



VEHICULAR ACCESS SYSTEM

AVIANS INNOVATIONS TECHNOLOGY PVT. LTD.

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About Us

Avians is headquartered in one of the most renowned Pune's industrial and Automotive hub and has its own infrastructure and manufacturing capabilities in area of more than 2,80,000 sq ft. with state of the art technologically advanced plant and in-house warehouse facility with a team of experts.

Avians is an **ISO:9001**, **ISO:14001** and **ISO:45001** company with its complete range from to its latest range of Physical Access Solutions, which are truly tested for Indian conditions and have been certified with CE for the complete array of products in Physical Access Systems (PAS).

Avians offers wide range of products from Turnstile, Flap Barrier, Swing Barrier, Boom Barrier, Bollards, Road Blocker, Tyre Killer, Underground Vehicle Scanning System, Crash Rated Gates, Gate-Door-Rolling Shutter Motors to Access Control Solution, These products are designed to create a difference to your secure premises and assures peace of mind to users.

The company's strong technical backbone in innovative R&D and manufacturing facilities ensures that each product delivers on our promise of quality, precision and innovation. The company's extensive Pan India sales and service network presence makes sure support is always at hand.



Customer Care



CE Certified Range



Technical Expertise



40+ Legacy



Innovation Driven Company



Top Class Infrastructure & Manufacturing Capabilities



Automatic bollards are normally installed in vehicle entrance or exit areas and control point. Commands are sent by remote control or other control system to make bollard automatically back to ground level to realize barrier free passing.

It consists of oil pump unit and steel frame construction. It uses oil pressure as a dynamic for rising & lowering. It rises to block the vehicle and falls the ground level to authorize free passing.

Features

- Hydraulic movement
- Built in hydraulic pump in the bollard
- Available in SS and MS with dia range 220 mm to 355 mm & height 600 to 1200 mm as per requirement.

Avians crash rated bollards have been designed to ensure the anti-terrorism defense at highest level. Its combination of open aesthetic appearance with the highest level of perimeter control ensures secure protection. Crash rated bollards provide free movement of pedestrians and are available in variety of operating configurations. Utilizing the highest cycle duties available, the crash rated security bollard are an economical & effective way of protecting any high secured entry.

Features

- Designed to ensure the antiterrorism defense at highest levels.
- This anti-terrorism bollards are built to ASTM/PAS68 specifications.
- Provision to integrate with BMS system.

APPLICATIONS









Air

Airports

Hotels

Government Offices

Defence Area

Highly Secured Premises

Parameter	Descriptions		
	Automatic Bollards	Crash Rated Automatic Bollards	
Cylinder	Mild Steel With SS 304 Covering/Mild Steel	Mild Steel With SS 304 Covering/Mild Steel	
Cylinder Diameter	Up to 275 mm	Up to 355 mm	
Cylinder Height	Up to 1200 mm	Up to 1200 mm	
Cylinder Finish (mild Steel)	Powder Coated	Powder Coated	
Cylinder Finish (Stainless Steel)	Natural finish	Natural finish	
Reflective Strip	Up to 90 mm	Up to 90 mm	
Rising time	8-9 sec	8-9 sec	
Lowering time	6-8 sec	6-8 sec	
Emergency lowering	Yes (Optional)	Yes (Optional)	
Connection cable to control unit	Up to 10 Mtr	Up to 10 Mtr	
Hydraulic Pump	Common/Individual	Common/Individual	
Protection Level	IP67	IP67	
Life Average	5,000,000 cycles-2000/Day	5,000,000 cycles-2000/Day	
Vehicle Impact Energy	NA	1850 kj	
Operating Temperature	-10 °C to +70 °C	-10 °C to +70 °C	
Crash Rated	Non-Rated	K4 / K8 / K12	





USP

- Programmable Control Panel.
- Option for Individual (Standalone)/Common (Set) operation
- Dimensional customization.



Avians fixed bollard are designed for constant protection or separation of an area to restrict access for vehicle. Avians manufactures and supply huge range of fixed bollards with much kind of colors as per demands.

Security fixed bollards are available with different size, materials and thickness. It can be worked with automatic and semi-automatic bollard and could also be applied to high security anti-terror requirements.

