

MAMBA

Remote CW Access System

The Challenge – to build a single system that could:

- Remotely access CWAs in sealed containers safely
- Offer complete system solution - access, sample, neutralise
- Be small & light enough to be carried in a small rucksack
- Offer a cost effective solution

The Valent Mamba product range offers the world's first lightweight, remotely controlled system for the investigation and disposal of CBRN hazards.

After 18 months R&D effort Valent has squeezed a huge amount of capability into a very small device. 20 years of experience and knowledge has gone into incorporating the best ideas from previous work into a single system.

The system has been designed to offer the user:

- **Reusability** - to keep costs down reusable components are utilised as much as possible.
- **Safe Operation** - the access and all subsequent operations are completely sealed at all times.
- **Remote Operation** - the system can be operated from up to 20m away from the target
- **Multi-role** - targets can be sampled then emptied or backflushed through the same access point.
- **Modularity** - different baseplates allow the maximum number of targets to be attacked.

User Configured. Users are able to configure the Mamba system depending on their requirements and budget.

Lightweight Reusable DH:

- Extremely efficient
- Less than 2.5kg in weight
- Simple, quick couple onto baseplate

Remote Operation:

- Remote stand-off of up to 20m
- Simple hand controller

Empty & Sample ports:

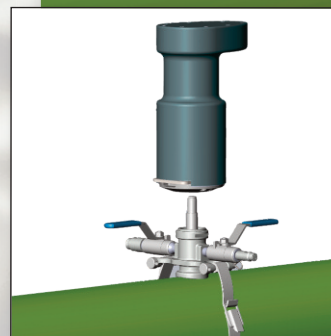
- Flow rate of up to 5 l/min
- Agnostic connection end

Sealed base-plate:

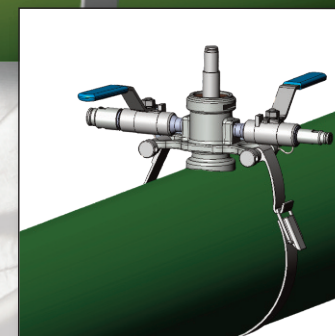
- Tgt thickness up to 16mm depth
- Test seal integrity prior to drilling
- Target pressures up to 150psi

Simple to use attachment mechanism:

- Tgt diameters: 120 to 880mm
- Quick to set up and install



DH clips onto baseplate – no tools required



After drilling DH removed leaving sealed baseplate for sampling or emptying



World leader in the development and manufacture of invasive technology

Drilling Chemical Weapons for a living since 2000...

Valent is the world leader in the development and deployment of invasive technology for the investigation and disposal of wide range of targets in the CBRN, Hazmat and decommissioning environments. Our experience is built on nearly two decades of inventing, manufacturing, supplying and training some of the leading organisations involved in the investigation and removal of hazardous materials. Invasive technology offers the ability to drill through the outer wall of a target without allowing the hazardous internal contents to escape. The technology allows for investigative and disposal procedures to be carried out whilst preventing any leakage.

Valent first developed equipment in this area in 2000. Since then our systems have been used by the military globally and with international organisations such as OPCW, UNMOVIC and UNOPS in the investigation and disposal of CW hazards. In addition Valent has developed bespoke solutions for other organisations for hazmat and toxic industrial chemical (TIC) operations.

Valent is also very experienced in the integration of its equipment in systems for defence and civilian markets. Projects have included remote access systems for civil nuclear decommissioning; disposing of missile fuel systems and working with industry partners to solve to hazardous challenges worldwide. Over 60% of Valent's work in R&D, creating bespoke engineering solution. Although only a small company we are experienced in the execution of innovative projects from concept, through to field deployment and operator training.

Our work has been recognised with a number of awards including the Queens Award for Innovation in 2006 and the UK HMG Chief Scientific Advisers Award for exceptional service in 2016.

Valent Applications Current Invasive Systems

Monica Remote Case Entry System. Flagship system, field proven with extensive capabilities for the sampling and neutralisation of CBRN threats

Remote Ops: up to 500m	Tgt size - 90mm Ø to flat
Wall thickness - up to 20mm	Max pressure - 100psi
Max empty rate - 15l/min	System Weight - 40kg

Mamba Remote Case Entry System. Lightweight, modular stand-off system for sampling, emptying and neutralising CBRN threats

Remote Ops: up to 20m	Tgt size - 120mm to 880mm diameter
Wall thickness - up to 16mm	Max pressure - 150psi
Max empty rate - 5l/min	System Weight - under 5kg

Aardvark Case Entry System. Simple system designed to fit in a standard rucksack but still offer sampling and emptying capability

Remote Ops: None	Tgt size - 120mm to 880mm diameter
Wall thickness - up to 14mm	Max pressure - 150psi
Max empty rate - 15l/min	

Midas Sampling System. Hand held tool for the sampling of hazardous containers

Remote Ops: None	Tgt size - 90mm Ø to flat
Wall thickness - up to 8mm	Max pressure - 30 psi
Max empty rate - N/A	

