

Certificate

of passed Barrier Testing Programme

IWA 14-1:2013, N3E, 48 km/h, 19th July 2017, CTS-Test No: 18763

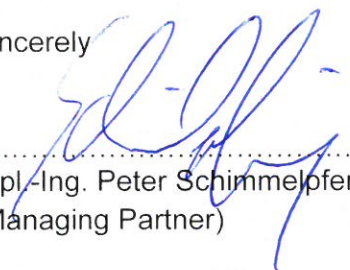
Type of product:	Bollard, „Z-HSP 500“
Vehicle penetration:	0.64 m
Mass [Target]:	24000 kg (± 400 kg)
Mass [Test]:	23957 kg
Impact speed [Target]:	48.0 km/h (47.0 km/h – 51.0 km/h)
Impact speed [Test]:	47.9 km/h
Angle:	90 °
Major debris:	No
Kinetic energy:	2121 kJ

Observations

Vehicle restrained:	yes
Vehicle immobilized:	yes
Performance Rating IWA 14-1:2013	Moveable Bollard V/24000[N3E]/48/90:0.6



Sincerely


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Dipl.-Ing. Peter Schimmelpfennig
(Managing Partner)