Features

- Available in mild steel and SS304
- Installation simplicity
- Absence of necessity in service maintenance
- Dia range 89, 114, 220, 275 mm
- Bollard height 900 mm

Manual operated bollards are ideal solution for light security areas. Manual bollards are the obvious choice for ease of use & economical, maintenance-free operation. This bollard lifts easily and locks into place.

One key conveniently locks and unlocks and secures the stainless steel cover plate into place when bollards is in retracted position for pedestrian safety. Manual bollard available in

Features

- Easy installation
- Operational simplicity
- Very low maintenance
- Dimensional customization

APPLICATIONS



Parks/Gardens



Mall/Cinema



Residential/ Office Parking



Commercial Building



Busy Streets

Folding Bollard

- O It is mechanical product designed to stop unauthorized parking from reserved parking areas.
- O It can be unlocked by key & lowered flat to the ground.
- It is quick and easy to install.
- O Neat and stylish structure made up of mild steel & SS also.
- O Dia-63 and height-600 mm.







Removable Bollard

- Manual removable bollards offers aesthetics, available in MS & SS304.
- To enhance the security bollard can be locked permanently on the floor.
- O In case of emergency, the bollard can be unlocked with a key and taken away easily, simply unlock & lift bollard up.
- O Dia-114 mm, Height 900 mm.

Retractable Bollard

- This bollard retracts with a lock, it is lifted easily and can be locked into place firmly.
- The locked stainless steel lid covers the bollard to prevent pedestrian from hurt.
- O It can be pulled up during emergency to block off road access.
- After pulled up, it can also be locked with a key system to prevent unauthorised/illegalentry.
- O MS&SS304, Dia-114 mm.
- O Bollard Height 900 mm.





Crash Rated Fixed Bollard

- O Designed to ensure the anti-terrorism defence at highest levels and ideal for securing entrances.
- This anti-terrorism bollards are built to ASTM/PAS68 specifications.
- O Permanent Closer of area that is to be highly secured.
- O Highly durable and absence of maintenance cost.



The road blocker is a perfect type of barrier that is used for high security purposes. With this type of road block, no vehicle can be able to access the blocked route. Its heavy duty angled fully raised blocker to ensure that un-authorized vehicles get damaged/stuck if bangs into the blocking structure.

Road Blockers are heavy duty and anti-terrorist barriers that are installed at high-sensitive areas with strict restrictions for access. They can be lowered to clear the ground surface for vehicle movement and raised at an inclination to act as a barrier.

Types of Road Blocker

- Hydraulic Drive Road Blocker.
- Electro-Mechanical Drive Road Blocker.

Features

- Up to 50 tons load handling capacity.
- Hydraulic/Electro-Mechanical drive.
- 45°-60° angled Fully risen blocker ensure that un-authorized vehicles get damaged/stuck if bangs into the blocking structure.
- Operating voltage : Electro-mechanical Drive: 415Vac/50Hz, 3 Phase.
- Operating voltage: Hydraulic Drive 415Vac/50Hz, 3 Phase.
- Micro-processor based programmed control panel.
- Manual hand Crank for Emergency Lowering operation.

