The Integration of the Performance-Driven European Norm EN 1317 for Vehicle Restraint Systems (Safety Barriers) into National Installation Guidelines

A Challenge for the National Road Authorities

Presented by

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Requirements on modern Road Barrier Systems acc. to EN 1317

A Challenge for the National Road Authorities

Seite 1

Road Safety plays an important role within the concept of the EU-Commission aiming to improve the social level of all the people living within the EU-Territories.

Indisputable evidence of this important role is given by the New European Safety Action Program, having as an overall target the reduction of fatalities due to road accidents by 50 % until 2010.

ROAD SAFETY is based on three principal columns:

- VEHICLE
- EDUCATION
- INFRASTRUCTURE

Consequently we have sectors of road safety which are

- Vehicle driven
- Educational driven
- Infrastructure driven

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Starting Point and Target:

A road section, which has to be equipped with Vehicle Restraint Systems (VRS/Safety Barriers), to protect road users and to guide traffic within a specific road section acc. to the requirements of EN 1317 and specific situation of the road section.

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It is a fact that
without such a national regulation the implementation of the EU-1317 normative requirements into reality will create a national problem with negative input to the desired level of Road Safety.

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The decisions on these objectives must be taken by the responsible Road Authorities (Public and Private).

Designers and producers can and have to support the authorities.

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According to my understanding and based on my personal experience from many countries in the World the most important and for sure not very easy task for the Authorities is the integration of the EU-Norm 1317 into National Guidelines for Installation of Vehicle Restraint Systems (VRS).

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OBJECTIVES:

EVALUATION and DECISION about the installation of the suitable vehicle restraint systems to protect us against the „dangers“ on your roads.

Maintenance of the Vehicle Restraint Systems (VRS)

