

ELASTEC

SmartAsh

Portable Incinerator
Technical Description



McGill Arctic Research Station (MARS)



Oil Spill Equipment | Floating Barriers | Incinerators

Product Introduction

SmartAsh® cyclonic barrel burner is an innovative portable incinerator that meets EPA requirements* for burning non-hazardous refuse. Simply load a 55 gal / 208 Litre open top steel drum (with removable lid/head), light the load and clamp on the lid. A whirlwind of fire and intense heat is created inside the drum by the integrated electric air blowers, burning waste without smoke or smell. Once combustion is complete, only 3% ash remains.

The SmartAsh mobile incinerator is ideal for remote locations with limited facilities for disposing of waste, such as mining, military, camps, expedition bases, and remote communities, etc. The optional Oil Away attachment can also be used to burn waste oils that may be hard to recycle in remote areas. It has also been found useful on board ships to minimize waste materials.

The SmartAsh mobile incinerator can be used with or without fuel. For dry loads that support combustion, SmartAsh incinerates waste with incredible efficiency. Simply light the fire, place the lid and turn up the blower to create an intense fire.

The optional OilAway Attachment (fuel injection) enables loads with a moisture content above 15% to be burnt. A pump delivers waste oils into the drum using a spray rail arrangement. If you have your own open top 55 gallon drum, the SmartAsh is available in a kit that can be shipped by parcel post and assembled on site. Alternatively we can supply the unit with drums (steel or stainless steel) ready to be put into use.

The SmartAsh family of products (Drug Terminator, Oil Away, SmartHeat) represent original patented designs that have been manufactured by Elastec for over 30 years. Available in 110V or 220 V models.

Applications

- Mining Camps
- Expeditionary Bases
- Remote Communities
- Police Departments
- Oil Spill Cleanup Operations
- Ship / Rig Waste
- Disaster Relief Operations
- Military Bases



Haughton Impact Crater, Devon Island Nunavut, Canadian Arctic



Areva Que Inc. Canada

Features

- Elevated Stand (Protects Floors from Heat)
- Airflow Controls
- Easily Removed Motor Covers
- Quick Access to Air Filters
- Stainless Steel Spark Screen
- Stir Port Cover
- Integral APC System
- Four Fast Lock Barrel Clamps that create a tighter seal on the drum (and prevent smoke emission)
- Stainless Steel Air Feed Hose
- Automatic Killswitch
- Shielded Electric Cord
- Shielded Wheels and Handle
- Weatherproof Toggle Switch
- Instructional Labels and Videos

List of Typical Burnables

Absorbent Types

- Cellulose Base Types
- Polypropylene & Cotton Mix
- Saw Dust
- Cotton
- Corn Cobs
- Peat Moss

Hydrocarbons (Using Oil Away)

- All Types of Crude Oils
- Used Motor Oils
- Lubricating Greases
- Diesel Fuels #1 & #2
- Jet Fuels (Flash Point Above 100°F)
- Waste Oils

Filters

- Spin-On and Cartridge Oil Filters from Cars, Trucks and Heavy Equipment
- Air Filters of All Types
- Poly & Fiberglass Filters
- Natural Gas Pipeline Filters (Glycol)

Paper Products

- Newspapers
- Cardboard
- Computer Paper
- Office Waste
- Sensitive Documents
- Fast Food Paper Waste

Wood Products

- Saw Dust
- Scrap at Construction Sites
- Shipping Pallets
- Tree Limbs & Leaves
- Any Type of Wood Product

Non-Hazardous

Medical Waste

- Linens
- Rags
- Wipes
- Masks

Misc.

- Clothing
- Oily Rags
- Gloves
- Packaging Material

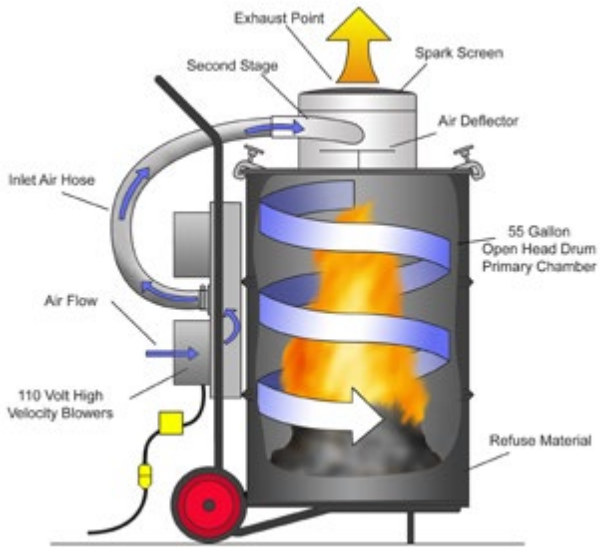
Plastics

This unit will incinerate a wide variety of plastics. The volatile emissions emitted by these types of material are not acceptable in the permitting requirements.