APPLICATIONS



Airports



Government Offices



Defence Area

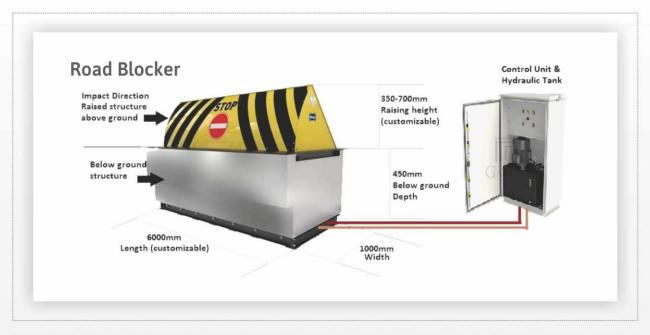


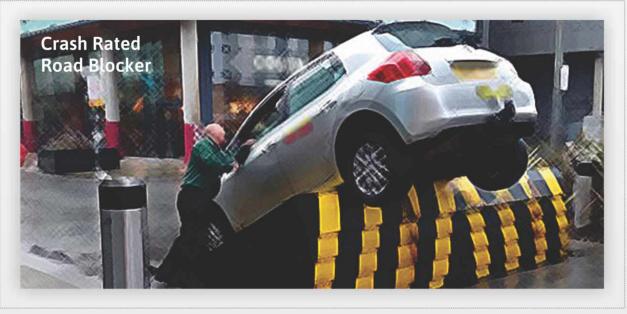


Highly Secured Laboratories

Warehouse

Parameter	Technical Specification			
Operation	Electro-Mechanical	Hydraulic		
Dynamic	Motor	Hydraulic Fluid		
Material	Mild	steel painted		
Power supply	41	5 VAC/50Hz		
Length	Up	Up to 6000 mm		
Width	Up to 1000 mm	Up to 900 mm		
Foundation depth	Up to 750 mm	Up to 900 mm		
Rise height	37	70-500 mm		
Cover thickness		10 mm		
Control Board	P	LC Based		
Control mode	Pu	ulse mode		
Operating time	Up to 9 sec. ris	e Up to 8 sec. lower		
Operating temp.	-10	°c to +70 °c		
Protection level		IP 68		







High Security Vehicle Access Control System, To be installed directly on Roadway with very small excavation. It has Strong & sturdy construction of Heavy Duty Mild Steel Material. Popular solution for high security applications because of its Installation & Operational simplicity. Heavy duty Blades ensure that tyres of un-authorized vehicles get busted/punctured if travels through the tyre killer. It is very reliable for Large number of operations. Easy to integrate with all types Access Control Devices for authorization of Entry. Consists Simple control panel with operating switches.

Types of Tyre Killer

- Flat Type Tyre killer
- Hump Type Tyre Killer

Features

- Up to 50 tons load handling capacity.
- Electro-mechanical drive.
- 45° to 60° Raised Blades.
- Operating voltage 230Vac/50Hz, 1 Phase.
- Micro-processor based programmed control panel.
- Manual crank for emergency lowering operation.

APPLICATIONS



Banks



Government Offices



Defence Area

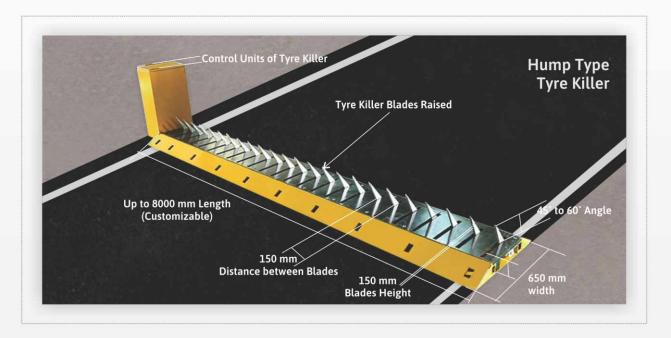




Laboratories

Highly Secured Highly Secured Museum

arameter	Technical Specification			
	Flat Type	Hump Type		
Operation	Electro-Mechanical	Electro-Mechanical		
Material (Cover and Spikes/Blades)	Mild	Mild steel painted		
Power supply	230	230 VAC/50Hz		
Length	Up	Up to 8000 mm		
Width	Up	Up to 650 mm		
Foundation depth	Up	Up to 450 mm		
Blade thickness	1	10-20 mm		
Cover thickness		16 mm		
Blocking angle	4	45° to 60°		
Control mode	Pt	Pulse mode		
Operating time	Up to 5 sec. rise			
	Up to	Up to 5 sec. lower		
Operating temp.	-5°c to +70°c			
Protection Level	IP 65			
Power consumption	Upto 370 W			



USP

- Customizable blocking width.
- Installation & operational Simplicity.
- Strong build quality.
- Visually sturdy & attractive.
- Low maintenance.





Toll Plaza Boom Barrier

Avians Toll Plaza Boom Barriers have short opening and closing time. It is also considered to avoid boom bouncing in the end positions. Hence, makes the opening-closing operation smoother. In the event of a power failure, it can still be moved easily by hand (optional). A built in spring mechanism provides a precise counterbalance for the barrier boom. Model has got specially designed safety Boom holder as we consider heavy use at toll plaza application. It provides maximizes boom life. Product is designed keeping in mind with the Indian context: Weather conditions. rough use, power fluctuations. Thanks to heavy duty & rigid constructions.

