

# PRODUCT BROCHURE

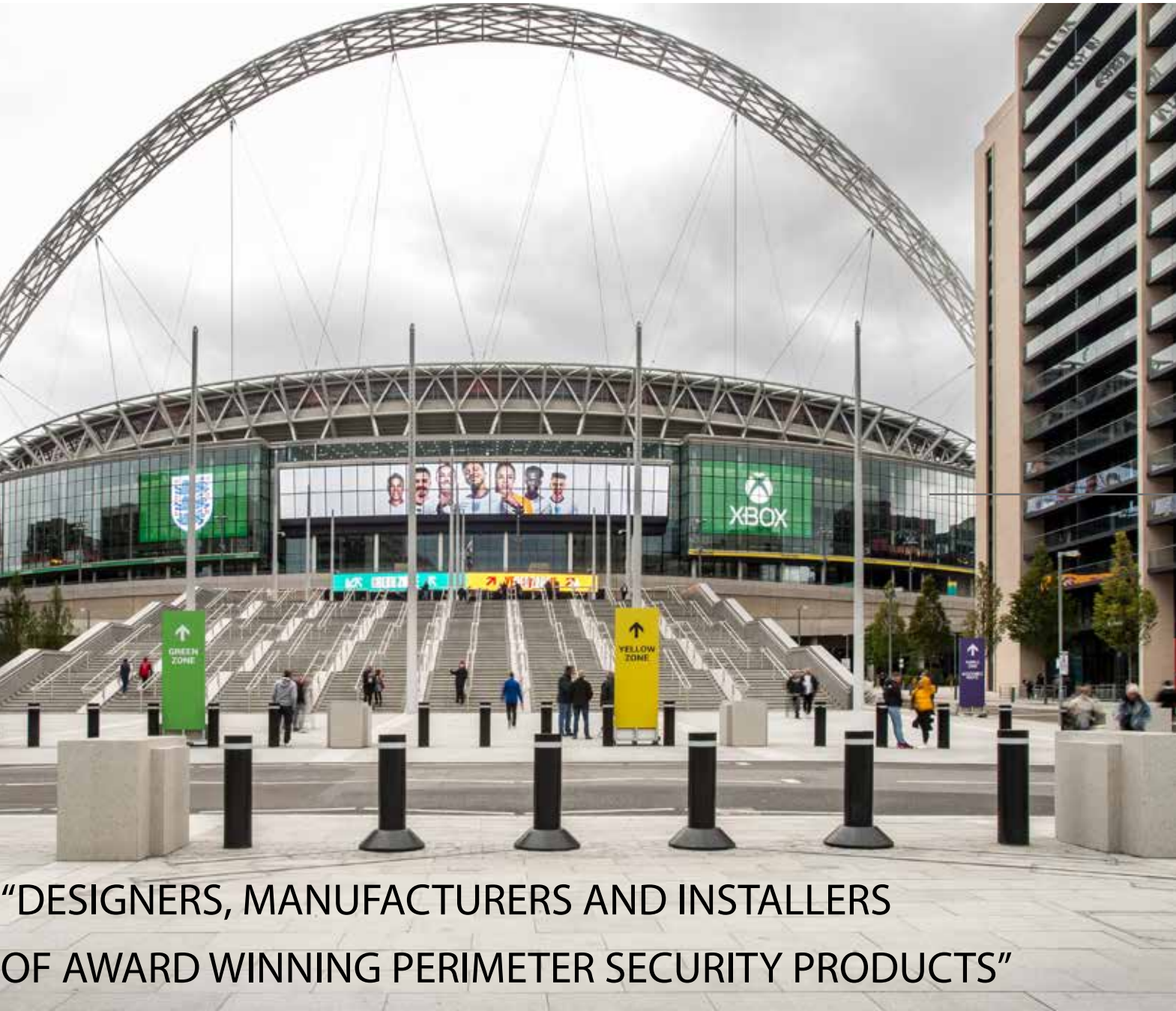
Issue 10



PERIMETER SECURITY  
PRODUCTS

**HEALD®**





“DESIGNERS, MANUFACTURERS AND INSTALLERS  
OF AWARD WINNING PERIMETER SECURITY PRODUCTS”



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# COMPANY OVERVIEW

Solutions for a safer world

FOR OVER THREE DECADES, HEALD HAS BEEN SECURING SOME OF THE WORLD’S MOST HIGH PROFILE LOCATIONS WITH ADVANCED PROTECTION AGAINST HOSTILE VEHICLE ATTACKS.

We are world class innovators in the field of perimeter security technology and the largest manufacturer of quality security equipment in the UK.

Our range of award-winning, PAS68, IWA and ASTM Bollards, Roadblockers and Barriers play a leading role in the defence of vulnerable properties worldwide from expressive and acquisitive crime.

Our global client base includes military sites, presidential buildings, palaces, embassies, border controls, airports, oil refineries, stadia, banks, shopping centres, government buildings and many more.

We constantly push the boundaries with ground-breaking new designs, tested to the latest British, EU and US security standards, and are renowned for our exemplary in-house manufacturing.

Our products have been recognised by some of the security industry’s leading professional bodies, receiving accolades such as IFSEC Security and Fire Excellence, International Business Awards, ADS Security Innovation, Counter Terror Excellence in Innovation, Security Excellence Awards and Outstanding Security Equipment Manufacturer.

# HEALD SERVICE

Heald provide a full turnkey service for all of our products, from the initial design to installation and maintenance.

## Design

Innovation is at the core of what Heald does. We have a range of unique, patent protected products, meaning you will find nothing else like our Bollards and Roadblockers on the market. We have been listed in the IP100 League Table for five consecutive years, always ranking in the top ten companies and have been recognised for our innovation with numerous awards.

## Customisation

We can offer bespoke, customised designs to suit your site and customer specifications; ranging from different finishes, covers, sizes, configurations and operational requirements. We can also offer third party reports if validation is required on the performance of any products that vary from the crash tested model.

## Manufacture

Heald’s range of products are all manufactured in-house. We are fully ISO9001 registered with strict quality control at every stage ensuring the products we supply are of the highest quality.

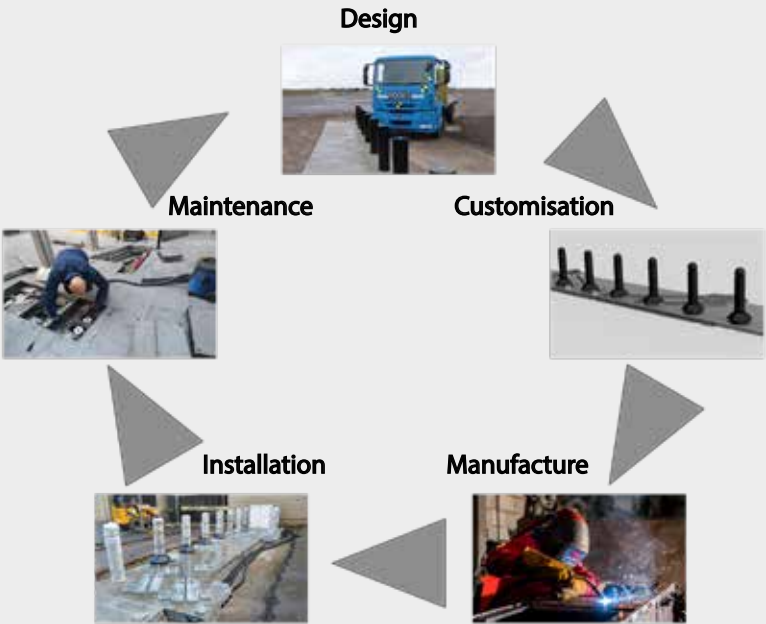
## Installation

We have a team of expert installers who are always available on site if required, throughout the UK and overseas. Heald offer a range of services from full installation to onsite support & commissioning.

