

Protective Equipment for Riders and Drivers











DEAR SUPPORTERS OF EQUESTRIAN SPORTS,

No matter if competing or pleasure riding - do not take any risk in question of your personal protection.

The right choice of your individual protection wear might be crucial in case of an accident. Therefore we combined important background information, expertise and experiences with our product know-how to protect riders of all levels who do not want to take any risk.

Your Safety is our concern! Our team has committed itself to this philosophy and is working permanently on new ideas and concepts concerning your personal protection. The result is a broad selection of body protectors for beginners, advanced and professional riders which is continually being improved.

We want you to ride well-protected!

Yours Stefan Schwanbeck

Managing Director and Founder of USG United Sportproducts Germany GmbH Active Member of the European Committee for Standardisation Sport/Body Protectors

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Body Protector for Riders and Drivers

- Basic protection for riders and drivers: Offers the maximum level of protection by fully meeting European standard EN 13158-2009, Level 3
- In the USA and Canada body protectors have to meet demands of ASTM F1937-04 and should be SEI approved.
- May reduce severity of injuries when falling off, being kicked or stood on by a horse.
- Designed for optimum comfort and mobility.
- Please ask your authorised USG retailer for advice when fitting your new body protector.

Sara and Frank Ostholt wearing »USG Flexi«. Its block structure system allows extreme comfort and easy adaption, even in big sizes. You will find further information on page 12-13.





Individual Silver for Sara Algotsson-Ostholt and her horse »Wega« at the Olympics 2012 in London. Sara has been well protected by her »FlexiPlus EquiAirbag®«.



Airbag-Protectors – What's most important!



1. Instant Protection

An Airbag protector can only serve its purpose when it is fully inflated in time. The airbag will be activated as soon as the rider is separated from the horse. Once the activation cable is torn, the protector will be inflated. Depending on the way to fall, the timeframe may be very short. Is the airbag triggered too slowly, it cannot protect the rider from impact injuries when falling on the ground. According to EN 1621-4 a maximum of 200 ms (= trigger time + inflation time) is required before the airbag is fully inflated. Test results for EquiAirbag®: 60 ms + 88 ms = Protection within 148 ms!



2. Parts of the Body to be protected

Only an Airbag protector is able to protect the entire spinal column provided, it is able to unfold fully in time. Then it can save the vital and especially endangered cervical spine from injuries and also give you neck coverage. The dorsal vertebrae as well as the nerve tracts are most endangered when falling off a horse. Especially injuries of the spinal cord are particularly severe, as they may lead to paraplegia.



IN FEW WORDS

An Airbag Protector should:

- Have a quick trigger time according to EN 1621-4 within 200 ms!
- **②** Protect the entire spine from head to tailbone.
- **3** Absorb impact energy according to EN 1621-4 Level 1 or Level 2.

3. Shock Absorption

Airbag protectors according to EN 1621-4 absorb impact energy differently depending on their certified level.

Level 1: Average transmitted forces of 4.5 kN max

Level 2: Average transmitted forces of 2.5 kN max (EquiAirbag®: 1.4 kN) EquiAirbag's® good shock absorption was confirmed during CE-testing. The transmitted forces of only 1.4 kN fully meet Level 2 requirements.

Do not confide in any airbag which does not meet requirements of neither Level 1 nor Level 2!

Protect your Back

Protection of your spinal column is crucial to prevent injuries of the spinal cord and imminent paraplegia when falling off a horse! Therefore, confide in certified protection gear only!

You can see from the picture below, how well airbag and body protector combine the best of both products!

Presently, EquiAirbag® is the only airbag-protection system for riders and drivers that is certified according to EN 1621-4. EquiAirbag®-protectors are available as the jacket itself made of high-quality cordura® or combined with USG's body protector »USG Flexi«.

You will find the most important protective qualities of two CE-certificates combined in the one product »FlexiPlus EquiAirbag®« which is the winner of BETA Innovation Award for Safety + Security 2013.