Repair of the VRS

Up-Grade of the VRS

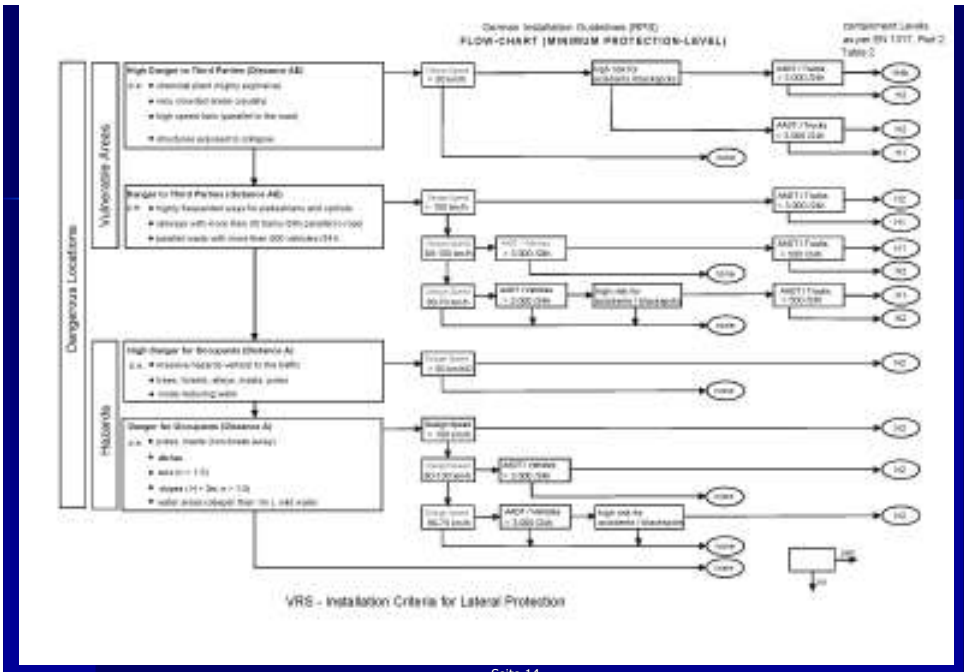
Seite 7

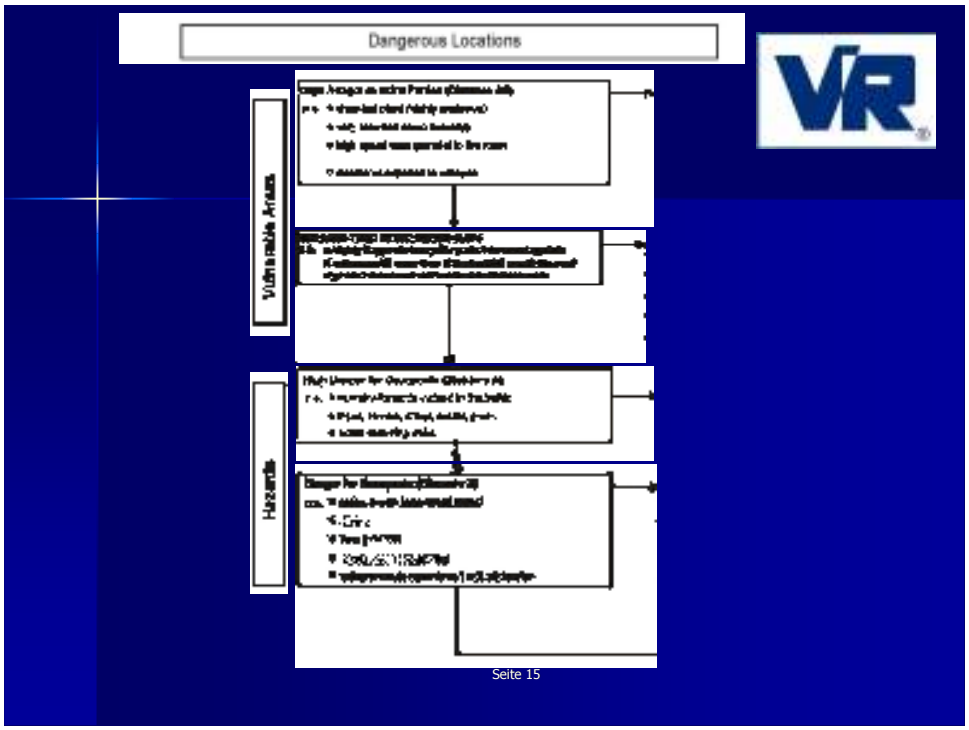
Among those instruments – helping to ease the decision -process – the Flow-Chart developed by the German Committee seems to be quite effective.

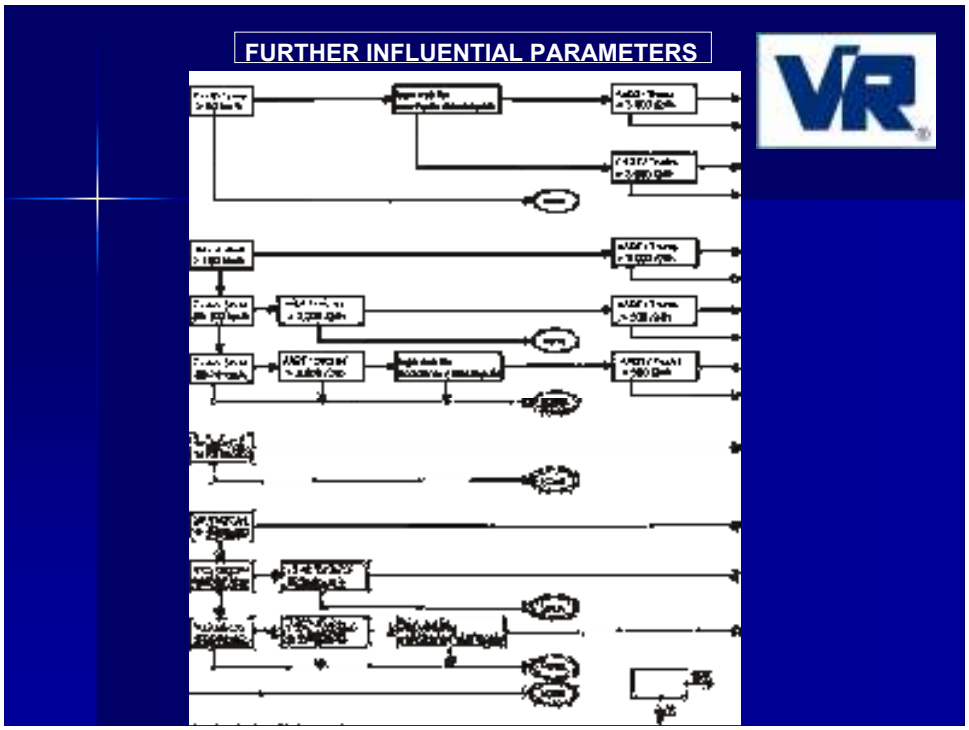
The Flow-Chart, which is demonstrating an evaluation process, starts from HAZARD, taking into consideration

DESIGN – SPEED ,
BLACK SPOTS
DTV = Daily Traffic Volume
VEHICLE – TYPE

ending with the minimum containment level of the Vehicle Restraint Systems to be implemented for protection.