Incineration is a waste treatment process that involves the combustion of organic substances contained in waste materials. Incineration and other high-temperature waste treatment systems are described as “thermal treatment”. Incineration of waste materials converts the waste into ash, flue gas and heat. The ash is mostly formed by the inorganic constituents of the waste.



FV Pacific Breeze



Specification

Construction:	Heavy gauge stainless steel lid Powder coated steel frame Two Axial Vane Blowers - 110V or 220V Galvanized plenum & tool storage tray
Requires:	55 gallon / 200 litre open head drum (not included) ISO 15750 with outer bead of 597mm / 23 .5 inches
Height:	46 inch / 1.17 m
Floor Space:	36 x 26 inch / 0.91 x 0.66 m with drum
Weight:	96 lb / 44 kg without drum, 139 lb / 63 kg with steel drum (optional)
Average Burn Rate:	50 lb per hour / 22 kg per hour
Power Consumption:	110 volt - 12 amps - 1350 watts 220 volt - 6.8 amps - 1550 watts
Optional:	Steel or Stainless Steel Open Top Drum, Oil Away and Pump Unit, Spares Kit, SmartHeat

Emissions

The SmartAsh falls into the category of Cyclonic Barrel Burner covered by EPA Regulation 40 CFR Part 60 (Standards of Performance), exempted under section 60.2555. Always contact your regulatory authority before use.

Summary of Stack Sampling Tests;

Air Pollution Testing Inc, Colorado

Air Source Technologies, Kansas

Air Pollution Testing, Inc, Texas

Actual emissions will depend on a number of factors including waste type, volume of waste, moisture content, fuel used and local environmental conditions



Testimonials

Thousands of satisfied customers are currently using SmartAsh around the world to eliminate a wide variety of burnable waste materials. Elastec also manufactures the Drug Terminator which was designed for the elimination of evidence drugs and prescriptions collected at take-back programs.

Coastal Towing, Inc.

"My enthusiasm over your [SmartAsh] is overwhelming. It has been extremely effective in our waste management needs."

Manitoba Hydro

"The SmartAsh...has proven itself beyond a doubt. It reduces piles of greasy oily rags to mere cups of ash with no smoke..."

Stinson, Inc.

"Wow, was I surprised when I fired [SmartAsh] up. The cyclone effect of the flame inside the barrel reduced our waste to ash so completely I almost couldn't believe it and with no smoking."

Brittain Oilfield Services

"[Everyone was] so surprised at how the air injection system heats to high temperatures so fast, how clean it burns and the fact that it is portable is definitely an asset."

Optional Accessories

OIL AWAY

Oil Away is an option that allows the SmartAsh to burn waste oil or hard to burn/wet materials. It is delivered with an electrically operated dosing pump, delivery hose and spray rail that fits inside the drum.



Oil Away Flow Rate:
3-6 gallons per hour
11-22 liters per hour

Shipping with Oil Away attachment;
27 x 27 x 21 inch/ 0.69 x 0.69 x 0.53m 112lbs / 51kg
48 x 7 x 5 inch/ 1.22 x 0.18 x 0.13m 11lbs / 5kg

Shipping with Oil Away attachment and steel drum;
30 x 37 x 53 inch/ 0.76 x 0.94 x 1.35m 139lbs / 63kg
48 x 7 x 5 inch/ 1.22 x 0.18 x 0.13m 11lbs / 5kg

SMARTHEAT

The SmartHeat works in conjunction with the SmartAsh by capturing the heat being emitted by the incinerator and directing it into buildings using a blower unit.



DOCUMENT BURNER

Document Burner is a barrel insert used to destroy large quantities of paper. The frame creates a void that allows the burn to circulate through the paper.



BARREL

The SmartAsh works with ISO 15750 standard open top drums (55 Gallon / 208 Litre). We can supply drums with the unit in steel or stainless steel.



Optional Accessories

EASY-FEED LID & CARTRIDGE



The Easy Feed Cartridge allows operators to inject refuse into the barrel while the unit is in operation.

Unit has a full opening hinged door in the top lid assembly: Open measurement is 10x6 inches. The hinge is balanced to automatically close after injection.

The injection door is made from 1/4" Stainless Steel, creating a seal to prevent any leakage of heat or fire during use.

All other lid assembly parts are made from 11 gauge Stainless Steel.



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