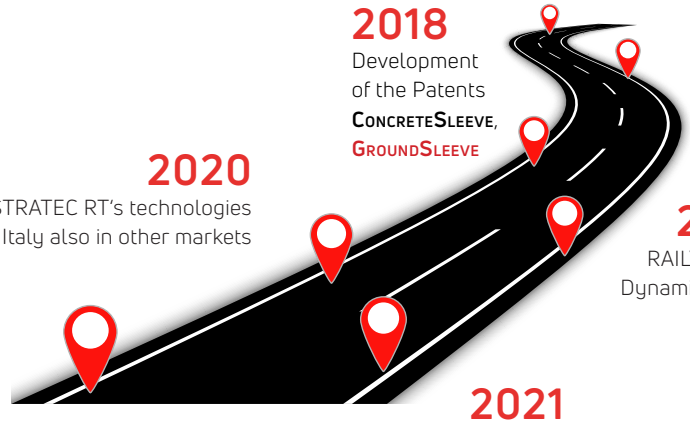
Stratec RT
ROAD TECHNOLOGIES

INNOVATIVE TECNOLOGIES FOR SAFE ROADS

... watch our corporate movie ...



2017
Analysis of the market and current installation problems

2018
Development of the Patents **ConcreteSleeve**, **GroundSleeve**

2019
RAILY company costitution - Dynamic Railing Patent

2020
Introduction of STRATEC RT's technologies besides Italy also in other markets

2021
GroundSleeve system accreditation with road and motorway operators

2022
Projects in Italy and abroad

ABOUT US

STRATEC RT was founded with the purpose to develop new integrative systems which improve the safety of road barriers. The innovative patents designed by the company allow to solve the critical issues related to the correct installation of road barriers on narrow embankments as well as on bridges and viaducts.

The constant research, great attention and experience given in the various stages of development have made it possible to achieve great results, appreciated by operators in the road sector in Italy and abroad.

Stratec RT technologies are inserted to support existing barriers as well as in new projects aimed to guarantee safety and reliability over time.