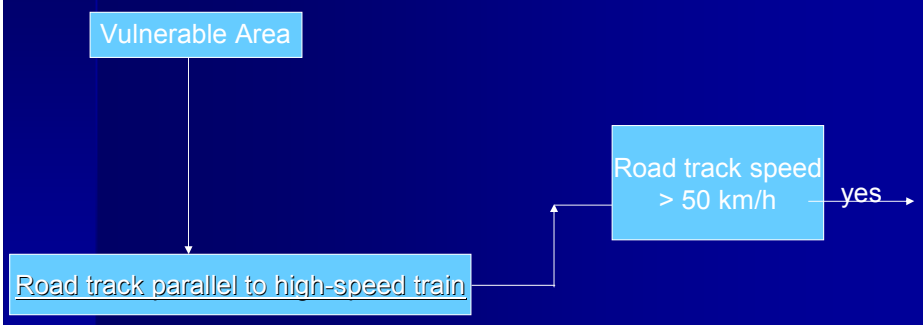


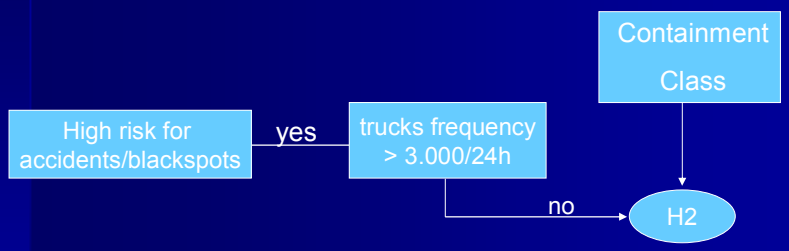

Dangerous Locations
Vulnerable Areas
Hazards
Seite 15


FURTHER INFLUENTIAL PARAMETERS

MINIMUM CONTAINMENT LEVEL

Example of the decision – taking process





Solutions from the Industry:

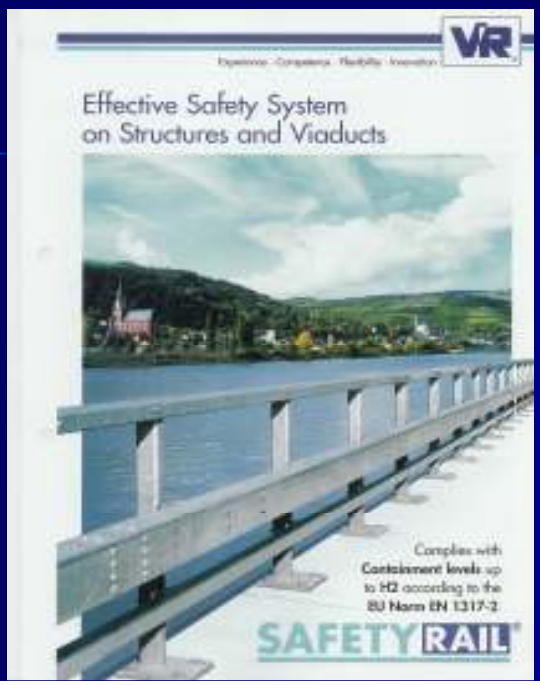
- Highly efficient and modern VRS attending all requirements

