



EMJAY

CONTROL SYSTEMS PVT. LTD.

An Invention of
Bollards to stop
Armoured Vehicles
With Tracks (Chain Drive)

Indian & International
Patent Pending

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Bollards in
Down
Position



Bollards in
Default
Position



Bollards with manual override

Mechanical:

- ❑ This is purely mechanical with direct motor drive and is eco friendly.
- ❑ The power consumption is minimal (for 2 wheelers 2HP & for 4 wheelers 3HP)

Manual Override:

- ❑ In case of an eventuality, the power station will be sabotaged first to stop all the operations.
- ❑ This bollards can be operated up & down any number of times manually by rotating a ratchet. This is the first time in the world the bollard can operate fully manually in case of power failure.

Protection:

- ❑ It is designed for 4 layer protection.
- ❑ Popup Bollard made of special seamless tube of 150mm diameter & 12mm thickness onwards (as per the requirement) with a height of 2300 mm with inter connected stiffeners at bottom. Only 40% of pop up bollards, 915mm is coming up from the road level. Balance 60% is at down to withstand impact.
- ❑ Inner Casing made of ISMB 150 designed to withstand high Impact.
- ❑ Outer Casing & Main Frame made of ISMB & Special Steel Structures.
- ❑ Civil Structure in which the system accommodated.

Impact Withstanding Capacity

- ❑ 2 Wheeler Bollards with 2 numbers pop bollards can with stand an impact load of 5000 kg vehicle travelling at speed of 80 KM.
- ❑ Car Bollards with 5 numbers pop up bollards can withstand an impact load of 20000 Kg vehicle travelling at speed of 80 KM or it can be custom made.
- ❑ Heavy Duty Bollards with 6 numbers or more pop up bollards depending on the width of the road & load capacity, it can be designed to with stand an impact load of 150000 Kg vehicle travelling at speed 100 KM or it can be custom made.
- ❑ It can even stop an ARMoured Military Vehicle with tracks or BULLDOZER.

Control

- ❑ Bollards are fitted with an Electrical Control Panel with PROGRAMMABLE LOGIC CONTROL which can be programmed as per the requirement.
- ❑ Triggering can be with any type of modern electronic signalling system like RFID, BIOMETRIC, Card Reading, Barcode Reading etc.

Safety

- ❑ Bollards system is fitted with latest signalling systems to protect from any type of malfunctioning thus making the system fool proof.
- ❑ This is an out door unit & can withstand all weather conditions.
- ❑ It is washable & fitted with automatic soiled water suction pump.

Vehicle Arrestor
in Down
Position



Vehicle Arrestor
in Up Position



We Manufacture
Heavy Duty Vehicle Arresters also