A fall off the horse is especially dangerous for your spine.

Allround Protection!



EQUIAIRBAG® in daily Use

Whether cross country or show-jumping - EquiAirbag® can protect your back very effectively. EquiAirbag® is the only airbag protector for equestrian sports that is certified according to EN 1621-4. It has also proved itself in daily use and competition.



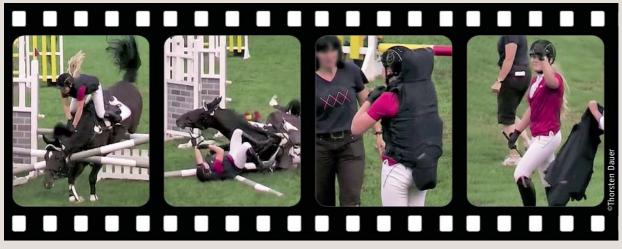


Case Study 1 - Cross-Country Accident

According to statistics of the FEI, most accidents occur after a jump, just as you can see from the following example.

- Picture 1: Horse touching the jump and rider losing his balance.
- Picture 2: Rider falling off.
- Picture 3: Rider falling backwards.
- Picture 4: Rider reaching the ground with his tailbone first being well-protected by the EquiAirbag® protector.

You may guess from this picture sequence that in the moment after picture 4, EquiAirbag® has given neck coverage. Horse and rider remained sound and unharmed. The rider was able to rise and leave the grounds by himself.





Case Study 2 - Show-Jumping Accident

- Picture 1: Horse and rider falling trying to overcome a jump.
- Picture 2: Rider falling backwards on the poles. Since both are falling together, the rider is being seperated very late. Only thanks to the extremely quick inflation, her back does not get hurt.
- Picture 3: Rider getting up without external help and taking off her airbag protector.
- Picture 4: Everything okay!

EQUIAIRBAG

CE-tested and approved

USG EquiAirbag® Back Protector

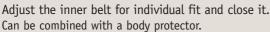
Certified according to EN 1621-4 and individually adjustable. With a trigger time of 60 ms and inflation time of 88 ms it can absorb impact energy of 1.4 kN. The jacket weighs 1.400 g and allows for fully body movement. »USG EquiAirbag®« comes ready to use, and is supplied with its gas canister installed and with a lanyard to connect the rider to the saddle. If not damaged, the airbag system can be refilled again. Please read the manual that is included before use.

13150003

Adult S Adult M Adult L Adult XL

Ideal add on product for your body protector.







IN FEW WORDS

- 1 Top protection results, CE-tested and approved to EN 1621-4
- 2 Currently quickest airbag protector
- Protects entire spine
- 4 Neck coverage, no retroflexion of head

EQUIAIRBAG

EquiAirbag®-Accessories

1 Recharge Kit

- for »EquiAirbag®« and »EquiAirbag® for Flexi« ✓ Reusable recharge tool to refill the carbon dioxide cartridge
- √ 1 carbon dioxide replacement cartridge (for one inflation) Please see the instruction manual for help changing the cartridge.

2 3-Piece-Recharge Kit for »EquiAirbag®« and »EquiAirbag® for Flexi«. Containing 3 spare carbon dioxide cartridges and reusable tool.

3 Carbon dioxide cartidge 13150006 Single Carbon dioxide cartidge for one refill for »EquiAirbag®« and »EquiAirbag® for Flexi«.

Please see the instruction manual for further information. »EquiAirbag®« products can be refilled again and again as far as they are not damaged in any way. Should you feel unsure about refilling them yourself, please ask your retailer or contact USG directly.

Video clip »How to recharge«:









Face to Face with Ingrid Klimke

Eventing champion and winner of Olympic team gold 2012 in London Ingrid Klimke has been using USG's protector combination »FlexiPlus EquiAirbag®« since 2011. We have asked her for her experiences.

USG: We are delighted that you have decided to wear »FlexiPlus EquiAirbag®«. What made you come to this decision?

