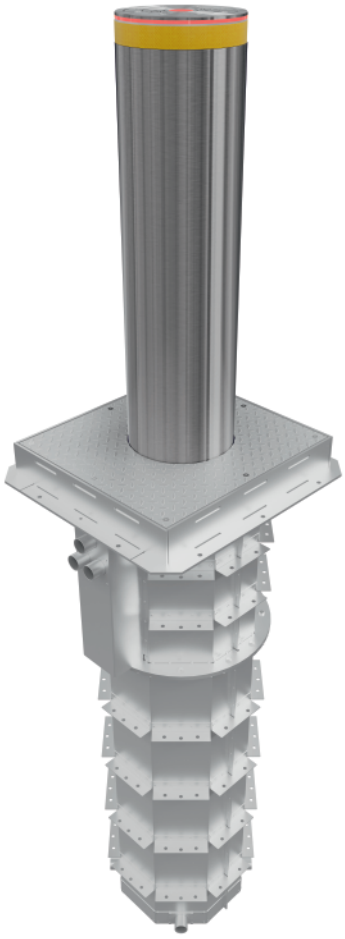
HIGH SECURITY AUTOMATIC BOLLARD

M50 (K12) ANTI-RAM CLASS

ASTM F2656-07, M50, P1 (-0.6m)



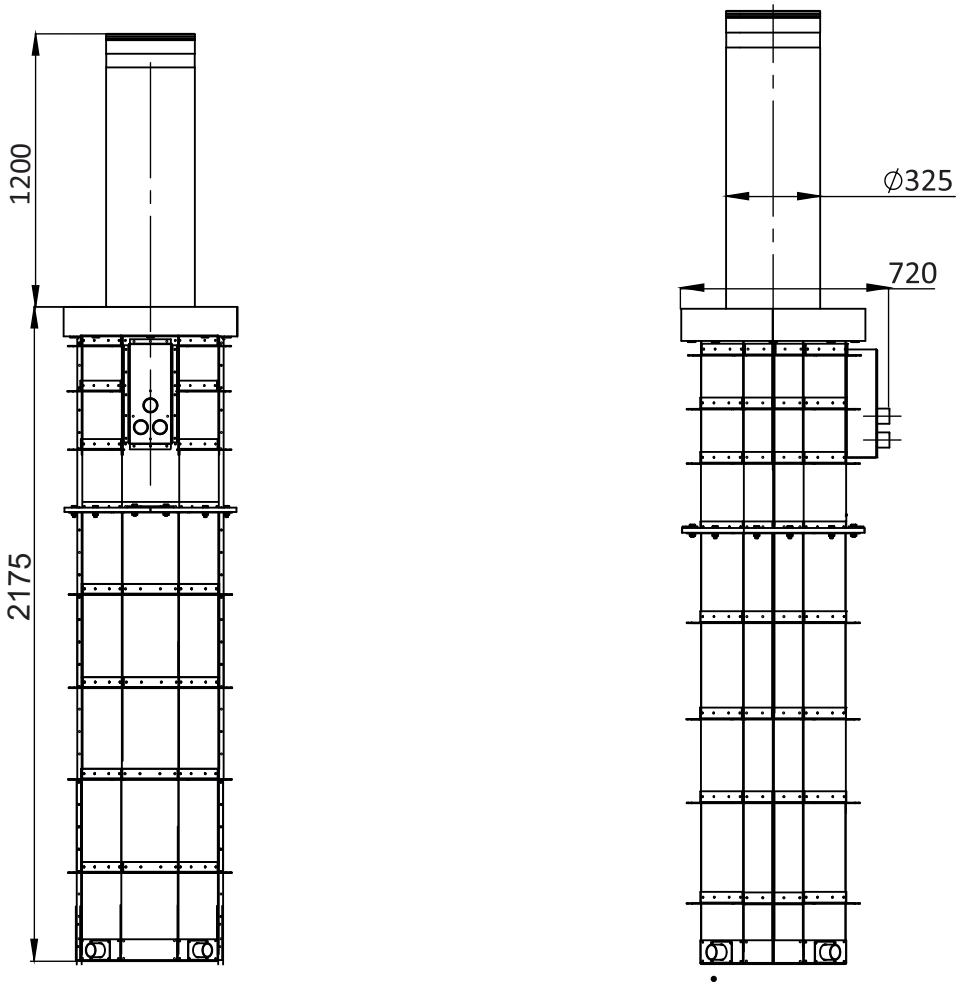
RELIABLE, PRACTICAL AND COST-EFFECTIVE SOLUTION TO PROVIDE 100% SECURITY OF YOUR TERRITORY

TiSO automatic high security bollards intend to prevent vehicles unauthorized access to secured areas and keep the highest level of antiterrorism protection. Mostly this type of equipment demanded for installation sites with high risk of heavy vehicle attack: public places (stadiums, fairgrounds), governmental institutions, or military infrastructures etc. TiSO automatic high security bollards have been certified according to ASTM F2656 standard, including M30 P1 (-1,2m) and M50 (-0,6m). Literally regular set consists of blocking segment with installation case, outside control box with HPU and PLC in it, connection cable and hydraulic/oil hoses, and push button control unit. Wide range of accessories enables trouble less operation under severe environment conditions. Herewith this type of equipment can be easily integrated and interconnected with ACS and other vehicle access control equipment (arm barriers etc.).

Installation areas

- Governmental Institutions
- Military Bases
- Nuclear Power Plants
- Production sites (Industrial Plants)
- Commercial areas
- Financial institutions
- Airport Premises
- Business (Office) Center
- Hotels
- Sport Complexes
- Recreation areas
- Urban areas
- Education Institutions

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global



TECHNICAL SPECS:

Model	RB342
Drive	Hydraulic (external)
Tube diameter, mm	325
Tube height, mm	1200
Wall thickness, mm	20
Impact resistance, kJ	1845,0
Load per axle, t	15
Rising speed, cm/sec	~31
Lowering speed, cm/sec	~35
Emergency fast operation (EFO), sec	1,5
Operating temperatures*, ° C	-40 /+60
Power supply	3 phase 400 V, 50/60 Hz
Protection level	IP 67 for Bollard IP 54 for control box
Tube materials	Epoxy polyurethane coating Stainless steel sleeve / casing up on request

* for temperatures lower than -10° C use the heating device
for temperatures higher than +40° C use the cooler device

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e-mail: sales@tiso.global

CTS
crashtest-service.com

Contracting Client:
Tiso Blockers, LLC
72, Yamska str.
03150 Kyiv
Ukraine

Certificate

of passed Barrier Testing Programm

ASTM F 2656-07, M50, 1st October 2015, CTS-Test No: 18236	
Type of product:	„Bollard AUIA – 342"
Vehicle penetration:	-0.6 m (dynamic)
Mass [Target]:	6800 kg (±140 kg)
Mass [Test]:	6862 kg
Impact speed [Target]:	80.0 km/h (75.1 km/h – above)
Impact speed [Test]:	83.5 km/h
Angle:	90 °
Major debris:	n/a (≥ 25 kg)
Observations	
Vehicle restrained:	yes
Vehicle immobilized:	yes
Bollard still functions after impact:	yes
Penetration Rating:	**P1 (-0.6m)**





Sincerely,

Dipl.-Ing. Peter Schimmelpfennig
(Managing Partner)

Amelunxenstraße 30, 48167 Münster, Germany

www.crashtest-service.com





