A new way of thinking about CBW Disposal.

Fast sampling & disposal using invasive technology

The MMIC Monica equipment is the first system to offer a complete solution for the disposal of CBW in conventional or improvised devices. Utilising innovative technology it is the only equipment capable of invasively interrogating any device without leakage into the surrounding environment. One seal penetration gives access for sampling, disposal or visual investigation - CBEOd has never been simpler.

100% Certainty

Most CBW threats will be deployed or stored in a sealed container but standard chemical agent monitors depend on an agent release into the environment for them to function. Non-invasive detection methods, such as neutron activation analysis will provide information on the elemental composition of materials but not direct evidence of their chemical structure. The only totally reliable technique for the analysis of the contents is to take a physical sample. Monica offers a field proven capability to sample and dispose of any chemical or biological threats, regardless of vessel without contaminating the environment.

Applications

- Conventional CBW or CBIED sampling and disposal.
- Sampling of any chem/bio agents or TICs. Gas, liquid or powder.
- In-situ decontamination or neutralisation without agent release.
- Separation of agent and explosive elements.
- Further investigation using endoscopes or other devices.
4 Step Operational Sequence

Step 1 - Attach
Using Monica’s unique vacuum system the drilling head can be attached to any diameter of target regardless of shape or surface condition. An experienced operator can fix Monica in less than 30 seconds after arrival. The drilling head has no significant EM or RF signature.

Step 2 - Drill
Monica’s innovative drilling system can drill any metal (including stainless steel) or plastic in under 2 minutes. The compressed air motor cools the probe and target surface as it drills. The whole operation can be competed from up to 500m away with simple controls which provide feedback to the operator.

Step 3 - Sample
The MMIC sampling system can extract a sample of any known agent in gas, liquid or powder form. Drip free seals ensure no agent is released. Once sampled the syringe contents can be analysed quickly by Raman spectroscopy. The result can be double checked using GCMS on the physical sample if required.

Step 4 - Dispose
Using the same penetration for the sample, the agent can be pumped from the target for disposal using the MMIC MATS system. Alternatively decontaminant can be pumped into the target for in-situ disposal. The system can handle even the most viscous substances.

Performance Data

<table>
<thead>
<tr>
<th>Performance</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>1hp compressed air motor</td>
</tr>
<tr>
<td>Materials</td>
<td>All metals, composites, plastics &amp; wood</td>
</tr>
<tr>
<td>Agents</td>
<td>All, including powders and viscous liquids</td>
</tr>
<tr>
<td>Target Dimensions</td>
<td>Wall Thickness: 1.6mm to 20mm</td>
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<tr>
<td></td>
<td>Diameter: 75mm to flat plate</td>
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<tr>
<td>Target attachment</td>
<td>Flexible, vacuum feet</td>
</tr>
<tr>
<td>Max Internal Pressure</td>
<td>120psi</td>
</tr>
<tr>
<td>Drilling Time</td>
<td>1 to 3 minutes</td>
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</tbody>
</table>

Advantages

- **Fast** - Disposal under 20 minutes from arrival.
- **Simple** - Designed to be used intuitively in full NBC protective clothing.
- **Portable** - Can be easily carried by 2 man-team.
- **Safe** - System ensures no agent release in the event of a power failure.

Complete Sealed Solution.

The equipment is designed to insert a gas-tight self-sealing probe through the target casing. It can deal with a wide range of materials including metal and plastics over a considerable range of wall thickness. Once installed the probe gives fully sealed access for sampling, extraction and in-situ neutralisation of the contents.

Power is supplied by compressed air from standard SCBA cylinders making the system man-portable. It can be deployed by a 2 man team in under 5 minutes.

Current Users of the Monica System.

- UK MoD Dstl
- UK SIBCRA team
- US Army
- US ECBC
- SWEDEC
- Australian IRR
- Classified Users

Further Information.

More information can be found at www.mmic-eod.co.uk or contact us as mail@mmic-eod.co.uk