Ingrid Klimke: Well, when competing you can see different versions of inflating jackets that seem to be very similar at first

glance. In respect for my family and having witnessed some really bad falls in recent years, I decided to take the time and ask for detailed information and advice. I learned that »EquiAirbag®« is currently the only airbag

protector for riders that is certified – which really makes a big difference to all the other airbags.

USG: Have you already had any falls using the »FlexiPlus EquiAirbag®«? Please tell us about your personal experiences.

Ingrid Klimke: Fortunately, I have not fallen off since I decided to wear USG's »FlexiPlus EquiAirbag®«. Therefore, I did not

gain any experiences in that regard. This protector, however, gives me a real save feeling and is also very

comfortable to wear.

USG: When do you wear the »FlexiPlus EquiAirbag®«?

Ingrid Klimke: Whenever I do Cross Country, go hacking or when riding young and unexperienced horses. Being mother

and professional rider at the same time, I do not want to take any unnecessary risks as far as my health is concerned. I have practised handling of »EquiAirbag®« in my daily training sessions and got used to it so well, that I actually like to wear the Airbag protector in competition and all other situations that might bear

a risk.

USG: Can you recommend the »FlexiPlus EquiAirbag®«?

Ingrid Klimke: Most definitaly! My husband started using this protector combination and is also very pleased with it.

Also my cross country colleagues Sara and Frank Ostholt as well as Kai-Steffen Meier have been using USG's »FlexiPlus EquiAirbaq®« for a while. No other product is able to protect the spinal column as effectively

as »EquiAirbag®«. And since this part of the body is most endangered when falling off a horse, its protection is

extremely important to me.

USG: Thank you very much for your positive feedback and best of luck for the future!

Innovation Award: »FlexiPlus EquiAirbag®«

»EquiAirbag® for Flexi«

The black EquiAirbag® protector is fully CE certified according to EN 1621-4. It is designed to be worn in conjunction with USG's body protector »USG Flexi«.

Simply pull »EquiAirbag®« over the back part of »USG Flexi«. It can be removed again just as easily.

The »EquiAirbag®« offers protection for the back, reduces flex in the spine and gives neck coverage as well as it helps to prevent impact injuries.

The protector comes ready to use, and is supplied with its gas cartridge installed and with a lanyard to connect the rider to the saddle. Extra gas cartridges are available to buy (page 9).

Please read the manual that comes with the

airbag protector before use.

»USG Flexi« is not included in delivery.

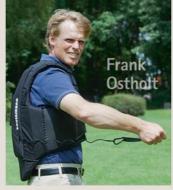
For further information please see the pages 12-13.

13150001

Children XL Adult S Adult M Adult L Adult XL









The Swedish eventing team has been extremely successful with »FlexiPlus EquiAirbag®« at the Olympics 2012 in London, especially Sara Algotsson-Ostholt, she has won individual silver with her horse »Wega«.

Three steps to combine »EquiAirbag®for Flexi« and »USG Flexi«



»EquiAirbag® for Flexi« and Body Protector »USG Flexi«, Level 3



Pull airbag over the body protector's back part.



Close tape on the inside. Finished!

IN FEW WORDS

»EquiAirbag® for Flexi«

- Top protection results, CE-tested and approved EN 1621-4
- 2 Currently quickest airbaq protector available
- **3** Protects entire spine from head to tailbone
- Additional neck coverage, no retroflexion of the head
- 6 To combine with »USG Flexi«



»Intelligent design and providing much needed protection«. Winner of the BETA Innovation Award 2013 for Safety & Security.

World Champion Michael Freund WY 10 WY 10 WY 10

Body Protector



In combination with »EquiAirbag® for Flexi« winner of the BETA Innovation Award 2013, Safety & Security.





USG Block Structure System

- ✓ Moulds easily to the shape of the body
- ✓ Helps to keep you cool
- ✓ Extremely comfortable
- ✓ Offers the maximum level of protection by fully meeting EN 13158-2009 and BETA 2009 Standard, both level 3 and ASTM F1937-04, SEI approved.