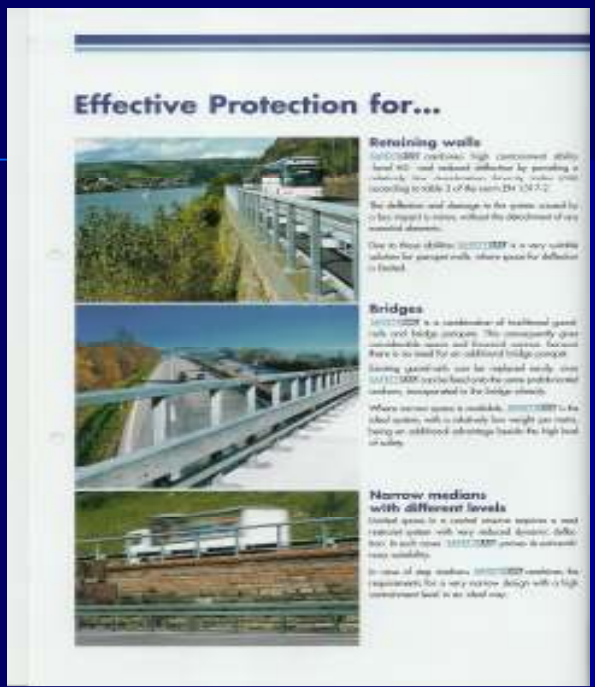
Distance Barriers

Normal barrier systems

Safety Rail

Containment Level H2

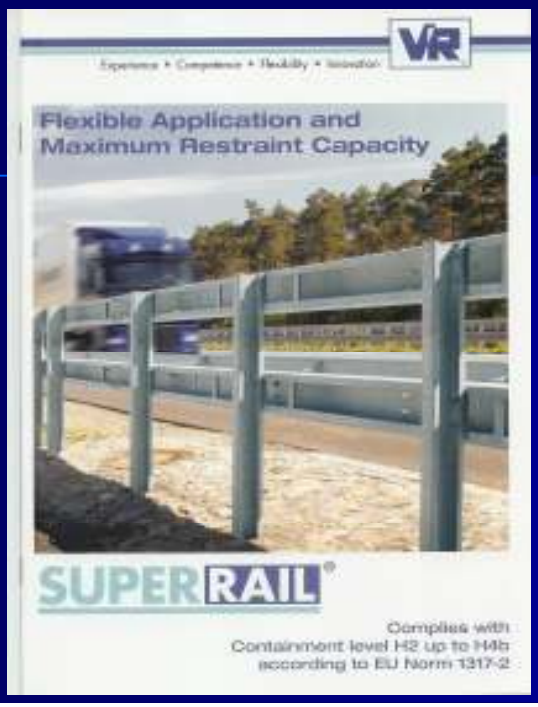

Effective Safety System
on Structures and Viaducts
Complies with
Containment levels up
to H2 according to the
EU Norm EN 1317-2
SAFETYRAIL

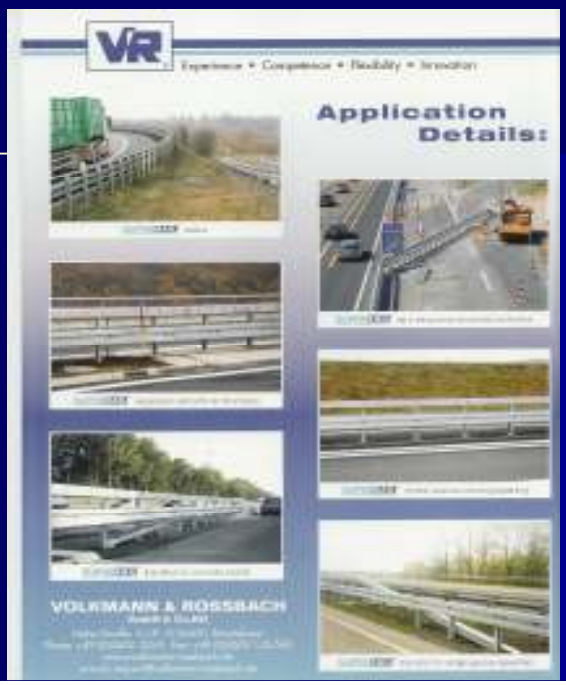

Effective Protection for...
Retaining walls
Bridges
Narrow medians
with different levels