## Maintenance

At Heald, we offer a swift response and full site support for all new and existing installations, in addition to a high level of service with qualified and experienced engineers. We pride ourselves on rapid response times, barrier maintenance expertise and peace of mind that your site is secure.

## AWARDS & ACCREDITATIONS



# Introduction to Hostile Vehicle Mitigation



## WHAT IS HOSTILE VEHICLE MITIGATION?

Hostile Vehicle Mitigation (HVM) relates to the protective security measures in place that aim to reduce the risk associated with vehicle borne threats. HVM measures form a combination of security planning, traffic management and physical security barriers.

Planning HVM measures requires a site specific security risk assessment and a Vehicle Dynamic Assessment (VDA) to ensure you have the correct level of security to provide the required level of protection to a location.

Heald Limited specialise in physical security barriers that are designed to disable a vehicle in a Vehicle As a Weapon (VAW) attack and mitigate any damage to a property or location by creating a standoff between the protective line and the perimeter. These products include bollards, roadblockers and barriers, which can provide authorised access or prevent all vehicle access to a location.

For further advice on which products would be suitable to meet your site requirements, please contact our friendly team at [sales@heald.uk.com](mailto:sales@heald.uk.com).



## CRASH TESTING

At Heald our full range of Hostile Vehicle Mitigation products have undergone rigorous in-house testing and an independent physical crash test. These tests are carried out to replicate the worst case scenario to ensure that our products provide the maximum protection.

Products are tested to meet one of three international crash test standards, these are ASTM, PAS68 or IWA14. After crash testing the product is given a crash test classification based on it's performance. It is important to note that HVM products should be installed following either the PAS69 or IWA 14-2 guidelines.



### PAS68: 2013 – UK standard

PAS68:2013 Fixed Bollard V/7500[N2]/64/90:0.0/0.0

PAS68 is the UK's first crash test standard, this closely relates to the IWA standard, however the vehicle classification and the datum point for the penetration distance varies.



### IWA 14-1 - International standard

IWA 14-1:2013 Blocker V/7200[N3C]/80/90:0.0

IWA 14-1 is the most recently published standard, which was created to provide a single crash test standard for all vehicle categories including the UK, European and North American vehicle types.



### ASTM F2656 – US standard

ASTM 2656-07 M50:P1

ASTM is the American crash test standard, this supersedes the previous K-ratings. These tests use the American style vehicle which has a reduced vehicle mass compared with the European truck used in the PAS68 tests.

Each classification is specific to the crash test conditions, due to this Heald work with third party RSES certified engineers and we can offer site specific reports to ensure that any variations made to a product will meet the same specification. For further details regarding these reports and the crash test standards please contact Heald directly, or visit [www.heald.uk.com](http://www.heald.uk.com)

### Test Standard

### Product tested

### Vehicle weight, kg

### Vehicle class

### Speed, kph (ASTM in mph)

### Impact angle

### Penetration distance, m

### Dispersion (debris over 25kg)





# Automated EM Matador

Surface Mount/Shallow  
Mount Security



Location: Australia

- BOLLARD HEIGHT** 1050mm (with semi-domed cover)
- OPENING APERTURE** Ranges from approx. 2.6m to 6.8m (Dependent on model)
- BASE DIMENSIONS** Dependent on number of bollards required
- BASE PLATE DEPTH** 155mm/160mm (not including concrete base or Paving)
- INSTALLATION** Surface mount or Shallow Mount
- NORMAL OPERATING SPEED** 5-6 seconds approximately (Matador 3/4)  
12 seconds approximately (Matador 5/6)
- FINISH** Galvanised with Grade 316 stainless steel covers, base plate painted RAL7001 with Anti-slip coating (other colours available upon request)
- OPTIONS** Architectural Paving System (APS), Emergency Fast Operation (EFO), specialist cover options, ramps & handrails, heat trace, LED lighting on static bollards and integration with access controls



Matador 3 with APS  
Location: Gibraltar

**PATENT NUMBERS** Granted US Patent US9,315,956; Granted US Patent US10,119,230; Granted EP Patent EP2776631 (GB, FR, SE, NO, NL, IT, DE, TR)

HEALD'S SURFACE MOUNTED, SLIDING BOLLARD SYSTEM HAS REVOLUTIONISED THE PERIMETER SECURITY INDUSTRY WITH IT'S MULTI AWARD WINNING PATENTED DESIGN.

The Matador allows for constant pedestrian access whilst maintaining maximum protection against unauthorised vehicle entry. Unlike traditional rising bollards, the Matador slides across the surface meaning the bollards are visible at all times during operation. In addition, there are no trip or trap hazards on the product, making it extremely safe for users and pedestrians alike.

Heald now offer a range of Matador products which have undergone rigorous testing to both the IWA-14 & PAS68 standards. The system consists of two static bollards and a set of central sliding bollards, which move in a diagonal path away from the perimeter line to allow access for permitted vehicles. Available with one, two, three or four sliding bollards, additional fixed Matadors can be bolted onto the system to extend the line of protection to suit your requirements.

As an automated product, the Matador is Electro-Mechanically operated. This means that there is no requirement for additional power packs or hydraulic oil, providing a more environmentally friendly solution and maximising the real estate footprint of the roadside cabinet.

The Matador is available as a completely surface mounted solution and can be recessed in ground with architectural paving for a more seamless finish. The shallow mount design makes the Matador ideal for urban environments where excavation is restricted or cannot be undertaken at all. The unit is flexible in design with bespoke finishes available and a central joining unit to allow for road camber adjustments.

## ELECTRO-MECHANICAL (EM) MATADOR FEATURES

- Unique design - Patent Protected
- Available in the HT2 or HT3 model
- Available with a range of opening widths to suit various site conditions and vehicle types
- Designed and proven to protect underground utilities on impact, with minimal downforce
- Architectural Paving System (APS) available to enable the Matador to blend in with historic or modern surroundings
- No oil used: zero chance of oil spillage
- 100% duty cycle rated for longevity
- Quiet operation, means minimal noise pollution
- Extremely safe in operation, no pinch points or trap hazards
- Operated after impact providing continued protection and maintaining emergency access
- Minimal penetration offering maximum protection by providing a greater standoff distance
- Easy maintenance due to internal components that remove daily debris from the bollard path to the edges of the Matador
- Bespoke cover options available to suit any location
- Full Battery Back-up included as standard to provide continued operation in the event of power failure (approx. 40 operations)



Matador 4 with Standard base finish  
Location: Australia



# Manual Matador

HT2 and HT3 Range  
Surface Mount/Shallow  
Mount Security



Location: Wembley Park, London, UK

- BOLLARD HEIGHT** 1050mm (with semi-domed cover)
- OPENING APERTURE** Ranges from approx. 2.6m to 6.8m (Dependent on model)
- BASE DIMENSIONS** Dependent on number of bollards required
- BASE PLATE DEPTH** 155mm/160mm (not including concrete base or Paving)
- INSTALLATION** Surface Mount or Shallow Mount
- FINISH** Galvanised with Grade 316 stainless steel covers, base plate painted RAL7001 with anti-slip coating (other colours available upon request)
- OPTIONS** Architectural Paving System (APS), specialist cover options, ramps & handrails and heat trace (power supply required for heat trace)



Location: London, UK

**PATENT NUMBERS** Granted US Patent US9,315,956; Granted US Patent US10,119,230; Granted EP Patent EP2776631 (GB, FR, SE, NO, NL, IT, DE, TR)

OFFERING THE SAME PROTECTION AS THE AUTOMATED MATADOR, THE MANUAL RANGE IS IDEAL FOR SITES WITHOUT POWER OR THAT REQUIRE LOW FREQUENCY OF ACCESS.