Crash Rated Boom Barrier

Avians Crash Rated Boom Barrier has been crash tested by wherein barrier stopped a 7.2 ton truck @ 48 km/h. It is designed to completely close an entrance line to a facility and bring vehicles to a rapid halt; our barriers are of choice for Military, Government & Commercial installations around the world.

The unique design has been proven in the field against threats including terror and theft. All parts of barriers are first pre-paint treated and then given a double layer of painting to prevent rust. Smart control can be integrated with other safety equipments.

APPLICATIONS



Defence Area



Government Offices



Banks





Data Processing center

Embassy

Toll Plaza Boom Barrier Functions & Features

- o High Speed Boom Barrier System. (0.6-0.9 Second Operation)
- o Can be used in ETC (electronic toll collection) Lane.
- Specially designed for Toll Industry.
- O Plug & Play System, ready to connect to any Lane Controller System.
- o Safety features for human and vehicle safe technical data.

Crash Rated Boom Barrier Functions & Features

- Electro hydraulically operated with internal locking feature circuit controller for auto off in fully raised & lowered position with limit switches.
- All parts of the barriers are manufactured keeping in mind the corrosive nature of climate and are corrosion proof.
- Robust power transmission.
- Opening closing speed can be adjusted.
- The barrier can easily be operated manually in times of power failure.
- Hydraulic power pack can be installed within the barrier body.
- o Safety accessories against human traffic & vehicles.
- Manual operating override facility.

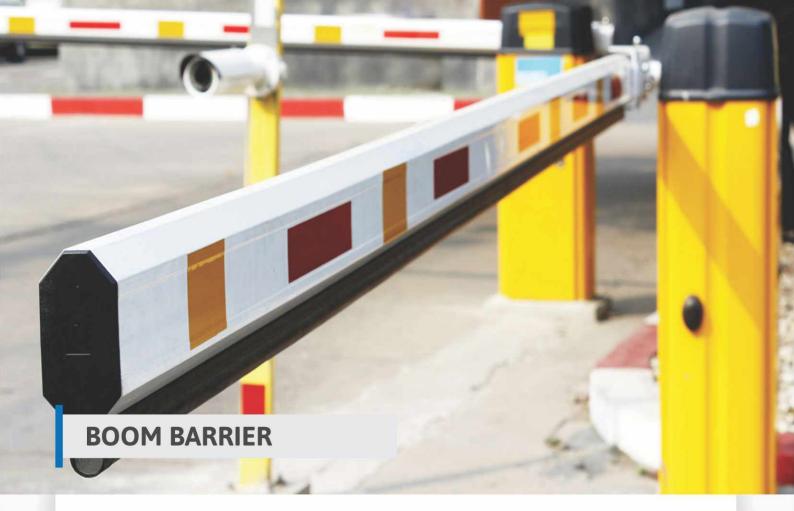
Technical Specification

Toll Plaza Boor	n Barrier
Dimension of housing arm	342 x 312 x 960 mm
Length	2.5 to 3 mtr
Housing	Galvanized steel with powder coated
Drive	Servo motor
Swing away arm option arm	Available
Direction	Can be change left or right (optional)
Power supply	230 VAC, 100W
Output torque	120 N.M
Motor no-load speed	3000 r/min
Operating temperature	-20 to +70°C
Life cycle	10 millions
Open/Close time for 2.5 mtr	0. 6 sec
Open/Close time for 3 mtr	0.9 sec

Crash Rated Boom Barrier		
Material	High tensile carbon steel	
Barrier type	Crash boom barrier	
Mechanism	Electro-hydraulic	
Dimension	3-7 m	
Operating temperature	-10 to +60 °C	
Power supply	3 phase	
Speed	6-8 sec	
Operating option	Push button	
Protection level	IP66	
Impact energy	656 Kilo joules	
Crash rated	K4 rated, 7.2 ton truck impact@48kmph	
Control panel	Smart control panel for various accessories integration.	







Boom barriers are vehicle access barriers are comes with Straight, folding, fence & advertising arm type. Also used with automatic Number Plate Recognition using ANPR camera. Parking Management is still a herculean task in both residential & Commercial Spaces at these days.

To address this, we at Avians have developed Contact-Less Parking management system, Gate entry & Visitor Management System to ensure seamless movement of vehicles with less human intervention and protection from parking revenue leakage.