2 Shoulder Pads

with tape closing and medical card, stepless adjustable. One pair, matching all styles of USG body protectors as of size children XL.

13200015

<u>2a</u> black (-100) <u>2b</u> navy (-132) **2c** brown (-102) Engineered to give you total confidence in your upper body protection. »USG Flexi« fully meets EN 13158-2009 and BETA 2009, both standard Level 3. It also meets the demands of ASTM F1937,04 and is SEI approved (Children M – Adult XL, colour: Black). Its block structure system of shock absorbing foam panels moulds around the body to give a close flexible fit and allows the rider to maintain freedom of motion. Outer material made of polyester is wipe clean. Shoulder and waist tape closures allow perfect individual adjustment, correct fit and protection. Suit bag included in delivery. Colours: black, navy, brown.

13000001

1a black (-100)1b navy (-132)1c brown (-102)

Children XS Adults S
Children S Adults M
Children M Adults L
Children L Adults XL

Children XL Adults XXL (only colour black)
Adults XXXL (only colour black)

»Flexi Race« for Jockeys





black, short cut, for jockeys. Certified according to EN 13158-2009, Level 1 and BETA Standard 2009, Level 1.

With block structure system of impact absorbing materials which mould to the shape of the body for your comfort and helps to keep you cool. Tape closures on shoulder and side allow perfect individual adjustment. Outer material made of polyester is wipe clean. Suit bag included in delivery. Can be combined with »USG Leg Straps«.

13050001 Adults

XS EU size 32 - 34 S EU size 36 - 38 M EU size 40 - 42

L EU size 44 - 46

XL EU size 46 - 48





The new Precto Generation





1 »USG Precto Flexi« Back Protector

black, certified according to EN 1621-2 with an extension to protect the cervical spine and with additional front padding.

3D CE protector made of elastic foam with perfect shock absorption values for a highly effective protection of the spine. Due to the

block structure system it moulds easily to the shape of the body, helps to keep you cool and gives best movability which allows the rider to bend fully in the event of a fall. Perfect fit and stepless adjustable with tape closure on waist and shoulders. It can be easily worn over or under the clothes. Unisex fit. Fabric wipeable.

13100002

Colour: Black (-100)

Sizes: XS-XL

2 »USG Precto 3000« Back Protector

black, certified according to EN 1621-2, for a highly effective protection of the spine. Extremely light weight, hardly noticeable protector of elastic foam for best movability which allows the rider to bend fully in the event of a fall. The protector is inserted in a sportive designed vest of 100 % polyester that moulds easily to the shape of the body. It can be easily worn over or under the clothes. Easy front zip opening, attractive darts flatter every figure. Vest washable at 30°C, please remove protectors before. Unisex fit.

13100003

Colour: Black (-100)

Sizes: XS-XL



COMFORT TRAINING



THE FASHIONABLE FOR BEGINNERS »Comfort Training«

High quality riding helmet for children and adults with fashionable glitter design. Light weight, safe and comfortable as well.

Protection features

- ✓ Certified according to Euro Standard 1384-1997
- ✓ Shock absorbing inner shell of polystyrene
- ✓ Top quality soft nylon four point harness that is adjustable for a perfect fit
- ✓ High quality buckle by YKK®

Practical features

- ✓ Maximum air flow through perforation apertures
- ✓ Removable and washable head liner
- Best fit and extra-soft neck pad which creates a snug and secure fit
- ✓ Rotary adjust system

Design features

- ✓ Stylish glitter design
- ✓ Black hardened matte finish

13250006

black/black (-233)

Size XS-S EU 48-52 Size S-M EU 52-56

Size M-L EU 56-60

CE

EN 1384







COMFORT STARX

1 EXQUISITE »Comfort Star«

Our deluxe model combines modern styling, fit and safety that make it the latest choice in equestrian protection headwear. Designed to improve comfort for training and competition, it has been designed to keep the rider's head cool during exercise.