As with the Automated range, the Manual Matador is available in both the HT2 or HT3 model in the full range of configurations.

The Manual system requires no power for operation. The dynamic bollards are manually locked in the open and closed position, which can be padlocked in position for additional security. To operate the system, the bollards are simply pushed along the tracks with no heavy lifting required.

For locations that do not require constant automated access, the Manual Matador provides an excellent alternative low-cost solution whilst maintaining high security protection.



Location: London, UK

**MANUAL MATADOR**

- Unique patented design
- Available as part of our HT2 and HT3 range
- Operated after impact on all crash tests providing continued protection
- Available with a range of opening widths to suit various site conditions and vehicle types
- Architectural Paving System allows the Matador blend in with historic or modern surroundings
- Extremely safe and easy operation
- No power and no additional cabinet required
- Cost effective solution
- Can be installed surface mounted or recessed in ground
- Anti-slip top coating for pedestrian safety
- High reliability
- Easy installation, with no requirement for precast pits and the shallow foundation avoids most underground utilities
- Suitable for both long term and temporary events



Location: Wembley Park, London, UK



# HT2 & HT3 Matador

Surface Mount/Shallow  
Mount Security



Location: London, UK

## BESPOKE BOLLARD SOLUTIONS (Automated & Manual Matador)

As the Matador does not retract into the ground like traditional automated bollards, the bollards can be provided with a wider range of covers and finishes.

- The standard range of finishes include:
- Sloped top Stainless Steel
  - Flat top/ semi-domed top Stainless Steel
  - Heritage style ball top covers
  - Bespoke static bollards with integrated access controls, lighting or photocells (automated only)

In addition Heald can provide a completely unique solution to suit your requirements.



Location: London, UK

PATENT NUMBERS Granted US Patent US9,315,956; Granted US Patent US10,119,230; Granted EP Patent EP2776631 (GB, FR, SE, NO, NL, IT, DE, TR)

## HT2 Matador

This model has been crash tested in various configurations to IWA and PAS68 standards, successfully disabling the vehicle at 40mph with minimal penetration beyond the product. The Matador continued to operate after impact during both tests to provide emergency access and uninterrupted protection.

### Specification

PERFORMANCE RATING  
PAS68: 2013 Bollard V/7500(N2)/64/90:0.7/0.0 (Matador 3)  
IWA 14-1: 2013 Bollard V/7200(N2A)/64/90:0.1 (Matador 6)

BOLLARD HEIGHT 1050mm (with semi-domed cover)  
BOLLARD DIAMETER 254mm (with semi-domed cover)  
OPENING APERTURE Ranges from approx. 2.6m to 6.8m (Dependent on model)  
BASE DIMENSIONS Dependent on number of bollards required  
BASE PLATE DEPTH 155mm (not including 150mm concrete base)  
NORMAL OPERATION SPEED 5-6 seconds approximately (Matador 3/4)  
12 seconds approximately (Matador 5/6)

## HT3 Matador

Designed for locations that require higher security, this range has been dual tested to IWA standards, offering protection against the larger N3C vehicle class at 40mph and the N2A vehicle at 50mph. During both tests the vehicles were halted with minimal penetration and continued to operate after impact.

The HT3 Matador has also undergone VADS delay rating testing, for temporary solutions.

### Specification

PERFORMANCE RATING  
IWA14-1:2013 Bollard V/7200(N2A)/80/90:3.2 (Matador 4)  
IWA 14-1:2013 Bollard V/7200(N3C)/64/90:1.3 (Matador 4)  
VADS delay rating

BOLLARD HEIGHT 1050mm (with semi-domed cover)  
BOLLARD DIAMETER 304mm (with semi-domed cover)  
OPENING APERTURE Ranges from approx. 2.6m to 6.8m (Dependent on model)  
BASE DIMENSIONS Dependent on number of bollards required  
BASE PLATE DEPTH 160mm (not including 150mm concrete base)  
NORMAL OPERATION SPEED 5-6 seconds approximately (Matador 3/4)  
12 seconds approximately (Matador 5/6)

## Matador Configurations

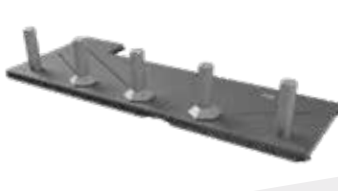
All Matador models are available in 4 different bollard arrangements to provide access to a range of sites and different sized vehicles. The smallest is the Matador 3 with one central moving bollard, with the largest being the Matador 6 (four central moving bollards) which is ideal for vehicles requiring larger turning circles, or can be operated as a dual lane entry and exit system.



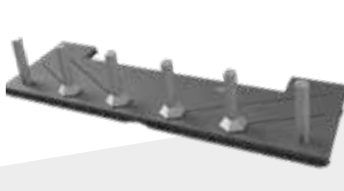
Matador 3



Matador 4



Matador 5



Matador 6



# Temporary Matador

HT2 and HT3 Range  
Surface Mount Security



Location: Germany

- BOLLARD HEIGHT** 1050mm (with semi-domed cover)
- OPENING APERTURE** Ranges from approx. 2.6m to 6.8m (Dependent on model)
- BASE DIMENSIONS** Dependent on number of bollards required
- BASE PLATE DEPTH** 155mm/160mm
- INSTALLATION** Surface Mount
- NORMAL OPERATING SPEED** 5-6 seconds approximately (Matador 3/4) - Auto  
12 seconds approximately (Matador 5/6) - Auto
- FINISH** Galvanised with Grade 316 stainless steel covers, base plate and ramps painted RAL7001 with anti-slip coating
- OPERATION** Manual or Automated
- OPTIONS** Additional fixed bollards and access controls



Location: Germany

**PATENT NUMBERS** Granted US Patent US9,315,956; Granted US Patent US10,119,230; Granted EP Patent EP2776631 (GB, FR, SE, NO, NL, IT, DE, TR)

## WORLDS FIRST SURFACE MOUNTED AUTOMATED BOLLARD SYSTEM, SUITABLE FOR TEMPORARY EVENTS

The Matador has been tested as a completely surface mounted solution making it ideal for temporary events as well as a permanent solution. Whilst maintaining maximum security, the product can be bolted down onto a suitable surface and supplied with ramps for access.

As a temporary solution the Matador is available as either a Manual or Electro-Mechanical system, with the ability to run off a generator for power. The automated bollards can be operated via local controls to provide more controlled access to the event, than standard manual options.