Features

- Powerful drive unit.
- Smooth boom movement with automatic slowdown.
- Comes with obstacle detection system (safety photocell) which makes barrier to move upwards if any obstacle is detected.
- Android app for seamless opening through smart phone.

Types of Boom Barrier

- Straight Boom Barrier
- Fence Boom Barrier
- Articulated Boom Barrier
- Advertising Boom Barrier
- Crash Rated Boom Barrier
- Toll Plaza Boom Barrier

APPLICATIONS



Toll Plaza



Parking Lot



Factory



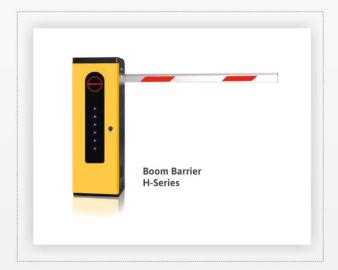
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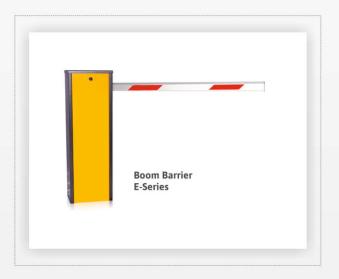


Corporate Offices

Malls/ Residentials

	Boom Barriers	
Boom Barrier Model	H-Series	E-Series
	Straight - up to 6m	Straight - up to 6m
Arm length	Fence - up to 4.5m	Optional
	Folding - up to 5m	Optional
	Advertising - up to 3.7m	NA
Housing dimension	280L x 355W x 1050H mm	240L x 345W x 1020H mm
Material	Metal casing with powder coating	Metal casing with powder coating
Design	Modular	Standard
	AC brushless /100W	AC brushless /100W
Motor	DC brushless/120W	DC brushless/120W
Input power supply	230 VAC, 50 HZ	230 VAC, 50 HZ
Arm direction	Fixed	Fixed
Arm profile	Octagonal	Octagonal
Protection level	IP55/IP65 optional	IP55/IP65 optional
Emergency operation	Manual	Manual
Swing away arm	Option available	Option available
Certificate	CE, NABL	CE, NABL
Working environment	Indoor, Outdoor	Indoor, Outdoor
LED on boom	Optional	Optional
LED on housing	Standard	Optional
Duty cycle	100%	100%
Motor rotation speed	1500 rpm	1500 rpm
Operating time	Up to 3,6 sec	Up to 3,6 sec
Strake central	AC-limit switch	AC-limit switch
Stroke control	DC- Encoder	DC- Encoder







Undercarriage is the only area of a vehicle which can never be locked or sealed hence, it is easy to hide damaging objects under the vehicle without knowledge of vehicle driver/owner.

We insist to install Under Vehicle Surveillance Systems (UVSS) for securing the premises.

As the vehicle arrives at the checkpoint and drives over the imaging unit, the camera captures images of the undercarriage and transmits them to the control unit which displays them on a monitor. The control unit and monitor can be located outside in proximity to the checkpoint or within the guardhouse.

Depending on the UVSS system, images of the vehicle's undercarriage can be stored for later viewing or can be zoom in for closer inspection.

UVSS systems has provision to integrate with number plate recognition (ANPR) system.

Types of UVSS

- Portable Type UVSS
- Fixed Type UVSS

Features

- Designed to scan, monitor and record clear digital video images of the entire width of a vehicle's underside.
- Operational simplicity.
- Strict quality control.
- Capability to store large number of operations.
- Sensing ability for vehicle entry/exit.
- Display & storage system for each vehicle surveillance data.
- Easy to integrate with ANPR system & driver camera system.

APPLICATIONS













Banks

Airports

Government Offices

Defence Area

Highly Secured Premises

Corporate

Parameter	Technical Specification	
	Portable Type UVSS	Fixed Type UVSS
Unit type	Movable	Fixed Underground
Unit dimensions	560 mm x 320 mm x 83 mm	1236 mm x 320 mm x 105 mm
Scanning technology	Area scan	Area scan
Vehicle max speed	Up to 20KM/H	Up to 20KM/H
Image resolution for private cars & image format type	4096 x 2160 pixels Standard color BMP/JPG	4096 x 2160 pixels Standard color BMP/JPG
Inspection time	<8 seconds	<4 seconds
Max vehicle load capacity	50 ton	50 ton
Power supply	AC110~240V/50~60Hz	AC110~240V/50~60Hz
Power consumption	Standby power: 10W, working peak: 150W	Standby power: 10W, working peak: 150W
Battery back up	In built 2-6 hrs UPS power management module-standard	Optional
Protection level	IP 68	IP 68
Network host	Desktop Set	Desktop Set





