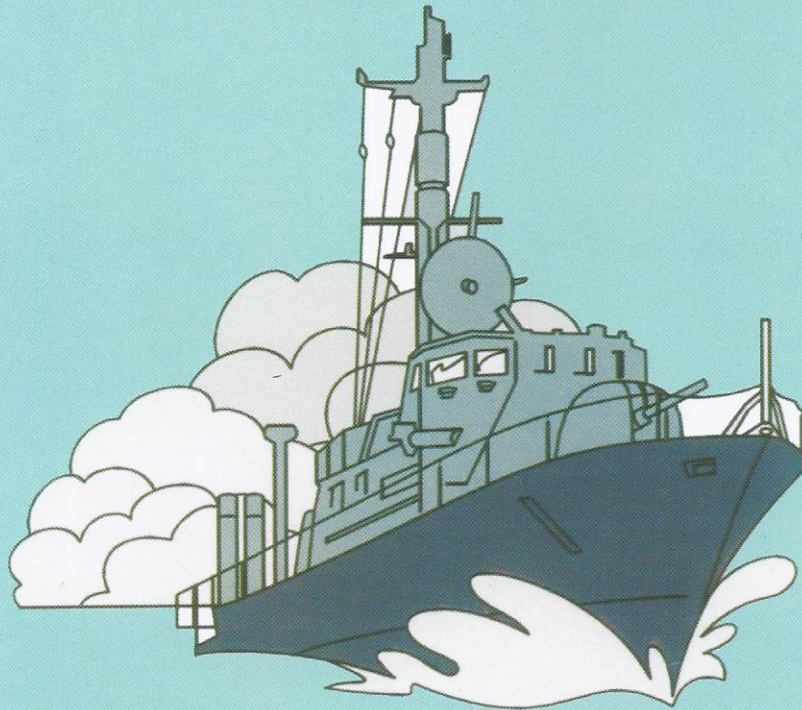


SHIPBOARD INCINERATORS



Burning To Stay On-Course



McClelland

Incineration

Technologies

ISO 9001:2008

McClelland Engineers Pvt. Ltd.

7th Floor, Vindhya Commercial Complex,

Sector XI, C.B.D., Belapur,

Navi Mumbai-400 614., INDIA.

Tel: (+91-22) 2757 6661, 2757 6662, 2757 2405

Fax: (+91-22) 2757 6663

E-mail : mcepl@vsnl.com

www.mcclellandincinerators.com

Incineration

The most efficient, hygienic end to waste

THE INCINERATION OPTION

Incineration as a method of waste removal is considered the best technology to put away solid/sludge waste with minimal social & environmental implications. In this method, waste reduction is the ultimate goal. An effective Incineration technology is one where waste material is efficiently combusted to ash, that is acceptable for disposal at land or sea, while assuring that exhaust gases be likewise dispersed without harm to environment.

McClelland have over a period of 20 years been able to combine effective incineration technology with superior fabrication and technical skills to be able to offer **state-of-the-art Incineration Systems** for varied applications at large. Shipboard Incinerator Systems represent the culmination of these skills honed over the years to offer the best world standard technology at Indian prices.

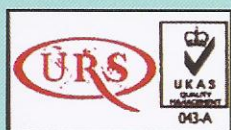
THE INCINERATOR

The **McClelland Shipboard** incinerators provide shipping companies compliance with the requirements of **ANNEX V of MARPOL 73/78** regulations, meant to ensure lesser pollution to the world oceans and a cleaner environment.

While the design and specifications of the shipboard incinerator can be tuned as per ship type and capacity, standard incinerator features include-

HIGH EFFICIENCY
HIGH CAPACITY
SAFE OPERATION
ROBUST, COMPACT DESIGN
EASY CONTROL
EASE OF MAINTENANCE

**MEETS
IMO
&
MARPOL
STANDARD**



Specification are subject to change from time to time to incorporate the gains of in house R&D.

WASTE TYPES HANDLED

Shipboard Incinerators are designed to handle all types of waste generated during sea travel. They include -

- Plastics-Synthetic ropes, fishing nets and plastic bags.
- Floating drainage, lining and Packing material. Paper, rags, glass, metal, bottles, crockery & similar refuse.
- Food waste, Mixed refuse types.
- Sludge Oil consisting of 75% sludge oil from heavy fuel oil, 5% waste lubricating oil, 20% emulsified water.
- Class 2 Solid waste consisting of 50% food waste, 50% rubbish (approx. 30% paper, 40% cardboard, 10% rags, 20% plastic). (Common type of refuse found in passenger ships)

THE INCINERATION PROCESS

McClelland Shipboard Incinerators are available as complete units or pre-fabricated kits, designed for easy & quick installation.

A typical shipboard incinerator consists of the following units:

- **Combustion Chamber**
- **Fuel firing System**
- **Liquid waste burner**
- **Waste charging door**
- **Combustion air/eductor fan**
- **Control panel**
- **Flue gas stack**
- **Ash door**

THE SYSTEMS RANGE

Shipboard incinerators are available for a wide range of Ship types and sizes, from waste capacities ranging from **10 kg/hr to 100 kg/hr.**

Model	Capacity Kg/hr		Ship Population (No)	Thermal Capacity Kcal/hr
	Solid	Oil Sludge		
MEPL/S/10	10	5	30	6 x 10 ⁴
MEPL/S/25	25	10	60	13 x 10 ⁴
MEPL/S/50	50	20	120	30 x 10 ⁴
MEPL/S/75	75	30	180	40 x 10 ⁴
MEPL/S/100	100	40	240	60 x 10 ⁴

Intermediate and higher capacity models are available on request.