Hire of the Matador is suitable for both long term and short term events, please contact our sales team for more information about the products available for hire.

*“World Snooker were delighted with the installation of the Matador and we were also impressed with the excellent service we received from Heald.” - Nigel Oldfield, Operations Director for World Snooker Ltd.*

### TEMPORARY MATADOR

- Unique patented design
- Available as part of our HT2 and HT3 range
- Available with a range of opening widths to suit various site conditions and vehicle types
- Automated or Manual operation
- Extremely safe and easy operation
- Minimal installation requirements
- Anti-slip top coating for pedestrian safety
- High reliability
- Automated Matador can be powered via a generator
- Available with ramps and handrails for safe pedestrian access
- No restriction to pedestrian access during events



Location: Sheffield, UK



# Fixed Matador

Surface Mount/Shallow Mount Security



Location: Glasgow, UK

- PERFORMANCE RATING**  
Fixed Matador test: PAS68 V/7500(N2)/48/45:0.0/0.0
- BOLLARD HEIGHT** 1050mm (with semi domed cover)
- BOLLARD DIAMETER** 254mm/ 304mm (with cover)
- BASE DIMENSIONS** Dependent on number of bollards required
- BASEPLATE DEPTH** 155mm/160mm (not including concrete base or Paving)
- FOUNDATION DEPTH** Surface mounted or shallow mount
- FINISH** Galvanised with Grade 316 stainless steel covers as standard, baseplate with anti-slip coating, painted grey RAL7001
- OPTIONS** Various cover options and finishes, Architectural Paving System



Location: Norway

**PATENT NUMBERS** Granted US Patent US9,315,956; Granted US Patent US10,119,230; Granted EP Patent EP2776631 (GB, FR, SE, NO, NL, IT, DE, TR)

HEALD’S FIXED MATADOR IS PART OF THE AWARD-WINNING MATADOR RANGE, PROVIDING AN ADDITIONAL STATIC BOLLARD SOLUTION.

Consisting of an array of one to four static bollards on a base plate, the Fixed Matador can be built to the same specification as either the HT2 or HT3 Automated Matador. This modular design is available with joining units to create an array of static bollards or extend the protection of the automated system.

The Fixed Matador has been independently crash tested as an array of three bollards, halting an N2 vehicle at 48kph with zero penetration, hence providing maximum protection to the site.

As with the other products in this range, the Fixed Matador is suitable as a surface mounted or shallow mount product, with quick and easy installation for either temporary or permanent events.

As standard the bollard comes with stylish Stainless Steel covers, with bespoke heritage covers available. The surface can be finished with surrounding paving material or coated with an anti-slip paint to suit your requirements.

## FIXED MATADOR

- Unique patented design
- Available in HT2 or HT3 Matador models
- Zero penetration – maintains maximum standoff distance
- Surface and shallow mounted – low cost installation
- Independently PAS68 tested to halt a N2A vehicle travelling at 48 kph (30 mph)
- Easy installation, no pre cast pit or rebar required
- Ideal for short term or temporary installations, as well as permanent installations
- Anti-slip coating on baseplate for pedestrian safety
- Can be installed with paving to integrate with surrounding architecture
- Variety of bespoke cover options available
- Modular design joins onto the Automated Matador or other Fixed Matador units



Image showing Fixed Matador 2 joined onto Manual Matador 6, Wembley Park, London, UK



# Raptor

Shallow Mount Security



Location: London, UK

- PERFORMANCE RATING**  
ASTM: M50-P1 Zero Penetration  
ASTM: C40 P1 Zero Penetration  
PAS68 Blocker/Bollard V/7500[N3]/80/90:3.3/18.9
- RAISED HEIGHT** 985mm
- RAPTOR WIDTH** 380mm
- FOUNDATION DEPTH** Shallow foundation - 500mm
- OPERATION** Electro-Mechanical, Hydraulic or Manual
- NORMAL OPERATING SPEED** 4-6 seconds approximately
- EFO SPEED** 2 seconds approximately
- FINISH** Galvanised and painted yellow (Other colours available upon request)
- OPTIONS** Emergency Fast Operation (EFO), anti-slip coating and integration with access control



Location: New York, USA

**GB PATENT NUMBER** GB Patent Number GB2479722. European Patent Number EP2561140. US Design Patent Number US D715, 174 S. US Patent Number US 8, 979, 419 B2

HEALD'S RAPTOR IS THE WORLDS MOST SHALLOW MOUNT RETRACTABLE BOLLARD TESTED WITH AN N3 VEHICLE AT 50MPH (80KPH)

The Raptor is an ideal solution for urban areas. Designed for areas with underground infrastructure, the bollard has a shallow foundation (500mm) and has proven minimal downforce, providing protection to above ground and below ground infrastructure during a high impact event.

Numerous tests have been carried out on the Raptor, providing the maximum protection with minimal penetration. Testing was carried out on a single unit, meaning that the bollard can protect any size opening without affecting the PAS68 & ASTM certification.

In addition, the Raptor has been impacted with a passenger vehicle at 30mph to simulate an unintentional road traffic incident. The unique shape of the bollard halted the vehicle without damaging the passenger space, making this an extremely safe form of protection for busy urban areas for both vehicles and pedestrians alike.

This product provides an alternative to the traditional circular bollard, integrating well with modern architecture for a more contemporary design.

The Raptor is available with Hydraulic, Electro-Mechanical or Manual operation. Providing various solutions to suit different site requirements, including locations where no power is available.

## RAPTOR

- Zero penetration maintaining maximum standoff distance
- Unique operational design meaning low energy requirements and reduced operational costs
- Operated after impact maintaining emergency service access and provides continued protection
- Strongest in class, best performing product of its kind, ensuring peace of mind
- Extremely safe operation with no trap or trip hazards
- Shallow and easy installation with an excavation depth of only 500mm with no pre-casting required
- No wear points meaning extended longevity
- Quiet operation with minimal noise pollution
- Very low maintenance and high reliability
- Unique design provides minimal downforce pressures on impact, protecting critical services and utilities
- Electro-Mechanical operation has many environmental benefits including no hydraulic oil or noisy HPU required
- Manual operation is ideal for sites with no power available
- Comes with rebar fitting kit to aid with installation



Location: Alabama, USA



# Evo Bollard

Automated/Manual Bollard



Location: London, UK

- PERFORMANCE RATING**  
IWA14-1:2013 Bollard V/7200[N2A]/64/90:1.3
- BOLLARD HEIGHT** 1000mm (including cover)
- BOLLARD DIAMETER** 306mm (including cover)
- FOUNDATION DEPTH** 1100mm
- OPERATION** Electro-Mechanical or Manual
- NORMAL OPERATING SPEED** 3-4 seconds approximately (Automated)  
30 seconds approximately (Manual)
- FINISH** Galvanised with Grade 316 stainless steel covers. Optional addition: special ultra hard wearing enamel (black finish)
- OPTIONS** LED lighting options, Architectural Paving System, integrated access control and specialist cover options



Location: Dubai, UAE

**GB PATENT** GB Patent Application Number GB1514970.1  
International Patent Application Number PCT/GB2016/000140  
US Patent Number: US 10, 385, 528

THE UNIQUE DESIGN OF THE EVO BOLLARD MEANS THE FOUNDATION DEPTH IS SHALLOWER THAN SIMILAR RETRACTABLE BOLLARDS ON THE MARKET.

