelt

Manufacturer: **MJ Autosadelmager, Holmstrupgårdvej 250, 8210 Århus V, Denmark**

### Identifikation af farekilder

Council Directive 2016/425/EU, Cat. II	Hazard Source	Risk Reduction
--	---------------	----------------

### Furthermore are used:

Danish Working Environment Authority, Bek. No 210 of 14/03/2018, about Personal protection and safety.

DS/EN ISO 13699:2013 Protective clothing - General Requirements.

DS/EN 13210:2004 Child use and care articles Children's harnesses, reins and similar type articles.

DS/EN 365:2004 General requirements for the use, maintenance, periodic inspection, repair, marking and packaging of PPE 's

1.1 Design principles. 1.1.1 Ergonomics. Used in the normal manner, the user is not exposed to risks	The user cannot move and is fixed in the seat.	The belt positioning only the body in the seat, arms, legs and head have free movement. Setting and adjustment described in the manual.
1.1.2. Highest level of protection. PPE should not be an obstacle to that user actually uses them as long as he is at risk.	The belt may go up or opened accidental	The user cannot unintentionally, open belt. MJ-Five point belt locked on the front with snap lock. MJ-Magnetic belt, is locked at the front of the belt, and fitted with magnetic latch, on the locking button. This require special tools to open. MJ-Easy Travel belt, is equipped with a special button locks on the front. The belt is secured on the seat backrest MJ-Bus belt lock with snap lock on the reverse of the seat backrest.
1.2.2. Adequate level of protection, protection classes	User can with unintentional movements fall out of the seat / wheelchair.	This will only happen, if the belt opened unintentionally or if the belt is not properly adjusted and aligned. Described in the manual.
1.2. PPE Harmlessness. 1.2.1. No risk or other inconveniences related to the security agent itself.	The belt can harm the user by pressure on the neck or other body parts	Manual describes, in words and pictures, how the belt, shall be fitted and adjusted, to avoid pressure on the neck and body.
1.2.1.1. Materials used must not be detrimental to the user hygiene or health.	Release of dangerous substances from the belt, to the prejudice of the user.	Webbing, west and chest pads are made of materials that do not emit hazardous substances during use.
1.2.1.2. All parts that may come in contact with the user during use must be free of roughness, sharp edges, etc.	Sharp edges, constricting webbing against the body.	MJ-Fivepoint belt is equipped with a pillow, which do have contact with the body, other belts have chest pads and west, there protects against edges. Metal snap lock, is located at the midpoint on the body, or behind the backrest, which are not susceptible to contact with sharp edges.
1.2.1.3. PPE must prevent movement, and sensory perception must be minimized, or movements that bring other people in danger.	No freedom for movement of limbs and lack of contact with surroundings.	The belt positioning only the body in the seat, arms, legs and head is free to move. Setting and adjustment described in the manual.

## Risk assessment of:

The positioning belt type MJ-Five point belt, MJ-Magnetic Belt, MJ Easy Travel Belt and MJ-Bus Seatbelt