Protection features

- ✓ Certified according to Euro Standard 1384-1997 and ASTM 1163-4a, SEI approved
- ✓ Shock absorbing inner shell of polystyrene
- ✓ Top quality four point harness that is adjustable for a perfect fit, padded softly with leather
- ✓ High quality buckle by YKK®

Practical features

- ✓ Maximum air flow through 9 ventilation apertures at front and rear covered in stainless steel mesh
- ✓ Removable and washable COOLMAX® head liner, breathable
- ✓ Soft neck pad which creates a snug and secure fit
- ✓ Rotary adjust system

Design features

- ✓ Flexible leather-coated visor
- ✓ Black hardened matte finish
- ✓ Elegant carbon design

13250002

black/brown (-223) Size S/M EU 52-56 Size M/L EU 56-59











THE SPORTIVE ONE 2 »Comfort Basic«

A comfortable everyday riding helmet, slimline in up-to-date styling achieving the perfect combination of cool equestrian protection headwear.

Protection features

- ✓ Certified according to Euro Standard 1384-1997 and ASTM 1163-4a, SEI approved
- ✓ Shock absorbing inner shell of polystyrene
- ✓ Top quality soft nylon four point harness that is adjustable for a perfect fit
- ✓ High quality buckle by YKK®

Practical features

- ✓ Maximum air flow through 9 ventilation apertures at front and rear
- ✓ Removable and washable head liner
- ✓ Extra-soft neck pad which creates a snug and secure fit
- ✓ Rotary adjust system

Design features

- ✓ Black hardened matte finish
- ✓ Stylish carbon design

13250001

2a black/black (-233) Size S/M EU 52-56 Size M/L EU 56-59 **EN 1384**ASTM 1163-4a, SEI

2b blue/black (-295) Size S/M EU 52-56 Size M/L EU 56-59

COMFORT BASIC





FAQ: More Information about Protection in Equestrian Sports

What is CE Certification? ()

With the CE Marking logo, it is indicated that the product meets the legal requirements described in the applicable European Directive and is a part of the personal equipment (PSA). The CE-marking on its own is not very specific, relevant are the protection standards as you can see from the attached information chart.

What is Euronorm Certification?

Euronorms inform about technical requirements of products. In protection gear they inform about their suitability, expected protectability as well as which parts of the body can be protected. The product is being certified when tested successfully at an approved institute according to the norm's requirements.

What is ASTM and SEI?

ASTM stands for American Society for Testing and Materials. The ASTM standard defines performance criteria and test methods. Manufacturers may voluntarily submit their products for further testing by the Safety Equipment Institute (SEI) using the test methods definded by the ASTM standard. If these samples pass the tests, they may be labeled ASTM/SEI certified.

What Norms are there for Equestrian Protective Gear?

Protector	Relevant Norm	Applicability
Riding Helmet	EN 1384/ASTM 1163-4a	In general for riding and driving.
Body Protector for Jockeys	EN 13158-2009, Level 1	Only for licensed jockeys whilst racing.
Body Protector for Riders in low risk situations	EN 13158-2009, Level 2	Only for riding in low risk situations providing a lower than normal level of protection.
Body Protector for Riders and Drivers, normal risk situations	EN 13158-2009, Level 3 ASTM F1937-04	For riding in normal risk situations and for competition.
Back Protector, also Airbag Protector before implementation of EN 1621-4	EN 1621-2:2003	To protect the rider's back.
Airbag protector	EN 1621-4, Level 1 or better Level 2	Effective additional protection to body protectors, may complement protection areas. Full protection of the back.

Attention!

Some products show EN 340 certification which is a mere cross reference and does not say anything about any level of protection.

What does the BETA-label mean?

This standard is a UK certification sheme operated by BETA (British Equestrian Trade Association). Testing is based on EN 13158, but the sheme involves additional annual re-tests on the certified protector by a BETA-approved laboratory. Therefore, quality of the body protector is ensured in shorter intervals. Unlike the mandatory EN-certification, the BETA-label is required by the manufacturer voluntarily.