The EVO Bollard has a sleek design with stainless steel covers and optional lighting, with covers available to suit both modern and historic architecture.

This Automated product is designed for Electro-Mechanical operation, with no hydraulic cylinder or noisy power packs required, providing an energy efficient solution, with uniform operation across the full bank of bollards. The EVO bollard is also available as a manually operated product, providing a solution for sites with no power available and a more cost-effective solution for locations that require infrequent access. Operation is via a handheld drill, with no heavy lifting required.

IWA testing was carried out on a single unit, providing maximum protection to any size opening. The bollard successfully disabled an N2A vehicle travelling at 64kph (40mph) and continued to operate after, providing continued access for emergency services.

Due to the patent protected design, the 1000mm raise bollard only requires an excavation of 1100mm, with no pre-casting of pits required. The EVO is easy to maintain, with surface level access to internal components.

## EVO BOLLARD

- Patent protected design
- Minimal penetration maintaining maximum standoff distance
- Tested as a single unit, providing protection for any size opening
- Operated after impact maintaining emergency service access and continued protection
- High reliability and easy installation, providing low whole of life cost
- Quiet operation with minimal noise pollution
- Unique design meaning a range of authentic cover options available
- Easy installation, comes with simple rebar fitting kit and levelling feet - no additional rebar cage required



Location: Australia



# Mantis 64 & 80

Shallow Mount Bollard



Location: Australia

### PERFORMANCE RATING

Mantis 64: PAS68:2013 Fixed Bollard V/7500(N2)/64/90:0.0/0.0

Mantis 80: IWA14-1-V/7200(N3C)/80/90:7.5

Mantis Array: IWA 14-1: 2013 Bollard V/7200[N2A]/80/90:3.5

**BOLLARD HEIGHT** 1130mm (including cover)

**BOLLARD WIDTH** Mantis 64 & 80: 196mm (including covers)

**FOUNDATION DEPTH** Mantis 64: 250mm  
Mantis 80: 300mm

**FINISH** Primed with Grade 316 stainless steel cover (if galvanised/painted finish is required this would be charged in addition)

**OPTIONS** LED lighting options available, alternative colours and patterns are available.



Location: Wembley Park, UK

MANTIS SHALLOW MOUNT BOLLARDS UNIQUE ANGULAR DESIGN PROVIDES AN EXCELLENT ALTERNATIVE TO THE TRADITIONAL CIRCULAR BOLLARD.

Available with two levels of protection, this shallow mount bollard requires less than 300mm excavation and is simple to install, providing a perfect solution for the public realm.

Various tests have been conducted on the Mantis, as both a single unit and in an array of 3, at 64kph (40mph) and 80kph (50mph). Providing a versatile solution to various perimeter layouts and sizes, whilst ensuring maximum protection.

The Mantis is well suited for areas with modern street furniture and is often installed alongside the retractable Raptor range. As standard, the bollard comes with grade 316 Stainless Steel covers, however alternative bespoke covers are available.

This product comes with an integral base and rebar fitting kit for easy installation on site. There are no requirements for additional rebar cages or pre-cast concrete pits making the Mantis fast to install.

### MANTIS 64 & 80

- Shallow mount foundation, avoidance of services and low cost installation
- Mantis 80: crash tested to stop a N3C vehicle travelling at 80 kph (50 mph) for maximum security
- Mantis64: crash tested to stop a N2 vehicle travelling at 64kph (40 mph)
- Fast and simple to install with no requirement for precast pits or rebar cages
- Sleek and stylish with stainless steel covers to suit any location
- LED lights available
- Stand alone bollard or part of an array
- Minimal Penetration for maximum standoff distance



Location: Military Site, USA



# Apex Bollard

Shallow Mount Bollard



Location: Singapore

- PERFORMANCE RATING**  
IWA 14-1:2013 Bollard V/7200[N2A]/64/90:3.7
- BOLLARD HEIGHT** 1050mm (with semi domed cover)
- BOLLARD DIAMETER** 254mm (with semi-domed cover)
- BASE PLATE DEPTH** 100mm
- FOUNDATION DEPTH** 150mm
- FINISH** Primed with Grade 316 stainless steel cover, surface of base plate finished to suit surroundings
- OPTIONS** Alternative covers and finishes available



Location: Sweden

HEALD'S APEX BOLLARD IS DESIGNED TO PROVIDE A FLEXIBLE CURVED BOLLARD ARRAY WITH A SHALLOW MOUNT FOUNDATION.

The modular design of the Apex allows for quick and simple installation, with the ability to form seamless curved arrays and right angles without the need for bespoke modifications. The bollards are available with a range of various covers and finishes to suit your requirements.

The shallow foundation makes this product ideal for public realm projects as there is minimal interference with underground infrastructure. With the growth in pedestrianisation and a focus on increasing the popularity of cycling, this provides an excellent solution to protect both pedestrians and cyclists by restricting vehicles without impeding their movement.

During IWA crash testing, the bollards disabled the N2A vehicle travelling at 64kph (40mph), both the bollard and foundation remained intact providing continued protection to the site.

Apex Bollards are easy to install with an excavation depth of only 150mm. The bollards are simply positioned with no pinning required and then secured in place with a concrete backfill. The surface can be finished with tarmac or pavers for a seamless aesthetic.

APEX

- Shallow mount foundation, avoidance of services and low cost installation
- Crash tested to stop an N2 vehicle travelling at 64kph (40 mph)
- Fast and simple to install with no requirement for precast pits or rebar cages
- Various cover options available to suit any aesthetics
- Minimum array of 3
- Minimal Penetration for maximum standoff distance
- Continued protection after impact
- Designed to create curved and cornered arrays without any bespoke modifications required



Location: Dubai, UAE



# Synergy Bollard System

Shallow Mount Bollard



Location: Australia

**PERFORMANCE RATING**  
Synergy Bollards: IWA14-1:2013 Bollard V/7200[N3C]/48/30:0.9 (minimum of 9)  
Synergy Bollards: IWA14-1:2013 Bollard V/7200[N3C]/48/90:4.2 (minimum of 9)  
Expansion unit: IWA 14-1:2013 Bollard V/7200[N3C]/48/30:0.2 (5400 mm)  
**BOLLARD HEIGHT** 875mm (without covers)  
**BOLLARD DIAMETER** 220mm  
**BOLLARD SPACING** 1200mm between each bollard  
**BASEPLATE THICKNESS** 50mm  
**EXPANSION UNIT** 5400mm (Bollard centre to Bollard centre) x 885 mm height  
**EXCAVATION DEPTH** 50mm, no pinning required  
**OPTIONS** Various cover options available to blend in with surrounding aesthetics



Location: UK

PATENT NUMBER GB Patent Application Number GB2000701.9

HEALD'S SYNERGY BOLLARD SYSTEM CONSISTS OF NINE FIXED BOLLARDS ON INDIVIDUAL BASEPLATES, WHICH ARE BOLTED TOGETHER.

Designed for bridges or areas where even bolting to the ground is not possible, this is the perfect solution for pedestrian walkways and cycle lanes alike.

This has been dual tested to IWA standards at 48kph (30mph), to simulate both a direct impact and a shallow impact angle that would be expected on a bridge. It's unique interlocking design provides shared distribution of the load, reducing the impact loading on the bridge structure and preventing the vehicle from penetrating the area the bollards are protecting.