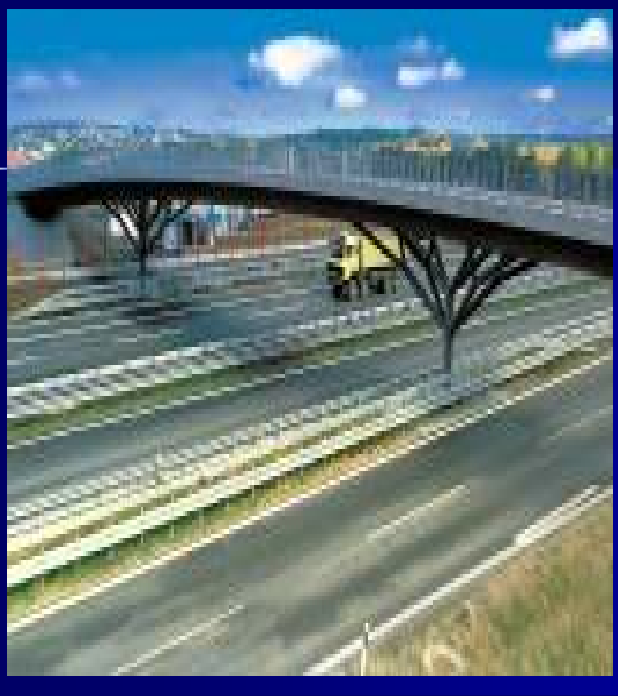
Certified Safety
Impact-Test 1317-2
VOLKMANN & ROSSBACH

Super Rail

H2 – H 4b


Flexible Application and
Maximum Restraint Capacity
SUPERRAIL®
Complies with
Containment level H2 up to H4b
according to EU Norm 1317-2


Application
Details:
VOLKMANN & ROSSBACH



MAXI RAIL

H 4B

Maximum Containment for...

Water-protection-zones

Industrial Plants

Condition · Development · Production · Installation

Certified Safety

TB11 | Impact-Test 1317-2 | TB81

Result: Containment level H4b according to EN 1317-2 fulfilled

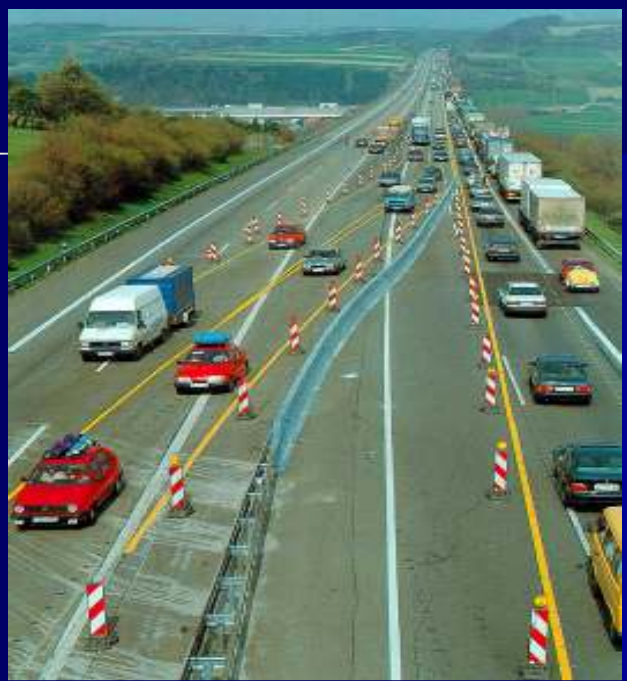
VOLKMANN & ROSSBACH

Vario Guard T 3 – H 2

Mobile systems

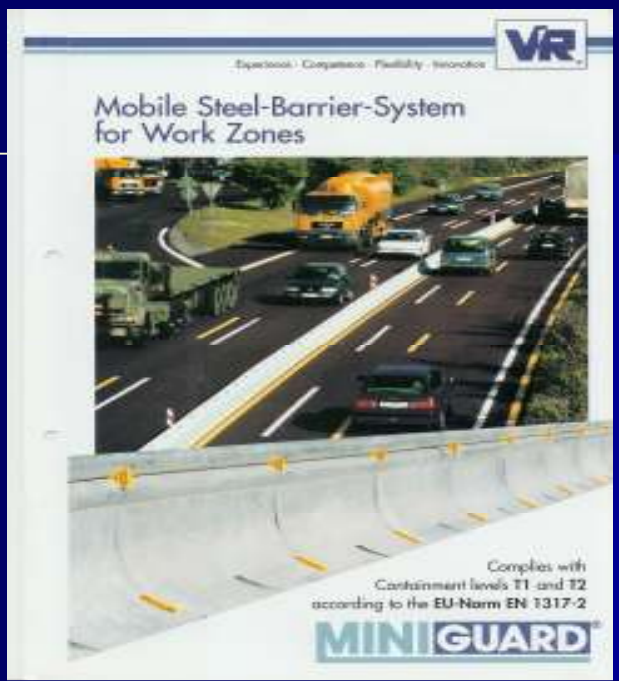
Die mobile Stahlschutzwand
für höchste Anforderungen
Erfüllt die
Anforderungen
bis einschließlich der
Aufhaltestufe H2 der EN 1317-2
VARIOGUARD