DESIGN

PROTOTYPE

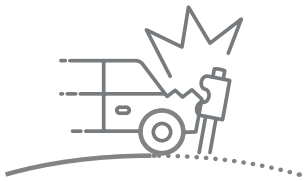
CRASH TEST

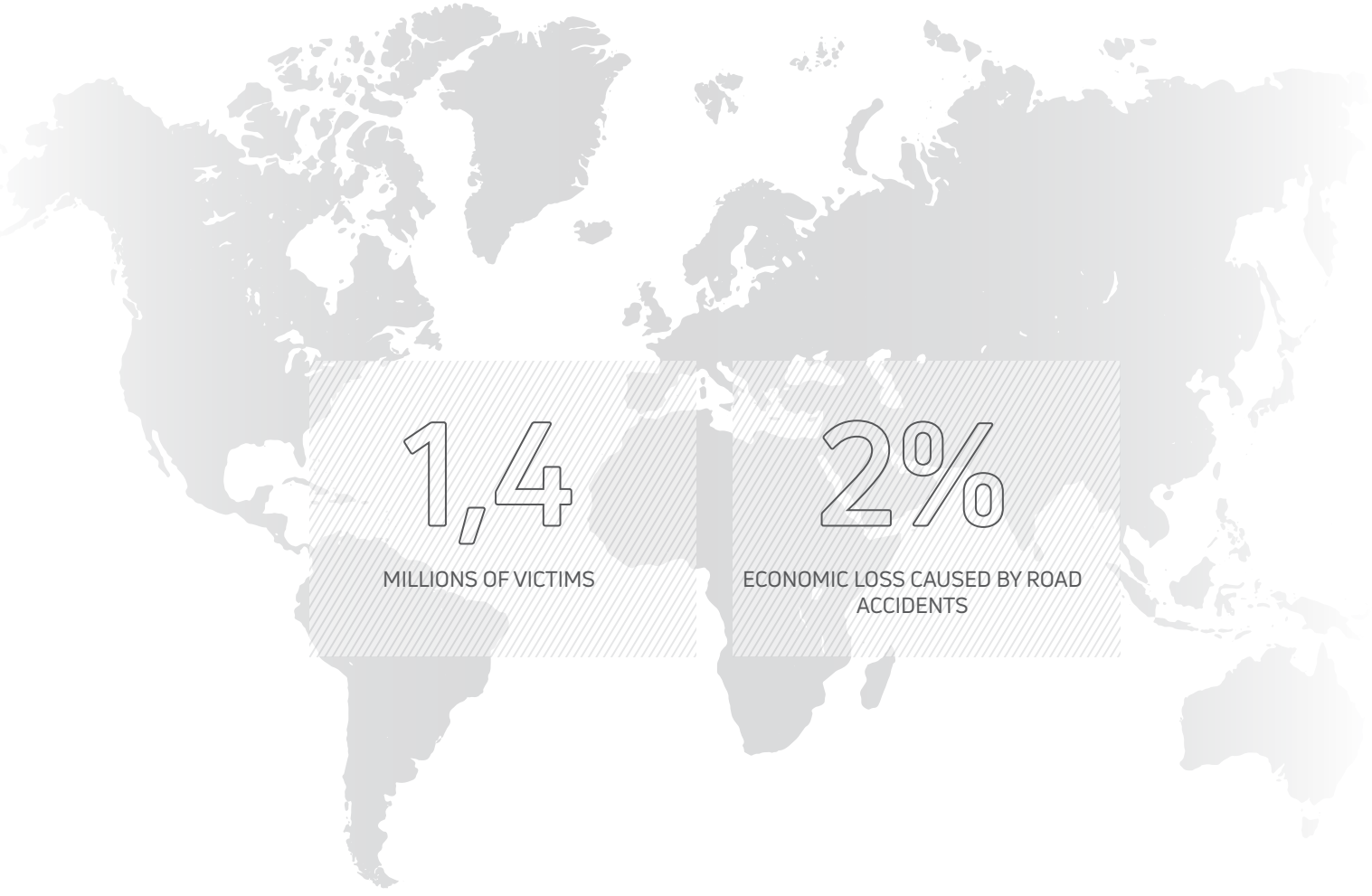
PRODUCTION

OUR SKILLS

- Qualified experience in engineering, design and automated production processes
- Experience in international partnerships
- Problem solving of road and guardrails safety applications
- Know-how in research, development and production of new technologies
- Detailed knowledge of road safety regulations
- Significative commercial, technical and industrial experience

Stratec RT ROAD TECHNOLOGIES





1,4

MILLIONS OF VICTIMS

2%

ECONOMIC LOSS CAUSED BY ROAD ACCIDENTS

Source: Silcock 2016

CRITICALITIES BEYOND THE CRASH TEST

The Infrastructure Safety Regulations provide that road barriers must pass a Crash Test before to be installed.

The most important criticality consists in the constraint at the base of the barrier, which is the connection point with the infrastructure or the ground that determines the correct triggering of the programmed deformation mechanism of the barrier system.

For the installation of guardrails on a concrete curb generally are used standard flanges, bolts and chemical anchors. This installation method does not always guarantee the compliance with the certification conditions and, beyond affecting the performance of the barrier in the event of a vehicle impact, makes maintenance and post-accident restoration very complex and expensive.

The widespread problem in the installation of barriers on embankments is generally the non-correspondence between the mechanical properties of the soil of the Crash Test certification site compared to the terrain present on the roadside. The situation is further aggravated in the case of the presence of narrow embankments, which due to the lack of contrast terrain inhibit the formation of the plastic yield point.

For the installation of pedestrian railings, numerous measurements are currently required to ensure a correct adaptation to the concrete support curbs, preparation of specific customized elements etc. Furthermore, most of the devices on the market are not designed for the loads required by the regulations.

All STRATEC RT solutions are properly dimensioned, universal and compliant with road regulations of the most countries in the world, applicable to all types of barriers to function in any environmental conditions and on any road surface.

REVOLUTIONARY SOLUTIONS

Each STRATEC RT technology is conceived, sized, calculated and designed according to the characteristics necessary for a correct application. Based on the results of the analyzes, a first prototype is created to be tested in the laboratory and multiple functional and material tests are carried out, which must correspond to the highest safety norms and quality standards. Adequate engineering and definition of the production process will guarantee to road management bodies, road designers and installers a perfect functionality, reliability and durability.