The bollards remained intact during testing and there was no encroachment of the vehicle onto the footway. Minimal dispersion and debris was recorded, ensuring pedestrian safety.

## Synergy Expansion unit

Synergy Bollard System can be installed with the expansion unit, which has been independently tested at 30 degrees, during which the vehicle was deflected back onto the carriageway. The barrier is designed to accommodate the lateral movement of expansion joints within bridges, and can be removable to provide access to utility and service covers.

## SYNERGY BOLLARD SYSTEM & EXPANSION UNIT

- Unique patented design
- Crash tested against an N3C vehicle travelling at 30 mph (48 kph) at 30 degrees
- Crash tested against an N2A vehicle travelling at 30 mph (48 kph) at 90 degrees to the product
- The bollards take approximately 45 minutes to deploy excluding civil works
- The design allows for additional bollards to be added to expand the area being protected
- No pinning or large excavation required
- Easily transported due to its modular design
- Synergy Expansion unit allows for lateral expansion joint in bridges
- Expansion unit can be removeable for access to utilities and services
- Variety of bollard covers available



Synergy Expansion Joint unit during testing



# Sparta 48 & 80

Crash Tested Security



- PERFORMANCE RATING**  
Sparta 48: PAS68:7500[N2]48/90:0.0/0.0  
Sparta 80: PAS68:7500(N3)80/90:10.6/11.1
- BOLLARD HEIGHT** 1000mm approximately
- BOLLARD DIAMETER** Sparta 48: 219mm  
Sparta 80: 273mm
- FOUNDATION DEPTH** Sparta 48: 600mm  
Sparta 80: 800mm
- FINISH OPTIONS** Bollard with galvanised & painted finish  
Bollard (mild steel & painted) with Grade 316 stainless steel cover  
LED Lighting, various bespoke cover options available



HEALD'S SPARTA STATIC BOLLARD SERIES OFFERS SIMPLE AND AFFORDABLE PAS68 TESTED SECURITY SUITABLE FOR A WIDE RANGE OF LOCATIONS.

Available in two security levels, the Sparta provides a low-cost solution for sites where depth of excavation is not an issue. This product can be installed as a standalone unit, with an extended foundation, or within an array of unlimited size. The bollards are flexible to suit any arrangement including curves, corners and gradients, making a useful solution for perimeter security.

With a range of bespoke covers, these bollards seamlessly blend in with the surrounding architecture providing protection for both historic and modern locations.

The Sparta range has been PAS68 tested with an N2 vehicle at 48kph (30mph) and with an N3 vehicle at 80kph (50mph), for maximum security sites. During both tests the vehicle was successfully halted and the bollard remained intact for continued site security.

- SPARTA 48 & 80**
- Sparta 80 has been crash tested to halt an N3 vehicle travelling at 80 kph (50 mph)
  - Sparta 48 has been crash tested to halt an N2 vehicle travelling at 48 kph (30 mph)
  - Affordable crash tested bollard
  - Stylish stainless steel covers
  - Variety of bespoke covers and finishes available
  - Standalone bollard or part of an array
  - Standard depth bollard





# Viper

Shallow Mount Security



Location: Singapore

- PERFORMANCE RATING**  
PAS68:2010 V/7500[N3]/80/90:0.0/24.6  
ASTM 2656-07 M50:P1.
- ROADBLOCKER HEIGHT** 1050mm
- ROADBLOCKER WIDTH** 3000mm - will secure an opening of up to 5400mm. (Alternative widths available)
- FOUNDATION DEPTH** 400mm (500mm for EM)
- NORMAL RAISE SPEED** 6 seconds approximately
- EFO SPEED** 1.5 seconds approximately
- OPERATION** Hydraulic or Electro-Mechanical
- FINISH** Galvanised and painted Yellow and Black
- OPTIONS** Emergency Fast Operation (EFO), LED lighting, bespoke colour options, small battery back-up (Hydraulic only), traffic lights, anti-Slip coating and various access control options



Bespoke finish: red & white chevrons

HEALD'S VIPER SHALLOW MOUNT ROADBLOCKER IS AN IMPOSING SECURITY BARRIER OFFERING MAXIMUM PROTECTION DESPITE IT'S SHALLOW FOUNDATION.

The Viper provides an excellent, reliable solution for high security locations, with installations at government and military sites globally. This solution is designed to provide a high visibility, clear deterrent to protect the site from unauthorised access of any vehicle.

Dual tested to both UK and US standards, the Viper is proven to provide maximum protection with zero penetration on impact of up to 80kph (50mph). After impact the product continued to function, maintaining site access and protection from secondary attacks.

The unique design of the Viper includes a sacrificial safety skirt to protect the internal components and reduce trap hazards associated with an open wedge barrier. The skirt is designed for easy access for maintenance and reduced debris build up, with a smooth and quiet operation.

The Viper is available with hydraulic or electro-mechanical operation, depending on your site requirements. The new electro-mechanical model has many environmental advantages including no requirement for hydraulic oil or large power packs.

The system is fast and simple to install, with a foundation depth of only 400mm (500mm for EM) and no requirements for additional concrete reinforcement or pre-cast pit. For ease of installation, the Viper comes with integral levelling feet and rebar fitting kit.

VIPER

- Zero penetration providing maximum standoff distance
- Dual tested to PAS68 and ASTM at 80kph (50mph)
- Operated after impact maintaining emergency services access and continued protection
- Proven reliability (Independent 200,000 cycle test report)
- Fast and simple installation with levelling feet and rebar fitting kit
- Sacrificial Safety Skirt, which can be easily repaired in the event of an impact
- Quiet operation and minimal noise pollution, due to smooth operation
- Unique design ensures easy access for maintenance
- No pre-cast pit required
- Shallow foundation makes this a suitable solution for sites with underground utilities or structures
- Biodegradable oil options available upon request
- Electro-Mechanical operation available with environmental benefits, including no hydraulic oil or noisy HPU



Location: Australia



# Commander

Deep Mount Security



Location: UK

- PERFORMANCE RATING**  
PAS68: V/30000[N3]/80/90:0.0/6.85  
USA DOS K12.
- ROADBLOCKER HEIGHT** 1165mm
- ROADBLOCKER WIDTH** 4000mm - will secure an opening of up to 6400mm.  
(Alternative widths available)
- FOUNDATION DEPTH** 1500mm
- NORMAL RAISE SPEED** 6 seconds approximately
- EFO SPEED** 1.5 seconds approximately
- OPERATION** Hydraulic
- FINISH** Galvanised and painted Yellow and Black
- OPTIONS** Emergency Fast Operation (EFO), LED front radius lights, high security lock out valve, anti-sever burst valves, bespoke colour options, traffic lights, Anti-Slip coating and various access control options



Location: UK

HEALD'S COMMANDER ROADBLOCKER PROVIDES THE ULTIMATE PERIMETER PROTECTION. IT IS THE WORLD'S ONLY ROADBLOCKER SECURITY BARRIER PAS68 TESTED TO STOP A 30 TONNE TRUCK TRAVELLING AT 80 KPH (50 MPH).

This is officially the highest ever impact energy test successfully undertaken on a Roadblocker security barrier. It achieved a zero penetration result and remained fully operational afterwards. The Commander is intended for sites requiring the highest protection, including Military sites and Government buildings.

