

PNEUMATIC RISING BOLLARD TECHNICAL SPECIFICATIONS

- 1. The revelation of this rising bollard will be used to control unauthorized vehicle entrances in places where required security applications.**
- 2. The rising section of the bollards should have 210 millimeters diameter with cylinder shape and the wall thickness of the cylinders should be minimum 14 millimeters.**
- 3. The top lids of the barriers should be made of aluminum.**
- 4. The height of the bollards should be 700 millimeters and the height of the rising section should be 500 millimeters. The combined rising bollards should operate synchronized.**
- 5. Rising bollards active surfaces should be covered with 1.5mm stainless steel and the section under the ground should be hot dipped galvanized.**
- 6. There should be integrated LED lights at the top section of the rising bollards to warn the drivers.**
- 7. There should be 30 cm square drainage holes under the bollards.**
- 8. Each bollard should have a capacity of 7,5 tons. The bollards should have microprocessors and should be capable of integrating with digital and analog components.**
- 9. The rising bollard system should be integrated with access systems like remote controllers, button access, and coins, digital and analog pulses.**
- 10. The pneumatic motor of the system should have 380 V. Ac 50 Hz power supply. There should be features of motor protection process on microprocessor.**
- 11. The control panel should have flasher lamp, loop detector, remote controller and frontrear outputs.**
- 12. There should be made fuses for motor and solenoid valves. Also there should be made thermal protection for motor and solenoid valves.**
- 13. There should be a pneumatic lock system to prevent lowering the bollards. All pneumatic components, valves, pumps and solenoid valves should be made with European brands, ISO norms and standards.**

- 14. Double, triple, four ways, fivefold and sextet bollards should work synchronized from a central separator.**
- 15. The pneumatic pipes should have ISO standards. There should not be used metal or copper pipes.**
- 16. The operation speed of the bollards should be between 4-8 seconds. Automatic closing time should be adjustable between 1-50 seconds. Front and rear photocells should work separated if required.**
- 17. In case of power outage, the system should be closed with a valve manually and if required, there should be an optional manual pneumatic pump to open and close the system.**
- 18. The system should have an air pressure indicator.**
- 19. The rising bollards should be consisting of three adjustable parts.**
- 20. The solar road buttons on the top lid of the barriers should be strong against to wheel strokes. The screws, solar buttons and edges should be maximum 2-3 millimeters high from the surface to not damage the vehicles and wheels. The solar lights should be visible by drivers.**
- 21. The pneumatic and electric components should be in an electro-static coated cabin. The system should work with 220/380 V.Ac /50 Hz (+/- %20) feeder voltage. The system should work between -25/+70 degrees. Rising bollard system should have TSE and ISO norms and certificates. The manufacturer should have ministry of industry confirmed warranty certificate, should supply spare parts for 10 years and should afford warranty for 2 years.**
- 22. The ventilation windows of the system unit cabins should have 12 V ventilators to cool the unit cabin. Also the hydraulic oil type should be chosen according to the climate of the country where the system would be installed.**
- 23. The rising bollards should be capable to operate in required certain times of the day and night. After the installation of the system, there should be technical optional features to control and operate the system with far-access orders.**
- 24. The rising bollards should operate integrated with a loop detector which prevents possible accidents when there is a vehicle on the bollards.**
- 25. Contractor should present this document to the administrator.**