Manufacturer: **MJ Autosadelmager, Holmstrupgårdvej 250, 8210 Århus V, Denmark**

### Identifikation af farekilder

Council Directive 2016/425/EU, Cat. II	Hazard Source	Risk Reduction
<p>1.3. Comfort and efficiency.</p> <p>1.3.1. Must be made, so it can be placed as easy as possible to use, and remain there as long as necessary.</p> <p>Adjustment and setting, I a way, it fits user's physique.</p>	<p>The belt is difficult to place on user, belt are easily removed, and the user's physique can destroy the belt.</p> <p>None or difficult adjustment and adaptation to the user.</p>	<p>The belt positioning the body so the body has a reduced mobility. The user will not be able to generate enough power, by own body weight, to destroy the belt.</p> <p>Location and regulation around the person are made with sliding buckle on webbing.</p> <p>Described in the manual.</p>
<p>1.3.2. Ease and durability.</p> <p>Adequate resistance for predictable events.</p>	<p>The construction is heavy and fragile against external influences.</p>	<p>The construction consists of webbing, west and small chest plates and is a light construction, as a liner. External influences such as, Jam with wheelchair where the body's moment of inertia, that strain belt, cannot cause breakage. When used in automotive, used car's seatbelt.</p> <p>Described in the manual.</p>
<p>1.3.3. Required possible combination of user, the user has to bear simultaneously.</p>	<p>N / A, PPE is single</p>	
<p>1.4. Information supplied by the manufacturer.</p> <p>a. supplied with the product.</p> <p>b. Notes durability by technical study.</p> <p>c. accessories used with PPE</p> <p>d. appropriate protection class at different risk levels.</p> <p>e. durability Deadline for PPE.</p> <p>f. packaging suitable for transport of PPE.</p> <p>g. the importance of the labeling.</p> <p>h. if necessary, references to directives.</p> <p>i. name, address and ID of accredited institute for PPE.</p> <p>Clear and understandable language</p>	<p>Separate instructions for each type</p> <p>Webbing and locking</p> <p>N / A</p> <p>no specific</p> <p>No shelf life limitation</p> <p>No risks of shipping and transport.</p> <p>Label with Supplier name and CE Mark.</p> <p>Reference to directives manual.</p> <p>No requirement to test.</p> <p>Use of artwork using images with explanation.</p>	<p>a. This avoids misunderstanding of the product's use.</p> <p>b. Technical description of straps and locks</p> <p>c. N / A</p> <p>d. N / A</p> <p>e. In normal use, as described in the manual, there is no or limited wear of the belt. User manual describes daily maintenance.</p> <p>f. The belt does not require special shipping packaging.</p> <p>g. The belt is equipped with type label</p> <p>h. Reference to the directives used to describe the product stated in the manual.</p> <p>i. No need for tests, see the classification of the product.</p> <p>The manual uses extensively images for description of the use of the product.</p>
<p>2. Further common requirements for several species and types.</p> <p>2.1. Control Systems design, risk of misalignment.</p>	<p>Belt adjustment, may in unintended be changed during operation, with reduced security.</p> <p>Improper adjustment by setting.</p>	<p>The belt positioning the body, in such a way, that the body has a reduced mobility. It will for the user, not be possible on its own motion, generating enough power to destroy the belt.</p> <p>Location and regulation around the person is made with sliding buckle on webbing.</p> <p>Described in the manual.</p>

## Risk assessment of:

The positioning belt type MJ-Five point belt, MJ-Magnetic Belt, MJ Easy Travel Belt and MJ-Bus Seatbelt

Manufacturer: **MJ Autosadelmager, Holmstrupgårdvej 250, 8210 Århus V, Denmark**

### Identifikation af farekilder

Council Directive 2016/425/EU, Cat. II	Hazard Source	Risk Reduction
2.2. PPE enclosing parts of the body to be protected, must be ventilated	No ventilation to the body	The belt consists of webbing, and vest / chest pads made of breathable fabric.
2.3. PPE for the face, eyes and respiratory tract.	N/A	
2.4. Wear and tear of the equipment.	Indication of durability, parts of the belt is worn out, for example lock and webbing.	The belt has not limited life. User manual describes daily maintenance and supervision.
2.5. PPE can be caught up during use	N/A	
2.6. PPE for use in hazardous areas.	N/A	
2.7. PPE for emergency use or rapid installation and / or removal.	N/A	
2.8. PPE for use in very dangerous situations.	N/A	
2.9. PPE can be adjusted or removed by the user.	User can open the lock and adjustable webbing during use; the belt does not work as intended.	<p>User cannot inadvertently, to open belt. MJ-Five point belt is locked on the front with snap lock. DS/EN 13688:2013 Generelle krav til ergonomi, ældning, størrelser og mærkning af beskyttelsesbeklædning.</p> <p>DS/EN 13210:2004 Børneseler og andre lignende produkter-Sikkerhedskrav og prøvningsmetoder</p> <p>DS/EN 365:2004 Personlige værnemidler og faldsikringsmateriale: Generelle krav til brugsanvisninger, vedligeholdelse, periodisk eftersyn, reparation, mærkning og pakning.</p> <p>MJ-Magnetic belt, is closed at the front, and equipped with magnetic clasp on the lock button, this require special tools to open.</p> <p>MJ-Easy Travel is equipped with a special button locks on the front. The belt secured in the seat backrest.</p> <p>MJ-Bus seatbelt locked with snap lock on the back of the backrests.</p> <p>Setting and adjustment described in the manual.</p>
2.10. PPE which may be connected to another, complementary device	N/A	
2.11. PPE fluid circulation system.	N/A	
2.12. PPE with brands regarding health and safety.	The belt should be specially marked it is used in special conditions. Risk labeling must be visible in life expectancy.	There are no special requirements for labeling of belt. The belt is labeled with the nameplate.