Portable Type UVSS



Fixed Type UVSS



Control Unit

UVSS Hardware



Automatic number plate recognition (ANPR) system is a surveillance device that optically performs character recognition to read the license plates on vehicles. ANPR can be used with either existing closed circuit television camera & specifically designed camera for the task.

As a vehicle passes an ANPR system, its registration number is read and instantly checked against database records of vehicles of interest.

It analyzes read data with stored data and provides output as Recognized or Not Recognized. Based on this output it provides access to vehicles at secured premises integrated with vehicular access systems.

Features

- Fast Traffic management at parking
- At tolls on highways, bridges or tunnels.
- Solution to prevent car theft.
- Ability to latch with access control systems.

USP

- Attractive look
- Strong build quality
- Easy to install

APPLICATIONS



Banks



Government Offices



Defence Area



Highly Secured



Corporate Office/Societies **Premises**

Parameter	Technical Specification
Camera	4 MP
Resolution	1920 x 1080
Lens	10.5 – 42 mm , 3.6 – 17 mm
Image compress mode	JPEG
HD Image Resolution	1920 X 1080
ANPR	Recognize Indian RTO License Plate
System	ONVIF Version 2.4 conformance
CMS software	KVMS Pro
Mobile software	iCOMB, gCOMB
Operating temperature	-10 °C to +70 °C
Protection level	IP 66
Power source	Ac220 V
Power consumption	15 W
Dimensions	447 mm x 240 mm x 230 mm
Weight	4.5 Kg







Avians offers high security Crash rated sliding and swing gates in wide range of gate widths and heights to provide high security within entry/exit premises at high profile sites/areas to prevent unauthorized vehicle attack. This electro-mechanical driven crash gates are ideal for frequent use and withstands high impact with ensuring no significant damage to the gate. Crash rated swing gate's unique trackless design allows moving freely and provides efficient solution against hostile vehicle attacks with its shallow foundation and extremely low penetration.

Features

- Durable and strong construction.
- Stops 7.5 ton vehicle with speed upto 80 km/ph.
- Crash rated sliding gates available in width of 3 m to 9 m.
- Crash rated swing gate available in each leaf up to 6 meters.
- Powered by electro-mechanical system.
- System can manually operate in case of power failure.
- Crash rated sliding gate Works on proven rack and pinion mechanism, hence maintenance free.
- Aesthetic can be achieved with required design or patterns.
- High grade & efficient automation system for higher no. of operations.

APPLICATIONS













Airports

Banks

Embassies & prisons

Police Headquarters

Defence Facilities

Financial Institutes

Crash Rated Sliding & Swing Gates		
Parameter	Crash Rated Sliding Gate	Crash Rated Swing Gate
Gate Each leaf width	3000 mm to 9000 mm	3000 mm to 6000 mm
Gate height	Upto 2500 mm	3000 mm
Material	Mild steel/Galvanized steel	Mild steel/Galvanized steel
Finish	Powder coating/Hot dip galvanizing	Powder coating/Hot dip galvanizing
Power supply	230 Vac to 440 Vac	230 Vac to 440 Vac
Operations type	Electro mechanical system	Electro mechanical system
Operating speed	Upto 0.20 m/sec	Upto 0.15 m/sec
Working temperature	10 °C to 65 °C	10 °C to 65 °C
Control devices	Remote Control , Key Switch (open-close-stop)	Remote Control , Key Switch (open-close-stop)
Crash rating	K4/K8/K12 crash rated	K4/K8/K12 crash rated
Crash testing capacity	Stops a vehicle Load of 7500 kg travelling upto 80 kmph speed	Stops a vehicle Load of 7500 kg travelling upto 80 kmph speed
Emergency operation	By manually disengage	By manually disengage



