

# Mini Turbex

## Portable Foam Generator

- Rapid Deployment
- Compact
- Lightweight
- Portable



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.

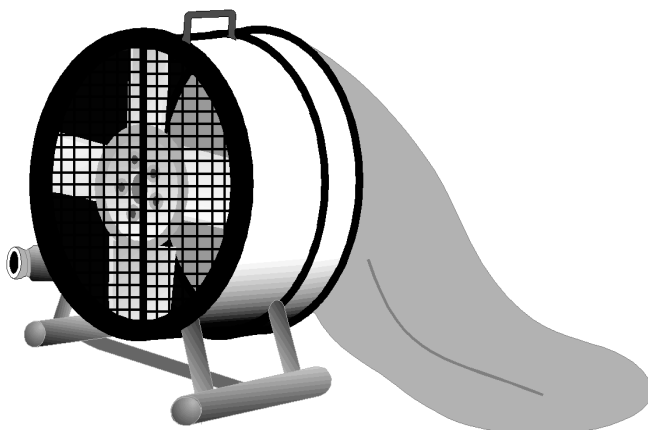
The **HI-COMBAT** Mini-Turbex generator is ideally suited to applications in a wide range of industries including Municipal Fire Brigades, Military, Ships engine rooms, machinery spaces and cargo holds, mining applications and total flooding of basements, flammable liquid stores, cable ducts and control 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 100m<sup>3</sup> (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.



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### 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.

Specification							
bar g.	Inlet Pressure		Total water flow† L/min	Expanded Foam produced#		Foam usage at 3% (L/min)	Expansion ratio*
	psi			m <sup>3</sup> /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 = m<sup>3</sup>/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.

Smoke Extraction (Typical)				
bar g.	Inlet Pressure		Total water flow† L/min	Volume of smoke removed m <sup>3</sup> /min
	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)	500W x 620H x 320D
Typical shipping specification (mm)	610 x 570 x 750 - 1 case
Nett weight	16kg
Gross weight	33kg

#### INTERNATIONAL SALES

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Angus Fire operates a continuous programme of product development. The right is therefore reserved to modify any specification without prior notice and Angus Fire should be contacted to ensure that the current issues of all technical data sheets are used.