## Risk assessment of:

The positioning belt type MJ-Five point belt, MJ-Magnetic Belt, MJ Easy Travel Belt and MJ-Bus Seatbelt

Manufacturer: **MJ Autosadelmager, Holmstrupgårdvej 250, 8210 Århus V, Denmark**

### Identifikation af farekilder

Council Directive 2016/425/EU, Cat. II	Hazard Source	Risk Reduction
2.13. PPE in the form of clothing that visually signals the user's presence.	N/A	
2.14. PPE for protection of several risks.	There are several risks associated with the use of the belt.	Belt has only the purpose to positioning a person in a seat, and is not made for any other purposes.
3. More specific requirements to address risks. 3.1. Protection against mechanical impact.	N/A	
3.1.1. Impact caused by falling or ejected objects.	N/A	
3.1.2. Individuals falling. 3.1.2.1. Prevention of falling due to slipping.	N/A	
3.1.2.2. Obstructing from falling from heights.	The belt is opening the lock and the person may fall out of the belt.	User cannot inadvertently, to open belt. MJ-Five point belt is locked on the front with snap lock. MJ-Magnetic belt, is closed at the front, and equipped with magnetic clasp on the lock button, this require special tools to open. MJ-Easy Travel is equipped with a special button locks on the front. The belt secured in the seat backrest. MJ-Bus seatbelt locked with snap lock on the back of the backrests. Setting and adjustment described in the manual.
3.1.3. Mechanical vibration.	N/A	
3.2. Protection against static compression of the body.	N/A	
3.3. Protection against physical injury (Rubbing, perforation, cuts, bites)	Belt rodent on the body during use. Sharp edges.	MJ-Five point belt is equipped with pads, where the straps have contact to the body. Other belts have chest pads and west, and have no edges. Metal snap lock is located at the midpoint on the body, or behind the backrest, with no contact with sharp edges.
3.4. Prevention of drowning.	N/A	
3.4.1. Increasing the flow ability.	N/A	
3.5. Protection against noise.	N/A	

## Risk assessment of:

The positioning belt type MJ-Five point belt, MJ-Magnetic Belt, MJ Easy Travel Belt and MJ-Bus Seatbelt

Manufacturer: **MJ Autosadelmager, Holmstrupgårdvej 250, 8210 Århus V, Denmark**

### Identifikation af farekilder

Council Directive 2016/425/EU, Cat. II	Hazard Source	Risk Reduction
3.6. Protection against heat and / or fire.	N/A	
3.6.1. Materials included in PPE, and other components.	Not used in connection with radiation and convection heat.	N/A
3.6.2. Protective suits ready for use.	N/A	
3.7. Protection Against Cold. 3.7.1. Materials which is a part of PPE, ore other ingredients.	Not used as coldness protections.	N/A
3.7.2. Protective suits ready for use.	N/A	
3.8. Protection against electric shock.	N/A	
3.9. Radiation protection. 3.9.1. Non-ionizing radiation.	Not used as protection against radiation.	N/A
3.9.2. Ionizing radiation.	N/A	
3.9.2.1. Protection against external radioactive contamination.	N/A	
3.9.2.2. Limited protection against external irradiation.	N/A	
3.10.1. Respiratory protection.	N/A	
3.10.2. Protection against contact with skin and eyes.	Not used as a protective hazardous substance.	N/A
3.11. Safety devices for diving equipment	N/A	

### conclusion:

The four types of belt that are dealt in this risk assessment, shows no significant residual risk points. Where could conclude a residual risk, are these risks clearly described in the instructions manual for each belt type.

Residual risk covers location of belt on the body, locking systems, security, and setup and adjustment of the belt.

These points are illustrated in the manual, hereby is malfunction in use of belt avoided.

Performed by: Ole Thorup Nielsen, OnConsult, Hybenvej 32, DK9280 Storvorde

Date: 17/07/2020

Translation on original Risk assessment.