EN 13158	ВЕТА
Level 1	Black label
Level 2	Brown label
Level 3	Purple label



»EquiAirbag®«



Short Information

- Airbag vest for all purposes.
 - Protects the entire spine.
- Easily adaptable by adjustable
- Colour: Black

inside laces.

»USG Flexi« »EquiAirbag® for Flexi«

»Precto Flexi« »Precto 3000«

»Flexi Race«



Short Information

- Designed to combine with Add-on Airbag protector
- Can be attached/detached anytime body protector »USG Flexi«
 - Colour: Black



Short Information

Body protector Level 3 with block structure system for a flexible fit.

flexible fit due to vest with Back protector that gives

Short Information

tape closure or zipper

With block structure system

for a flexible fit.

Colour: Black

Body protector Level 1

Short Information

for licensed jockeys

Best movability

Certification EN 1621-2

- Designed to fit riders of all shapes and sizes.
 - Colours: Black, navy, brown (ASTM black only)

Certification

- EN 13158-2009, Level 3
- BETA-Standard 2009, Level 3

with »USG Flexi« EN 13158-2009

EN 1621-4, Level 2. Combined

EN 1621-4, Level 2

Certification

Certification

+ BETA Standard 2009, Level 3

BETA-Standard 2009, Level 1

EN 13158-2009, Level 1

Certification

ASTM F1937-04, SEI approved

Sizes

Children XS-XL (ASTM only M-XL)

Adults XS-XL

Adults S-XXXL (ASTM only S-XL)

Licensed jockeys whilst Best suitable for races only. professional riders and drivers. Beginners, advanced and Best suitable for

Sizes XS-XL

Best suitable for Leisure Riders

Good to know

- Patented airbag with top test results.
 - Best to wear in addition to your body protector Level 3.

Award for Safety + Security 2013. winner of the BETA Innovation

premium protection for riders and

In combination with »USG Flexi«

Good to know

Further Information Video clips at Pages 10-11

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Further Information

www.usg-reitsport.de

www.usg-reitsport.de

Video clips at

Pages 8-9



Page 12-13

Further Information

0

Further Information

easily worn over or under the Scarcely noticeable: Can be

jacket.

the rider's legs.

scoring. Best tested in Driver's ma-Jazine »Pferd und Wagen« (09/12)

'09/11): Seal of quality with top

Riding magazine »Mein Pferd«:

Good to know

»USG Flexi« highest protection level

or riders with best test results.

in addition. In combination with nals who want to wear an airbag

fessional riders who want optional

additional protection.

Beginners, advanced and pro-

Best suitable for

Beginners, advanced and professio-

Sest suitable for

Children XL Adults S-XL

Adults S-XL

Sizes

Sizes

Good to know

Optional leg straps to connect body protector with

Good to know

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OUR VISION IS YOUR SAFETY!

Since we are devoted riders and organise competitions ourselves, it is our biggest concern to increase safety in equestrian sports. Managing Director Stefan Schwanbeck cooperates with sport scientists, physicians and safety experts to work out requirements for EN 13158-2009. He is also active member of the European Committee for Standardisation Sport/Body Protectors. We gather all this expertise and experiences to combine them in our safety products hoping that they may support your personal protection.

Where can I buy USG-Products?

No matter whereabouts you are, there will be an USG retailer near you listed on the homepage of USG Germany or on the homepage of one USG distributor you find below. Please ask your retailer for further advice on protection gear.

Contact us

Please also visit us at www.usg-reitsport.de or on facebook. Should you have individual questions, please do not hesitate to send us an e-mail to info@usg-reitsport.de and we will endeavour to answer your query as soon as possible. Furthermore, you can meet us at various fairs or competitions. We are looking forward meeting you!

Your team of USG United Sportproducts Germany GmbH





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