

traffic protection.**sicherheit.**



property protection.**sicherheit.**



barriers.**sicherheit.**



Swiss motorcycle underrun protection
moto-protect[®]

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Motorcycle inventory

In 2010, approximately 650,000 motorcycles and scooters were registered in Switzerland. In addition to the growing popularity of the motorcycle as a leisure activity of this transport is increasingly used by commuters and in everyday life. This motorcycle is propelled behind the cars steering ends the second largest user group of private passenger transport on the Swiss network.



Accident statistics

According to accident statistics could be detected in the passenger cars in recent years constantly declining casualty and injured figures. This positive trend is not recorded for the motorcyclists. The motorcyclists falls alongside the remains constant accident events on also significantly higher risk of injury . With the same transport performance, the risk of an accident with a serious injury for motorcycle propelled more than 30 times higher than for occupants of passenger cars.



Restraint systems for motorcyclists - situation today

Road restraint systems are designed for cars, vans, trucks and buses. Motorcycle riders are little or not protected by it. In a way, even the opposite is the case. For sliding motorcyclists the posts are a real risk with an increased risk of injury. This is on routes with high "Motorcycle frequency" a real problem, which waited for a certified solution, according to SN - EN -1317-8.



Functionality of *moto-protect*®

The motorcycle underrun protection of KAUFMANN AG is installed as an additional drawstring under the guardrail or the box section before the post. Sliding motorcycle riders are absorbed by it, and it prevents the usual injuries caused by posts. The large elastic impact surface combined with the patented "shock-absorbing" mounting brackets reduce the risk of injury significantly. The system is "soft" constructed and weakens the impact, which contributes to an effective absorption of impact energy.



Where to install?





In curves with black spots of motorcyclists and generally on routes with high "Motorcycle frequency" provides the certified system **moto-protect**[®] an appropriate measure to reduce the risk of injury from fallen motorcyclists . In order of a heavy winter service, the underride protection system of KAUFMANN AG has a patented "Quick mounting system", which can be easily removed and mounted.

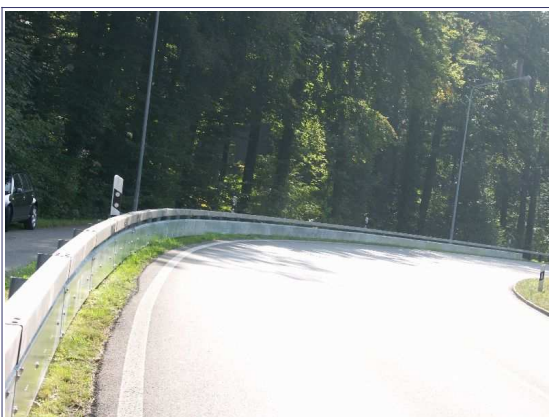


The decisive advantages of **moto-protect**[®]

The certified motorcycle underrun protection system of Kaufmann AG is flexibly mounted with absorption brackets to the posts of the guardrails or the box section. This design has two key advantages, namely: Firstly guarantees the shock-absorbing effect and secondly, can be added later to any existing system.

The new design offers among other things the following advantages:

-  The new system guarantees shock-absorbing effect and thus leads to lower injury.
-  Quick and easy assembly and disassembly of the underrun protection thanks to "rapid installation".
-  The certified system is tested accordingly to EN 1317-8.
-  **moto-protect**[®] can be retro-fitted to any system with post-clearance 2m.



Butt joint principle

Quick and easy: The bumpers of the *moto-protect*[®] system are simply bolted to pre-assembled stainless steel nuts using five M12 hexagon socket head bolts. This means that the bolts can be fitted and removed quickly without fixing the nuts directly at the joint. Another advantage: additional slots allow the system to be mounted easily and flexibly.



View



Rear view

Suspension principle

Practical and independent: The *moto-protect*[®] system is bolted to the butt joint with pre-assembled stainless steel nuts. The patented absorption brackets can be mounted on the post without screws thanks to the "quick mounting system". This means that the assembly team has a minimum of effort to assemble and disassemble the system.



Screwless disassembly



Screwless mounting

Head piece principle

Aesthetically designed to prevent the risk of injury: Arch end with attachment to posts.



View










Rear view

Proven testing accordingly to EN 1317-8

moto-protect® is the newest patented Motorcycle Protection System for effective safety of motorcyclists. The patented **moto-protect®** system from Kaufmann AG in Switzerland is the only motorcycle underride protection system to have been successfully tested and certified with impact tests on crash barrier systems approved by FEDRO in accordance with SN-EN-1317.

moto-protect® is certified for the following FEDRO systems and has been tested in crash tests:

-  Vehicle restraint system **1211** - LS A 2.00m
-  Vehicle restraint system **2111** - LS A - HL 60'140 2.00m
-  Vehicle restraint system **2211** - LS A - HL 60'140 1.33m
-  Vehicle restraint system **4211** - LS 130'150 2.00m
-  Vehicle restraint system **5211** - LS 150'180u 2.00m
-  Vehicle restraint system **6211** - LS 150'180 2.00m
-  Vehicle restraint system **6411** - LS 2x 150'180 2.00m



This allows you to check if the patented product was originally manufactured by the KAUFMANN AG, please pay attention to the following safety sign:



This sign stands for swiss high quality and progress...

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