

Mini-Turbex

Portable Foam Generator

Hi-Combat

Angus HI-COMBAT Mini-Turbex unit is a rapid deployment, first aid high expansion foam generator which produces up to 100 cubic metres (3,500 cu.ft) of foam bubbles per minute. This HI-COMBAT Mini-Turbex is capable of producing expansion ratios between 260-360:1. With special re-inforced smoke ducting, it can also be used for rapid smoke extraction (SX), positive pressure ventilation and removal of foam once the fire is extinguished.

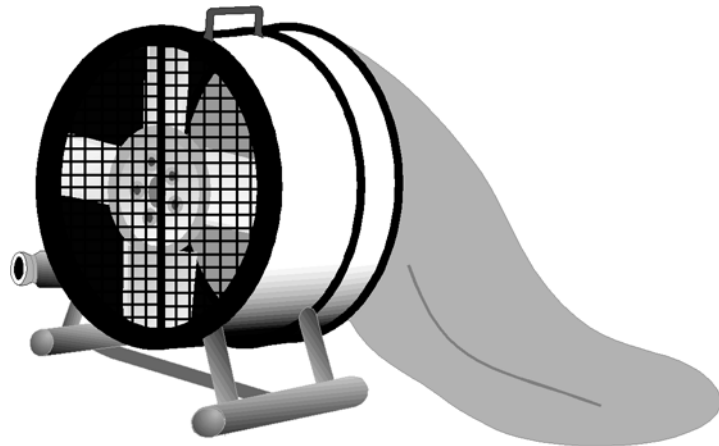
The HI-COMBAT Mini-Turbex generator is ideally suited to applications in a wide range of industries including Municipal Fire Brigades, Military, Ships engine rooms, machinery spaces and cargo holds, mining applications and total flooding of basements, flammable liquid stores, cable ducts and control of vapour releases of toxic and flammable liquid spills in general industrial applications. It is also suited to outdoor situations where fuel spillages may occur, or a rapid flowing foam is required.

These generators are designed to be robust and lightweight for portable use and can be quickly operated by just one firefighter, complementing larger output units like the Turbex MkII high expansion generators.

HI-COMBAT Mini-Turbex generators are also compact, neatly sized to fit into a fire vehicle locker as standard equipment, and requires only an Angus HI-COMBAT IND225 portable foam inductor in the water line to induce the Expandol foam concentrate at 3% setting, for fast, effective operation.

The unit utilises forced air technology from a highly efficient pelton wheel driven fan which enables expanded foam to be produced against high back pressures. This pelton wheel is operated by 4 water jets, with an additional 4 nozzles spraying foam solution directly onto the foam making net for bubble production.

When the optional smoke extraction (SX) ducting is fitted, the HI-COMBAT Mini-Turbex is also capable of rapid smoke movement at rates up to 100m³ (3,560cu.ft) per minute. Any burning embers entrained in the smoke will be cooled by waterspray from the nozzles, preventing the risk of ignition in adjacent areas. This optional smoke ducting can also be used for removal of the foam once the fire is extinguished.



FOAM PERFORMANCE DATA (Typical)

N.B. All inlet pressures refer to pressure at the generator. Remember a pressure drop of 35% typically occurs across a portable inductor, so the pump or hydrant pressure to the generator will need to be proportionately higher.

Inlet Pressure		Total water flow† L/min	Expanded Foam produced#		Foam usage at 3% (L/min)	Expansion ratio*
bar g.	psi		m ³ /min	cu.ft/min		
2.8	40	159	40	1450	4.7	260:1
4.2	60	195	56	2000	5.8	290:1
5.6	80	223	70	2500	6.7	320:1
7.0	100	245	80	2800	7.3	330:1
8.4	120	259	94	3300	7.8	360:1

Max. operating pressure 10 bar g. Std. inlet coupling male 2½" BS Instantaneous, but other connections are available.

† Conversion factor to US Galls/min = l/min x 0.264; to IMP Galls/min = l/min x 0.22.

Conversion factor to cu ft/min = m³/min x 35.64 Performances may vary with ambient temperature.

* Expansion ratio is dependent on operating conditions.

SMOKE EXTRACTION (Typical)

The inline inductor will NOT be required when using unit as smoke extractor.

Inlet Pressure		Total water flow (L/min)	Volume of smoke removed(m ³ /min)
bar g.	psi		
7.0	100	245	98

General Material Specification

Cabinet, feet & pelton wheel guard	Satin polished 316 Stainless steel
Main body casting	Black thermoplastic coated aluminium alloy
Fan	Aluminium alloy hub, polypropylene blades on stainless steel shaft
Pelton wheel	Natural phosphor bronze
Pelton wheel nozzles	Natural copper
Foam Nozzles	Natural brass
Foam making net	Woven Nylon
OPTIONAL Extras:	
Expendable foam ducting (AE00767)	Polythene in 30m(100ft) length
Smoke extraction ducting (AE12596)	Nylon re-inforced polythene in 7.6m (25ft) length

Dimensions

Approx.dimensions (mm)	500Wx620Hx320D	Nett wt.16kg
Typical shipping specification (mm)	610x570x750 1 case	Gross wt.33kg