Standing 1165 mm above the ground and presenting an imposing barrier to unauthorised vehicles, there is simply no alternative if you require the very highest level of security.

The Commander is designed to the same high standard as the Heald Roadblocker, with low maintenance, providing a low cost whole of life solution. The product is fast and simple to install, with an integral base and no requirement for additional rebar or a pre-cast pit.

For sites that require a high security Roadblocker without the maximum security of the Commander, Heald also offer the PAS68 Roadblocker.

## COMMANDER

- World's only PAS68 30 tonne tested road blocker
- Zero penetration, maintains maximum stand off distance
- Operated after impact maintaining emergency services access and continued protection
- Sacrificial front radius plate design ensures operation and protection of site after impact
- Strongest in class, best performing product of its kind, ensuring peace of mind
- High reliability with installations in operation for over 20 years
- Quiet operation with minimal noise pollution
- Quick and easy installation with no reinforcement of concrete required



Location: Middle East



# PAS68 Roadblocker

Deep Mount Security



Location: Factory, UK

- PERFORMANCE RATING**  
880: PAS68: V/7500[N2]/80/90:0/25. Also N3 tested.  
1200: PAS68: V/7500(N3)/80/90:0.0/14.3  
USA DOS K12
- ROADBLOCKER HEIGHT** 880mm and 1200mm (dependent on specification)
- ROADBLOCKER WIDTH** 4000mm - will secure an opening of up to 6400mm.  
(Alternative widths available)
- FOUNDATION DEPTH** 1180mm (880mm) or 1500mm (1200mm)
- NORMAL RAISE SPEED** 6 seconds approximately
- EFO SPEED** 1.5 seconds approximately
- FINISH** Galvanised and painted with Black and Yellow chevrons
- OPTIONS** Bespoke colour options, LED front radius lights, lockable inspection cover, Emergency Fast Operation (EFO), traffic lights, anti-Slip coating and various access control options.



Location: Loading bay, UK

HEALD’S ROADBLOCKER RANGE HAS PROVEN RELIABILITY AS A HIGH PROFILE SECURITY SOLUTION, WITH PRODUCTS INSTALLED ON SITES FOR OVER 20 YEARS.

The Roadblocker provides a simple, reliable security solution for controlled vehicle access. This is an ideal solution for sites that require a high usage barrier such as loading bays, site entrances and car parks. As standard the barrier is finished yellow and black to provide a highly visible deterrent.

Heald’s 880mm and 1200mm raise Roadblockers have been PAS68 tested to 80kph (50mph) with zero penetration. Both products continued to operate after impact for continued protection, with a sacrificial front plate for easy replacement.

The Roadblocker requires low maintenance, providing a low cost whole of life solution. The product is fast and simple to install, with an integral base and no requirement for additional rebar or a pre-cast pit.

For sites that require the visual deterrent of a Roadblocker without the high security rating, Heald also offer a range of Anti-Vandal Roadblockers.

## PAS68 ROADBLOCKER

- Zero penetration, maintains maximum stand off distance
- Tested to PAS68 and US K12 standards
- Operated after impact, maintaining emergency services access and continued protection
- Sacrificial front radius plate design, ensures operation and protection of site after impact
- Proven reliability with installations in operation for over 20 years
- Quick and easy installation with no pre-cast pit or rebar required
- Quiet operation with minimal noise pollution

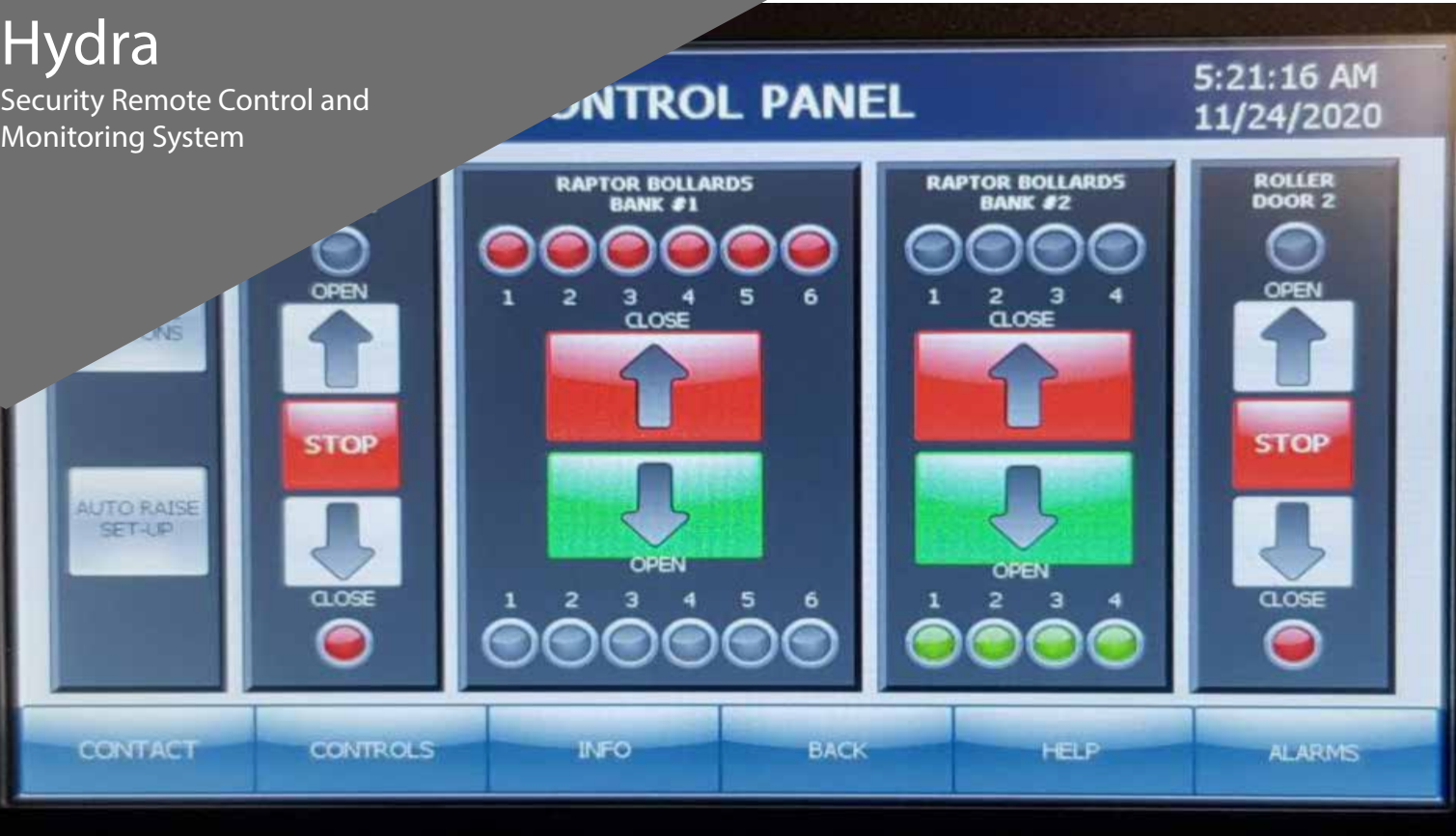


Location: Finland



# Hydra

Security Remote Control and Monitoring System



## HYDRA OPTIONS

**SIZES** Screens available in 7", 10", 12", 15" & 21"

**CONTROLS** Various control options available to suit operational requirements, including:

- Manual Open/Close
- Automated Open/Close
- Enable/Disable Automated/Manual operation
- Enable/Disable operation as a bank or as an individual product

**FEEDBACK** Product Status  
Fault & Alarms  
Datalogging (including fault and operational history)

**FINISH** High quality, industrial screen which can be provided as a standalone touchscreen or integrated within a desk mounted console



HEALD'S HYDRA IS A BESPOKE ACCESS CONTROL AND MONITORING SYSTEM DESIGNED TO SIMPLIFY AND STREAMLINE INTERACTION WITH HEALD AUTOMATED ROADBLOCKERS AND BOLLARDS.

