

## **EIM TECHNOLOGIES PTY LTD**

EIM Technologies, under the umbrella of EIM Research, has a philosophy of innovation, design and manufacture of world class environmental protection and pollution abatement equipment, as well as other efficiency improved products for industry and domestic use.

We constantly strive for technical excellence and efficiency in every piece of equipment we make, and for us, continuous product improvement is a way of life, "Good enough is never good enough". We start with an innovative design or concept, then with the aid of skilled engineers and artisans using only the highest quality materials, we maximise all potentials to make our equipment the best it can possibly be.

In our short history, we have patented two (2) ground-breaking and innovative inventions which will have a beneficial global impact on the environment, as well as providing significant savings or operational benefits for industry and individual consumers alike.

## MONTREAL PROTOCOL

The Montreal Protocol is considered to be the most successful global environmental treaty with all 197 member countries (every country in the world) committed to eliminating the anthropogenic related causes of Ozone Layer Depletion.

The GDU is the only Methyl bromide destruction technology approved by the Montreal Protocol as being capable of meeting and exceeding their 99.99% minimum destruction efficiency.

The GDU is not only capable of destroying the most potent Ozone Depleting Substances (ODS), but also is capable of destroyin.

.g the most potent Global Warming Gases (GWG), as well as a huge range of Volatile Organic Compounds (VOC's) that are of environmental or human health concern.

In Summary, the EIM Technologies Gas Destruction Unit (GDU) is as much an example of our commitment to environmental protection and pollution abatement, as it is to the innovation, design and manufacture of world class leading, technically superior equipment

GDU GENERAL DESCRIPTION

The EIM Gas Destruction Unit (GDU) is a fully automated, intrinsically safe, single pass, single or multi gas destruction system for the capture and destruction of toxic or environmentally damaging gases or vapours, and has the following features:

- The GDU utilizes an extremely effective combination of sequential oxidation processes to destroy the Methyl bromide gas, which is then converted into a harmless salt by chemical reaction within the liquid based scrubber
- All components of the air entering the GDU pass through a series of no less than 7 specialized filters before exiting the machine, thereby ensuring consistency of process and emissions.
- The EIM Gas Destruction Unit (GDU), is the only technology in existence that has been proven to exceed
  Montreal Protocol Destruction Technology requirements for Methyl bromide, and as such has been accepted
  as an approved destruction technology.
- GDU test results based on high resolution Gas Chromatography / Mass Spectrometer analysis, prove the GDU destroys between 99.99 100% of the target gases and their extremely toxic by-product gases.
- GDU operations and performance are computer controlled, and cannot be hacked, by-passed or compromised in any way.
- The GDU has its own custom built high quality gas sensor array that measures and controls all incoming and outgoing gas concentrations.
- The GDU is suitable for even the largest scale fumigations in single or multiple configurations with single machine capacities ranging from 7.200m3/day to 27,000m3/day, with larger capacity machines available on a special build basis.
- The GDU utilizes a single pass scrubbing system which does not require gas recirculation, so it cannot contaminate or spoil fumigated and or perishable goods through the introduction of scrubber sourced moisture or odours, and importantly,
- The GDU scrubbing process by-products consist of harmless salt brines that will not interfere with the microbial functions of a sewerage system.

## FEATURES

- · Substantial operational cost savings compared to other capture and or destruction technologies.
- Very low cost consumables utilized.
- · Global equipment back up and support systems, featuring major componentry with "plug and play" simplicity reduces downtime and provides substantial cost and time savings.
- · Safe to use in workplaces, ports, densely populated and or environmentally sensitive areas.
- · Montreal Protocol destruction credits available for gas destroyed using this technology.
- Opens up opportunities to establish or expand import / export related trade and businesses.
- GDU also has biosecurity, civil and or military defence applications.
- Verified Technology -Accredited lab details 99.99 100% destruction of the target gases and toxic byproducts.
- Automated Fail-Safe Operation.
- Remote control and monitoring functionality available on laptop or "dashboard" monitoring access on smartphone / tablet.
- · Auto alarm notification system via email or text.
- · Single & Multi-gas Units available.
- · Fixed or transportable (skid, trailer or truck mounted) configurations.
- · Full performance data logging, archiving and web portal based access worldwide.
- Secure, destruction processes cannot intentionally or unintentionally be compromised or by-passed.
- Utilizes an efficient Single Pass Destruction process which cannot spoil of damage fumigated goods / produce through the introduction of scrubber originated moisture or odours
- through the introduction of scrubber originated moisture or odours.
  Does not does utilize time, energy wasting and inefficient re-circulation as a means to improve destruction
- Ease of by-product disposal, the scrubbing solution is sewerage admissible, will not inhibit microbial activity of sewerage system and does not require costly disposal by incineration or deep burial.





## **MEETING OUR EXPECTATIONS**

We all desire to leave our children the legacy of a cleaner, safer atmosphere, workplace and environment than we found it. The EIM Technologies GDU meets Environmental Protection Agencies (EPA's), International and domestic Quarantine / Agricultural Authorities, Non-Government Environmental Organisations (NGO's) and community expectations for the control and elimination of toxic gas emissions into the atmosphere, and is the only commercially available product capable of meeting current and newly proposed reductions for Maximum Residue Levels (MRL's) and Occupational Workplace Safety exposure levels.

The GDU can be used in a variety of industries and markets including, but not limited to:

- Quarantine
- Customs
- Agriculture / Horticulture (commodity treatments hay, logs, tobacco, grains, fruit, flowers)
- Refrigeration
- Electronics manufacture
- Pest Control
- Port Operators (general / containerised)
- Maritime Transport (in-transit fumigations)
- Importers
- Exporters
- Hospitals (sterilant gas destruction)
- Emergency Services (degassing of structures etc)
- Civil Defence (Anthrax, nerve gas destruction)



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