The metal support system at the base of the guardrail posts

The solution for embankments

GROUNDSLEEVE

The metal guide to support the base of the guardrail

The solution for concrete curbs

CONCRETESLEEVE

The dynamic parapet that offers a rapid installation

The solution for pedestrian's safety

RAILY "DRS"

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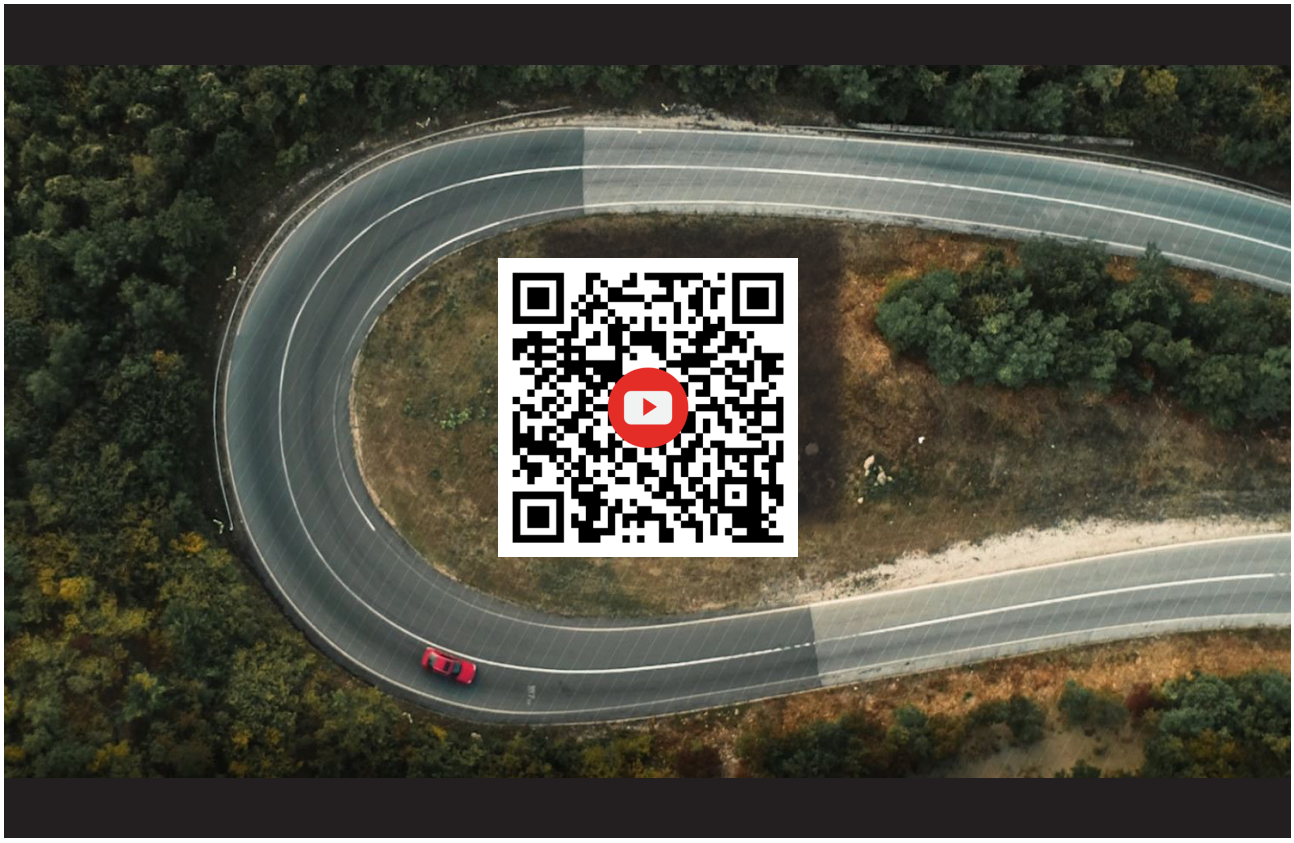
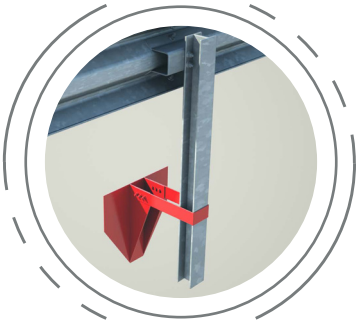
... GroundSleeve movie ...





