



HI-COMBAT Turbex

Features

- ✓ Rapid, portable deployment (two people) for larger areas
- ✓ Self-inducing for 3% Expandol, delivers reliable performance



Potable Water Turbine High Expansion (HEX) Foam Generator.

The Angus HI-COMBAT Turbex High Expansion Foam generator is designed to produce large capacities of high expansion foam for fast and effective flooding of large and inaccessible spaces with minimal water consumption and subsequently minimal water damage.

The unit is also capable of rapid smoke extraction (SX), positive pressure ventilation, and removal of foam once the fire is extinguished.

Rapid Deployment for Void Filling

The compact HI-COMBAT Turbex generates up to 200m³ (7,000cu.ft) per minute and is ideally suited to a wide range of applications. These typically include filling enclosed areas with foam where carbonaceous materials and flammable liquids may be stored, such as basements, cellars, tunnels, roof voids, cable ducts, warehouses and mines.

Forced Air Technology

Each HI-COMBAT Turbex utilises forced air technology and is powered by an enclosed maintenance free water turbine driving an aerofoil fan, so that only a pressurised water supply is required for operation with

Angus Expandol 3% High Expansion Foam concentrate, consumed at typically 4.5L/min. A special in-built filter system protects the turbine and inductor from blockage due to solid particles in the water supply.

A unique by-pass system allows performance to be maintained when working against high back pressures. Under suitable conditions foam can be produced to heights of around 8-10m (26-33 ft) with the by pass open. By control of both inlet pressure and by-pass valve, the type of foam produced can be varied in the range of 500-1100:1 expansion ratio.

Fire use recommendation is 500:1, particularly involving flammable liquids (e.g. diesel) plus general purpose applications, whilst 1,000

-1,100:1 is suggested only for back pressure and Class A material applications like packaging plants, where minimal wetting is required.

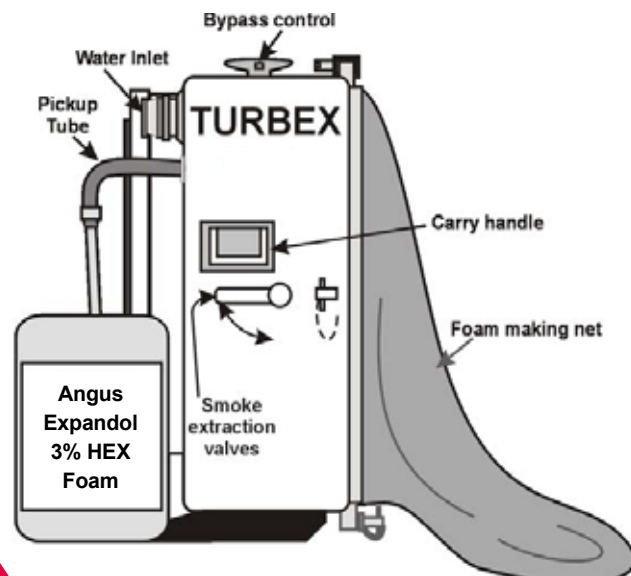
HI-COMBAT Turbex units are proven to work most effectively with Expandol 3% concentrate.

Smoke Extraction Facility

When fitted with optional specially reinforced smoke extraction (SX) ducting, the HI-COMBAT Turbex can also be used for rapid smoke movement at rates up to 285m³ (10,000cu.ft) per minute, at 7 bar g. inlet pressure. Positive pressure ventilation. This facility can also be used for the removal of foam bubbles once the incident is over.

For more information please contact Angus Fire or visit : <https://angusfire.co.uk/products/foam-concentrates/product-range/>

Schematic



Foam Performance Data (Typical)

	Inlet Pressure bar g.	Total water flow L/min	By-pass Flow L/min	Water for Foam Production † L/min	Expanded Foam produced#		Expansion ratio *
					m ³ /min	cu.ft/min	
By-pass Closed	4	180	Nil	180	85	3000	500 to 700
	6	225	Nil	225	115	4050	500 to 700
	7	245	Nil	245	135	4750	500 to 700
	8	270	Nil	270	150	5300	500 to 700
	10	290	Nil	290	190	6700	500 to 700
By-pass Fully Open	4	195	70	125	95	3350	800 to 1100
	6	245	90	155	135	4750	800 to 1100
	7	270	100	170	155	5450	800 to 1100
	8	290	105	185	175	6150	800 to 1100
	10	315	115	200	200	7050	800 to 1100
Smoke Extraction Mode	4	145					
	7	186					
	10	227					

Operating pressure range 4-10 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.

General Material Specification

Bodywork	Yellow chemically resistant UV stabilised GRP resin
Aerofoil fan and net retainer	Black thermoplastic coated aluminium alloy
Water turbine and inductor	Natural gunmetal
Pelton wheel Pipework	Stainelss steel
Ball valves and nozzles	Brass
Handles and fan guard	Black thermoplastic coated mild steel
Foam making net	Woven nylon and polyester ribbon

Optional Extras:	
Expandable foam ducting (AE00767)	Polythene in 30m (100ft) length
Smoke extraction ducting (AE12596)	Nylon re-inforced polythene in 7.6m (25ft) length

Dimensions:		
Approx. dimesions (mm)	902Wx927Hx495D	Nett wt.55kg
Typical shipping specification (mm)	991x1016x610 - 1 case	Gross wt.73kg

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.