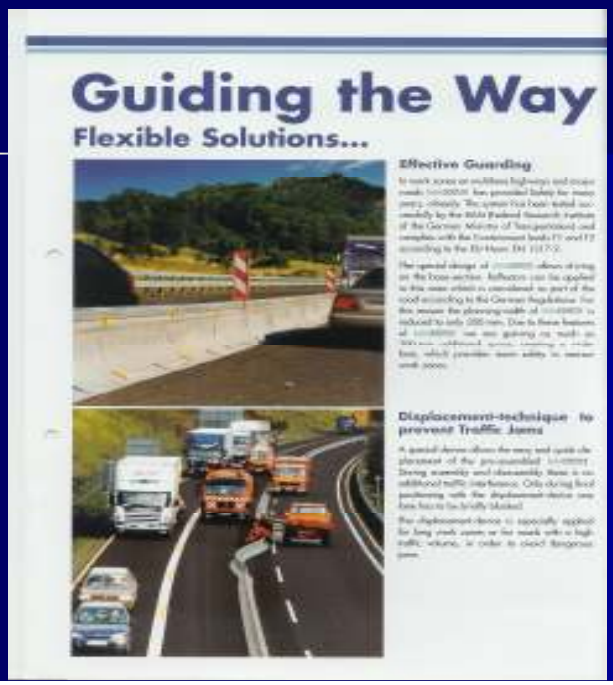
Richtungsweisende
Problemlösungen mit System...
Sicherung von
Verschwenkungsbereichen
Sicherung des Gegenverkehrs
Sicherung von Arbeitsstellen



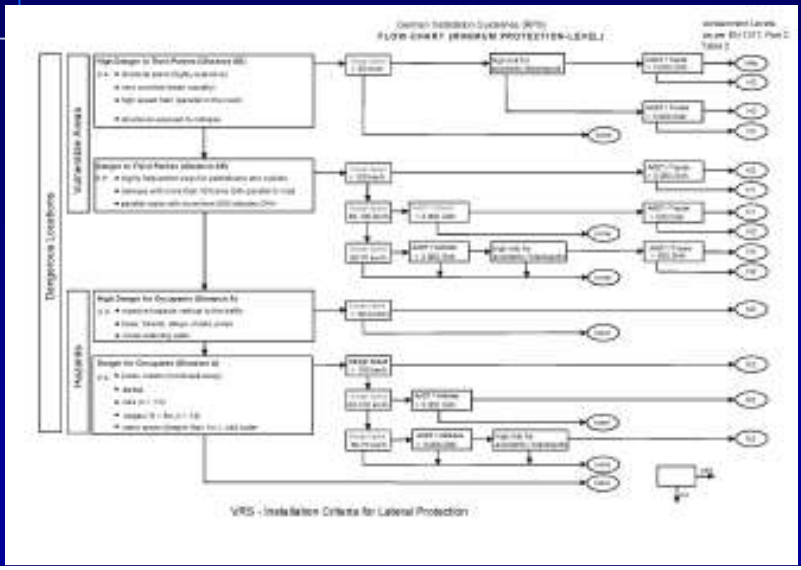
MiniGuard T 1 – T 3

Mobile protection


Experience · Competence · Flexibility · Innovation
Mobile Steel-Barrier-System
for Work Zones
Complies with
Containment levels T1 and T2
according to the EU-Norm EN 1317-2
MINIGUARD


Guiding the Way
Flexible Solutions...
Effective Guarding
Displacement-technique to
prevent Traffic Jams

Experience · Competence · Flexibility · Innovation
We provide Safety

The Integration of the Performance-Driven European Norm EN 1317 for Vehicle Restraint Systems (Safety Barriers) into National Installation Guidelines

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