

# ProTec 161 – the slim H1/W3 mobile crash barrier.



## Improvement of a tested solution: Higher containment level and a smaller effective range.

**ProTec 161 is a slim road restraint system that can be erected without supports – successfully tested according to DIN EN 1317 with an effective range of W3 for containment levels N2, H1 and L1.**

By modifying ProTec 160 with patented connecting elements and a novel central stand, ProTec 161 was created: a slim crash barrier system that can be erected without supports, suitable for temporary use on construction sites. ProTec 161 passed the test in accordance with DIN EN 1317 and boasts a very small effective range W3 on containment levels N2, H1 and L1, i. e. more powerful restraint.

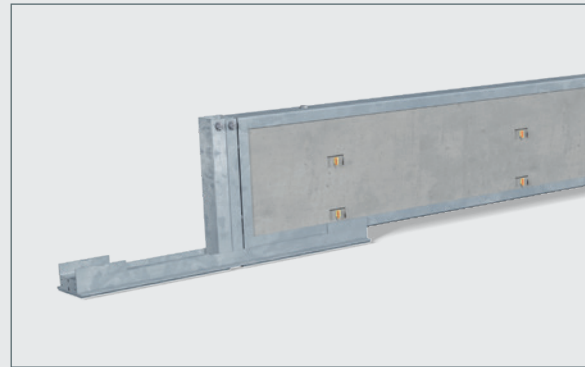
Containment level L1 with effective range W3 is a solid supplement of the portfolio particularly for the European market. In order to obtain the improved ProTec 161, the standard elements of the tried-and-true ProTec 160 were connected with newly developed central stands that are force-fit and screwed to the 10-metre elements with two additional central bases. This minimizes the pressure the crash barrier puts on the contact surfaces, sustainably protecting road surfaces.

The elements of ProTec 160 have been approved for the list of mobile crash barrier in accordance with TL-TS of the German Federal Highway Research Institute (BAST) since 2010.

## ProTec 161: The slimmest H1/W3 road restraint system.

### Technical data

Containment level	N2 / H1 / L1
Effective range	W3 / W3 / W3
ASI value	B / B / B
Structural width	0.25 m
Height	0.80 m
Element length	10 m
Minimum installation length	126 m
Ground anchoring	yes (only at the start)
Weight per m	315 kg



Standard element 10 Meter

### Test conditions as per DIN EN 1317-2

Acceptance test	TB 11 / TB 32	TB 11 / TB 42
Test vehicle	PKW / PKW	PKW / LKW
Weight	0,9t / 1,5t	0,9t / 10t
Impact angle	20° / 20°	20° / 15°
Speed	100 km/h / 110 km/h	100 km/h / 70 km/h

### An overview of the advantages of ProTec 161:

- Successful test according to DIN EN 1317 on containment levels N2, H1 and L1
- Narrow width of 25cm – only little space required
- Reflectors mounted in a way that shields them from impacts
- Very permeable
- No risk of aquaplaning or compilation of dirt
- The rubber-padded stands protect the road surface
- Quick and easy mounting
- Transition elements available for all ProTec systems
- Light-weight, therefore a large transportation volume possible

The ProTec family consists of several successfully tested mobile crash barriers – for all application areas of mobile road restraint systems pursuant to the ZTV-SA. Despite differing shapes and structures, all mobile crash barriers in the ProTec family can be combined with each other and fitted together with force-fit connections. Mobile crash barriers in the ProTec family can also be combined with stationary restraint systems or mobile systems by other manufacturers with a force-fit connection.