Detail of the GroundSleeve system

GroundSleeve

THE SOLUTION TO GUARANTEE A HIGHER RESISTANCE OF THE TERRAIN

"GroundSleeve" is a metal finned reinforcement system which is designed to affect a greater area of a terrain subsoil to determine a higher resistance of the guardrail system in the event of vehicle impact.

GroundSleeve complies with the EN 1317-5 standard as it intervents only on the ground and does not modify the geometric and mechanical characteristics of the certified barrier.

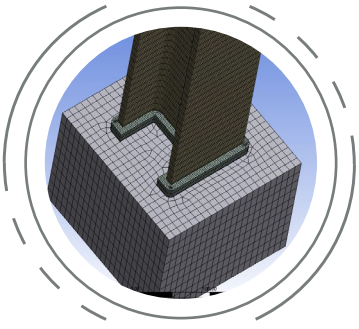
Therefore GroundSleeve DOES NOT REPRESENT A PRODUCT MODIFICATION.

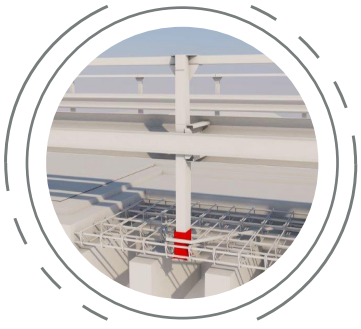
For a correct Design and Installation of safety barriers on road embankments it is important to follow the UNI / TR 11785/2020 guidelines in order to guarantee compliance with the EN 1317 provisions.

ADVANTAGES

- Terrain reinforcement in compliance with EN 1317 regulation
- Quick and easy installation with a standard pile driver
- Adaptability to all post sections on the market
- Customized design and dimensioning based on site characteristics
- It can also be installed on already existing barriers
- No need to dismantle the post and / or guardrail
- Correct formation of the plastic yield point
- Safeguard and legal protection for the managing body of road infrastructure after road accidents

... ConcreteSleeve movie ...





ConcreteSleeve for bridges and viaducts

ConcreteSleeve

THE SOLUTION FOR CONCRETE CURBS ON BRIDGES AND VIADUCTS

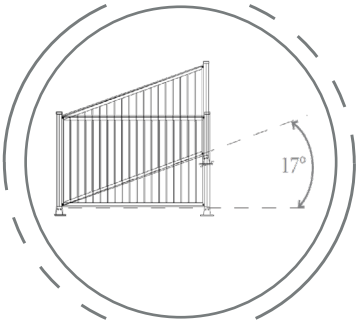
ConcreteSleeve is a patented metal guide designed ad hoc, to be used at the base of the guardrail posts installed on concrete curbs. ConcreteSleeve facilitates and speeds up the installation of the barrier, the replacement of post-accident deformed posts, avoids the restoration of the curb and reduces construction times. ConcreteSleeve guarantees the same safety and durability standards everywhere at an sustainable cost.

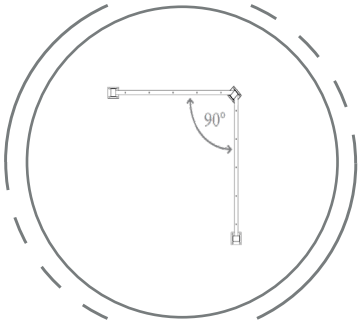
With "ConcreteSleeve" the posts, in the event of a real impact, are deformed in the same way they were deformed during the crash test, always guaranteeing the correct trigger of deformation mechanisms of all the components and therefore compliance with certified safety standards EN-1317.

ADVANTAGES

- Guarantees the formation of the plastic yield point as during a Crash Test
- Safeguard and legal protection for the managing body of the road infrastructure after road accidents
- Corrosion resistant
- Quick replacement of the post
- Easy insertion and quick mounting / fixing of the post
- High resistance and guarantee of sealing even after multiple accidents
- Compliance with the normative in every situation and / or condition
- Direct connection to the reinforcement rods of the curb along the road

... Raily DRS movie ...





Perfect adaptability to curves and slopes

THE DINAMIC PARAPET RAILY „DRS“

THE SOLUTION FOR PEDESTRIAN SAFETY

A new patented dynamic railing system RAILY DRS is a worldwide unique parapet in the pedestrian railing market.

