

**CHALLENGE**

Comply with MARPOL Annex V requirements on newbuild vessels in the most cost effective manner, and provide global support to ensure uninterrupted operations.

**SOLUTION**

Test ENVIRO-PAK Model H2 stainless steel compactor on existing tanker without compactor system; strategically position consumables at ENVIRO-PAK global facilities.

**RESULT**

MARPOL compliance was achieved with 80 to 90% reduction in operating expenses, leading to installation on all four newbuilds. Fleet support was provided with consumable stock strategically located in key operating areas.



Hoover Ferguson Enviro-Pak products meet and exceed International IMO MARPOL 73/78 Annex V. The maritime environmental regulation IMO Marpol 73/78 Annex V deals with different types of garbage such as food and galley waste, dry waste, dangerous waste, and specifies the distances from land and the manner in which it can be disposed. The most important feature of the Annex is the complete ban imposed on the disposal into the sea of all forms of plastics.

**H SERIES BALING COMPACTORS** *Solid Waste Compaction and Baling*

# Newbuild Tanker Fleet Cuts Costs and Meets Special MARPOL Compliance with Model H2 Compactors

Global operations supported with strategically located consumable stock

**APPLICATION**

Compaction and Baling,  
Crude Oil Tanker Fleet

**Application Summary**

A EU based shipowner was expanding their fleet with four newbuild Suezmax crude oil tankers. The vessels were the first in the fleet to be built to new MARPOL Annex V requirements, which prohibit and restrict waste discharge from ships into coastal waters and special areas. The primary operating regions of these ships were in these areas, where OPEX waste disposal costs average 35€ (approximately US\$39) per cubic meter. In these areas, where charter rates are very competitive, it was necessary to reduce OPEX cost as much as possible while meeting MARPOL requirements and environmental stewardship objectives.

The shipping company elected to test a Model H2 stainless steel compactor on board an existing vessel without an existing system. A customer-required electrical system was installed for service on the tanker.

Operation of the Model H2 compaction and baling equipment significantly reduced waste volume to cut disposal costs by approximately 90%. The successful test resulted in installation of H2 balers on the four newbuild tankers. Global operations were supported by strategically positioning consumable stock at select ENVIRO-PAK facilities.

The H2 Model is a 0.2 m<sup>3</sup> (6 ft<sup>3</sup>) capacity compactor. The unit provides the smallest footprint (0.5 m<sup>2</sup>/6 ft<sup>2</sup>) in the H Series family. The series offers capacities as large 1 m<sup>3</sup> (36 ft<sup>3</sup>) with compaction force up to 27216 kg (60,000 lb). The ABS approved, MARPOL compliant H Series compacts and bales paper, cardboard and plastic bottles to significantly reduce waste volume and lower disposal costs.



### Marine Green Series Compactors

- Segregate and compact solid waste materials into wheeled carts for recycling and convenience
- Enclosed structure for compaction operations
- Positive lock-in restraint system secures cart into compactor or to bulkhead
- Cart door with latch engineered for gradual release
- No ramps needed for placement and removal of carts
- No compaction force on the wheels
- Bags manufactured to a 5:1 safety ratio
- ABS approved
- MARPOL compliant
- Patent Pending



### H Series Compactors

- 100% stainless steel structure
- Compacts all types of non-hazardous waste
- Component parts are sand blasted and painted
- Door with latch engineered for gradual release
- Bags manufactured to a 5:1 safety ratio
- Air or electric operation
- Baling capabilities available upon request
- Improve shipboard incinerator efficiency and reduce operating time by compacting waste prior to incineration
- ABS approved
- Meets and exceeds International MARPOL 73/78 Annex V
- Patent Pending



### S05ES Stainless Steel Food Grinders

- 316 stainless steel
- No cast aluminum used in design
- Processes food waste into shreds of 6.3mm or less (less than 1/4" shreds)
- Custom capacity options available
- Can be installed indoors or outdoors
- Restaurant food waste can be ground and discharged in a sewer system reducing handling and disposal fees
- Safety switch on lid to prevent injury
- ABS approved
- Meets and exceeds International MARPOL 73/78 Annex V