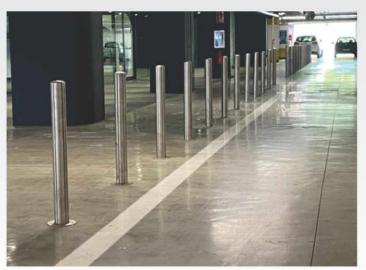


AIRPORT, HOTEL & HIGHLY SECURED PREMISES





MALLS, OFFICE PARKING & BUS DEPOS/BRT





GOVERNMENT OFFICE & DEFENCE AREA





BANK & HIGHLY SECURED PREMISES





GOVERNMENT & COMMERCIAL PREMISES





CHECKPOINT & GUARDHOUSE









INSTITUTES, EMBASSIES & POLICE HEADQUARTER





RESIDENTIAL, COMMERCIAL & INDUSTRIAL ENTRANCES





HOTEL & DEFENCE AREA





GARDEN, CINEMA HALL & FOOTPATH





TOLL PLAZA, PAY & PARK, RAILWAY STATION & METROS





Other Product Range



Pillar Type Turnstile



Bridge Type Turnstile



Metal Detector



Full Height Turnstile



Speed Flap Barrier



Swing Barrier



P Type Swing Gate



Sliding Barrier



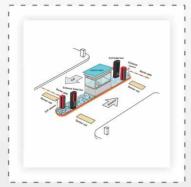
Boom Barrier-Straight Arm/Speed Toll



Fence Arm Boom Barrier



Crash Rated Boom Barrier



Parking Management System

FEW OF OUR PRESTIGIOUS CLIENT

- **Hindustan Petroleum** Corporation of India
- Tetra Pack
- Macleods Pharma
- Sunpower Ltd.
- Finolex Ind. Ltd.
- **CRPF Camp**
- Tata Mettalics
- MHA
- Saibaba Temple Shirdi
 Unichem
- Sandvik Asia
- Amphenol

- BOSCH Ltd.
- TATA Group
- Hindware
- Pavillion Hotel
- LG Electronics
- ITC
- Haier
- HUL
- Fiat

- Vidharbha Cargo
 Volkswagen India
 - Sassan Coal mine
 - Hyosung India
 - Beoing
 - Hero MotoCorp
 - MRF Ltd.
 - Daimler India
 - Cummins
 - Hindustan-CocaCola
 - Wipro
 - JSW Steel Coated Products Ltd.
 United Breweries

- Jaguar Group
- Amazon
- Syntel
- JBM
- Asians Paints
- Kansai Nerolac
- Kajaria Tiles
- P&G
- Ikea
- Hiranandani One

Avians have more than 1000+ Clients & have Executed Projects in Entrance Automation for over 4 decades and hold a strong position in the entrance automation segment.

AVIANS ADVANTAGE

- Legacy of the Brand.
- Wide Product Range of Physical Access Control Solutions.
- Strong Pan India Network for Sales and Service Support.
- Strong Base of Satisfied Customers.
- Continuous Technical Advancement for Product Innovation.
- Assurance to Deliver Quality Class Product.
- International Quality Certifications (CE).
- O Company is an ISO 9001, ISO 14001 and ISO 45001 certified.
- Customised Solution for Restrictive Access.
- Aesthetics and Super Finish available in SS302, SS304 & SS316.
- All Product Certified to IP 55 Standards.
- Best in Class Infrastructure for manufacturing, quality & delivery.
- O State of the Art 280000 Sq ft of Modern Factory and Corporate Office at Pune.
- Inhouse R&D Unit for Product Testing and Validation.
- Best Talent Resource in the Industry.

PHILOSOPHY



Customer Focus



Quality



Innovation

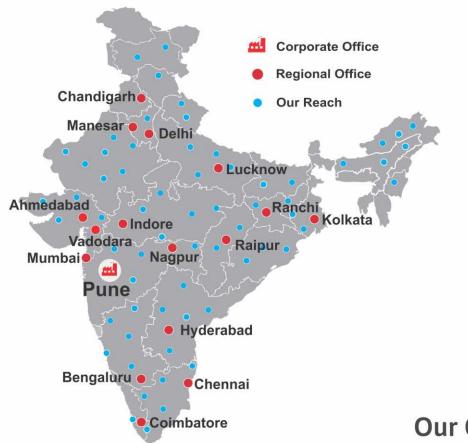


Product Consultancy



Promptness

Our National Presence







Our Global Presence











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