

VARIO-GUARD®

Containment Levels T3, N2, H1 and H2 according to EN 1317-2





▶ The human being stands in the centre of

traffic and environmental policy and in the

▶ The road network has become an indispensable part of our living standard

focus of all our actions

- ▶ Road safety equipment has an important influence on the consequences of accidents
- ▶ The development of road safety systems helps to continuously reduce the number of road casualties
- Our road restraint systems that have proven their quality in various tests and in many years of practice make an important contribution to this
- EN ISO 9001 certification is the basis for the quality of our production





VARIO-GUARD® Overview

Safeguarding Work Zones

VARIO-GUARD® provides a positive crashworthy barrier between traffic and work force. The barrier is only 400 mm wide, excluding the base, which is designed for traffic to drive over, making it especially suitable where road space is limited.



Safeguarding Traffic

VARIO-GUARD® has a very high containment capability, tested and approved to H2, i.e. vehicles up to 13,000kg impacting at 70 km/h at 20° angle. It is often used at the edge of dangerous road sections or as a median barrier, to provide maximum safety to traffic and to reduce the potential for head-on accidents .



Permanent Safety

VARIO-GUARD® is suitable for use as a median barrier. The 900 mm high barrier has excellent redirecting, as well as containment characteristics, when hit. MEISER Straßenausstattung also offers VARIO-GUARD® crashworthy gates which can be installed with this system for use of emergency vehicles and for contra flow requirements .



Safeguarding Diversions

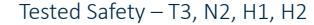
Frequently there are diversions in work / maintenance areas which pose a greater threat to traffic. VARIO-GUARD® is an ideal system for channelling and redirecting traffic in a safe way.



Maintenance, Storage and Transport

Maintenance and repair of VARIO-GUARD® usually pose no problem. Following an impact, the only maintenance normally required, is to realign the barrier.

1.000 m of VARIO-GUARD® can be stored in 100m² and a single flatbed trailer can transport 168 m of VARIO-GUARD®.



In extensive tests the variants of the VARIO-GUARD® system have demonstrated their ability to fulfil the demands of containment level T3, N2, H1, and H2 according to EN 1317-2.

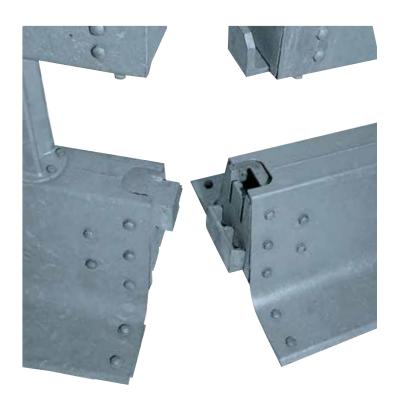
All impacting vehicles, passenger cars, as well as trucks and buses were gently redirected. All the vehicles were slowed down in a controlled manner and without too much tilting.

VARIO-GUARD® Assembly

The system is designed for quick and simple assembly.

Work zones tend to be dynamic and there is frequently a need to move barriers. This is easy with VARIO-GUARD®. The preassembled 12 m elements are linked via rapid connections and each is locked by a single bolt. They can be moved and reconnected quickly.

It is possible to reconfigure as much as 1.000 m/day.



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VARIO-GUARD® System overview

Containment level	Working width	ASI	Dynamic deflection	Test length	Terminal anchorage
Vario-Guard bolted					
T3	W4	В	0,40 m	68 m	yes
N2	W6	В	1,10 m	68 m	yes
H1	W6	В	1,39 m	164 m	yes
H2	W8	В	1,93 m	68 m	yes
Vario-Guard with rapid connection					
N2	W6	В	1,34 m	64 m	yes
H2	W8	В	2,42 m	64 m	yes
Vario-Guard MÜF					
H2	W5	В	1,20 m	36 m	yes

VARIO-GUARD® Construction

VARIO-GUARD® consists of 4 meter long elements. The main body has a trapezoidal cross section.

Water drainage is enabled by channels in the base. The top section of the 900 mm high barrier is a standard box beam. The weight of one 4 meter element is approximately 100 kg/m.

We offer special parts for bridge expansion joints and solutions for other installation problems. A wide variety of transitional parts for connection to other types of barrier can also be supplied.

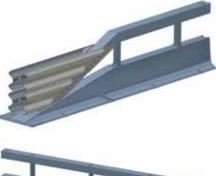
standard elements



sloped end sections



transitions to standard guardrails



transitions to concrete barriers



Transition VARIO-GUARD® to MINI-GUARD®

VARIO-GUARD® can be transitioned onto other barriers such as MINI-GUARD.®



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Passion for Road Safety