Hydra provides control of individual or multiple products from a secure location. These can be operated across a number of vehicle access points, with systems working either in banks or independently from one console. This product can integrate with any Heald automated product, providing a single control point for all of the site's vehicle security barriers.

In addition to controlled site access, Hydra monitors each product to provide a continuous record for each system including status feedback and alarms.

As a manned security option, this enables selective authorised entry and exit for high security sites from within the protective perimeter of the site or building. For additional security, or VIP access, Hydra can be used in conjunction with various other access control systems, for multi-layered security.



## HYDRA

- Intelligent remote control and monitoring system gives unprecedented levels of interaction
- Interactive computer display, ideal for secure command and control room installation
- Strictly supervised access control to maintain physical authorisation of high security sites
- Suitable for use as either a wired connection through data cables or fibre; or as remote access via 4G or 5G
- Provides a bespoke solution for access control to suit the specific site requirements
- Highly secure, streamlined interface, allows authorised users to securely operate and monitor multiple entrance points
- Full monitoring of the product's status and operation to provide remote operation and scheduled management of the system
- Available as an option with any Heald automated product
- Hydra can be integrated alongside other access control systems for higher security
- User accounts available to provide restricted access to confidential information





# Traffic Control

Traffic Control Products



Heald offer a range of Automated and Manual Traffic control barriers, roadblockers and bollards, ideal for traffic management.

For further information please contact our sales team, [sales@heald.uk.com](mailto:sales@heald.uk.com)

## ARM BARRIERS

### AUTOMATED ARM BARRIER

Standard barrier lengths 3.0m – 6.0m

Heavy Duty barrier lengths 3.0m – 8.0m

### MANUAL ARM BARRIER

Raising manual arm barrier lengths 3.0m – 8.0m

Swinging manual arm barrier lengths 3.0m – 9.0m



## BOLLARDS

### FIXED BOLLARD

Single bollard on a base plate, available in a range of sizes to suit requirement.

### TELESCOPIC BOLLARD

Round or square bollard that manually lowers into the ground, and is secured in place using an integral lock.

Available at a raised height of 670mm or 850mm

### FOLD DOWN BOLLARD

Manually folding bollard on the base plate.

Height: 640mm



## ROADBLOCKERS

### ANTI VANDAL ROADBLOCKERS

This product provides a heavy duty access control solution for sites that do not require the high security of the PAS68 Roadblocker.

WIDTH: Available in widths 2.0m – 5.0m

HEIGHT: 340mm, 540mm, 650mm, 800mm



### SURFACE MOUNT MINI VIPER

Available with ramps and handrails, this Roadblocker can be completely surface mounted (or recessed), providing an excellent solution for underground or multistorey car parks for authorised access.

DIMENSIONS: 2.6m wide x 340mm raise

(alternative sizes available upon request)





# Installation, Maintenance & Servicing



Heald's team of expert engineers provide additional support for the full range of products, ensuring each system receives the best aftercare and is installed to meet the required specifications.

## Services provided include:

- Installation
- Commissioning
- Product Training
- Maintenance
- Repairs
- Emergency call outs



## MAINTENANCE

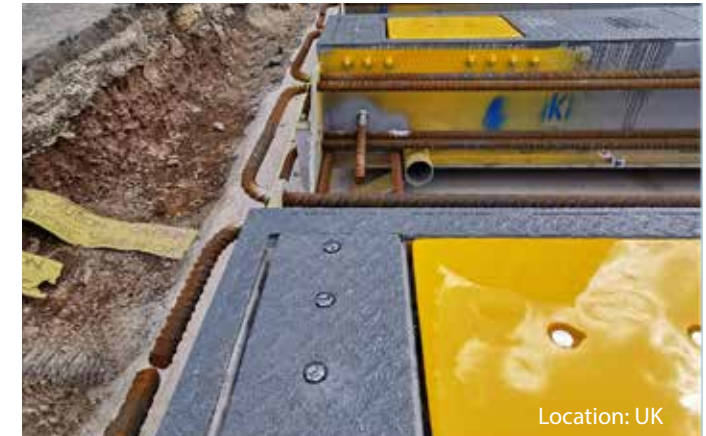
Regular servicing and maintenance is essential to ensure product longevity. By carrying out preventative maintenance, parts can be replaced to protect against excessive wear and mitigate against product downtime, providing continued site protection when required most.

By maintaining your product through Heald you will maximise the product's lifespan. Well maintained products have been installed at locations for over 20 years, and continue to operate at optimum functionality.

As every site is unique, Heald offer bespoke maintenance packages to suit the site conditions and your operational requirements.

Heald has a team of expert engineers to provide remote support, technical advice, and onsite assistance. This team specialise in Heald's unique product range, with regular in house training to ensure a first class service.

For additional information please contact Heald at [sales@heald.uk.com](mailto:sales@heald.uk.com).





# Distribution of Products

## GLOBAL DISTRIBUTION

Export accounts for approximately 70% of all Heald’s product sales, with installations at world renowned locations including the French Quarter in New Orleans, Australia’s Gold Coast, Dubai Expo 2020, in addition to many high security governmental and military sites globally.

For two consecutive years, Heald have been named as one of Yorkshires’ DIT export champions due to the company’s commitment to exporting British manufactured products and work within the exporting community.



Matador, Brisbane, Australia

Matador, Memphis, USA

## DISTRIBUTORS

Heald work with a network of global distribution partners, providing support across Europe, North America, Northern Africa, Middle East, South East Asia and Australia.

Our distributors receive continuous product training to ensure that they have the most up to date information about our full range of products. They are equipped with teams of approved installation and maintenance engineers, in addition to knowledgeable sales teams, to provide the same high quality turnkey service to all customers.



## DISTRIBUTOR OF THE YEAR AWARD

Each partner that works alongside Heald shares the same passion for our unique award-winning products and desire for excellent customer service.

To celebrate their contribution to the development of the company, Heald created the Distributor of the Year award. Starting in 2018 due to a record breaking sale from our partners in the Middle East, this award is now presented annually to the company with the highest product sales.

Heald are thankful to all of our distributors for their continued support and hard work. If you are interested in joining our team of distributors, please contact Heald for more information.



Matadors, Mainz, Germany

Vipers, Singapore



2018: Roadblockers in the Middle East



2019: Matadors at Avinor Airports, Norway



2020: Raptors in New York City



2021: First EVO install in USA



IT IS OUR MISSION TO CONTINUE TO INNOVATE  
AND CREATE QUALITY SUSTAINABLE SECURITY  
SOLUTIONS FOR A SAFER WORLD.



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