RAILY DRS is supplied in pre-assembled 2m / 2,5m modules, which can be quickly and easily installed directly on the site. It is no necessary any more to make surveys and / or take measures before the installation. Also assembly and installations errors are excluded thanks to the patented joints inside the parapet.

The parapet can be perfectly adapted, with any single module on any curb, to curves and angles up to 90°, slopes up to 17° and a height difference up to 60cm.

RAILY DRS guarantees higher impact resistance than traditional railings.

ADVANTAGES

- Simple, fast and intuitive installation
- Unnecessary preventive inspections
- Perfect adaptability to curves, slopes and angles up to 90°
- Industrial series production with quality guarantee and perfect homogeneity
- Immediate post-accident intervention with quick and easy replacement
- Possible site change with totally different slopes and angles
- Manufactured and controlled according to the UNI EN-1317 standard
- Cost and construction time savings

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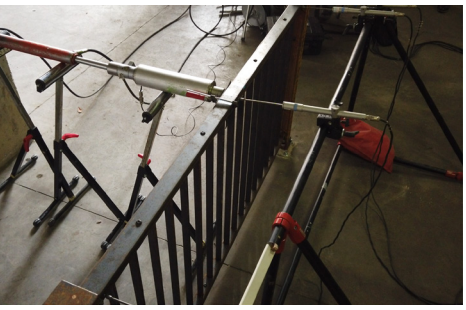

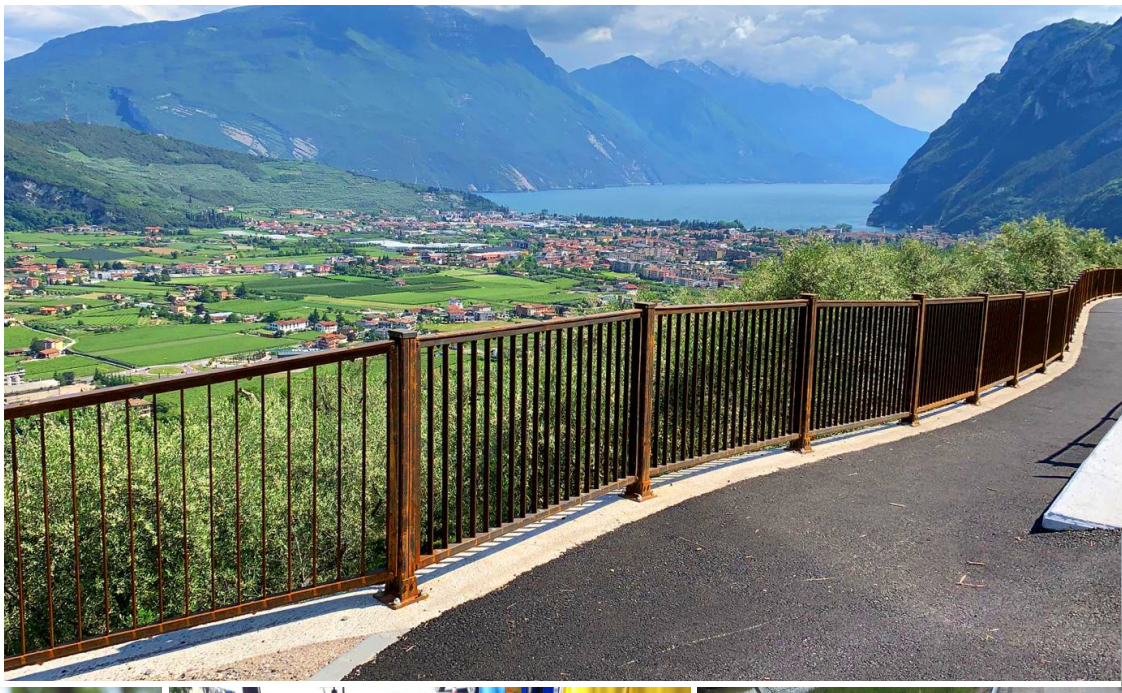

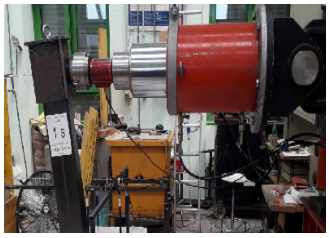

Tests and installations

Stratec RT ROAD TECHNOLOGIES

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