

IFP-HX-100L**WATER TURBINE DRIVEN
MINI HIGH EXPANSION FOAM GENERATOR
(PORTABLE)****SPECIAL FEATURES :**

- very compact unit with built-in foam inductor (fixed/variable proportioning) yet producing high output of foam.
- more compact and lighter in weight unit without built-in foam inductor also available if required separate matching inline inductor provided.
- highly efficient pelton wheel
- rapid deployment due to lighter weight.
- easy to operate.

**APPLICATIONS :**

IFP-HX-100L High Expansion Foam Generator is suitable for rapid coverage and total flooding of voluminous areas even against high back pressure. **IFP-HX-100L** is water powered pelton wheel driven. **IFP-HX-100L** can be used also in fixed Foam System. High expansion foam generators are used for application of foam in areas where inaccessibility makes conventional methods ineffective. Foam expansion ratio being high water damage is less. The important applications are:

- Oil Refineries & Oil Installations
- Chemical Stores.
- Control of Vapour release from toxic/flamable liquid spills.
- Petrochemical Plants
- Tyre & Rubber Stores.
- Shipholds & Engine Rooms.
- Fire Brigades
- Flammable Liquid including Paint Stores
- Aircraft Hangars
- Cable Ducts & Transformer Rooms
- Fertilizer Plant
- Basements & Substations.
- Mining
- Camouflaging for Civil & Military purposes Etc.

SPECIALISED APPLICATION FOR LIQUID NATURAL GAS (LNG) :

Liquefied Natural Gas is a very hazardous risk against which high expansion foam has proved effective all over the world. Fires can be quickly controlled or extinguished & the foam coverage considerably reduces the rate of vapour emission from LNG.

FOAM CLEARING :

After the area has been secured, the foam can be cleared by simply hand sweeping or blowing off by compressed air minimising eventual water damage.

SPECIFICATION :

TECHNICAL DATA (± 5%)

Model	IFP-HX-100L	
Minimum inlet water pressure (bar)	5.0	
Nominal water flow (LPM)	170	
Foam expansion ratio (IFP UNIFOAM)	1:250-1:500	
Foam output	LPM	85000 (Max)
	M ³ /min	48-75
Proportioning (induction)	Fixed 3% / 6% or Variable 3% - 6%	

DIMENSIONS (approx) :

Model	IFP-HX-100L		NOTE : A :With Built-in Foam Inductor B : Without Built-in Foam Inductor
	A	B	
Length (mm)	320	320	
Width (mm)	650	500	
Height (mm)	640	640	

SMOKE EXTRACTION (± 5%)

Model	IFP-HX-100L
Inlet water pressure (bar)	7.0
Smoke extraction capacity (m ³ /min)	100 (Appx.)*

* Design capacity (as per In house Test Report)

MATERIALS OF CONSTRUCTION :

Model	IFP-HX-100L	OPTIONAL : (WITH EXTRA COST) Smoke trunk: 10m long Special construction
Body/ shell	SS (304 Grade)	
Nozzle	GM/Al. Alloy/BRASS	
Foam screen	K.F / S.S	
Coupling	GM / Al. Alloy / S.S	
Piping & inductor	Corrosion resistant	
Fan	Al. Alloy	
Turbine	GM	
Foam duct (10 m long)	Polythene (disposable type)	

K.F.:Knited Fabrics , **AL:** Alluminium ; **SS :** Stainless Steel; **GM :** Gun Metal.

Use of High Expansion Foam Generator in Fixed Foam System

Custom Designed and Built services for High Expansion Foam Generators required for Fixed Foam Systems are also offered by **IFP-India** to suit specific requirements. Such fixed foam installations may involve single module/multiple module arrangements where large areas are to be secured in a short period of time. System design may be of manual or fully automatic type depending on the risk involved. In order to operate such Fixed Foam System, pressurised foam water solutions of required quantities will be needed to feed the system.

Fire Science Behind High Expansion Foam :

Oxygen in the air supports combustion and removal of air supply is one of the most rapid and effective ways of extinguishing fire. When a large volume of high expansion foam is released in a fire area it not only replaces air of that area but also provides cooling effect on the surface of the burning materials. In case of deep seated fires in timber, wood, cotton and paper bails, rubber etc. drained out water from high expansion foam while cooling the surface area of the materials also penetrates inside much faster than ordinary water because of reduced surface tension of foam water solution. This phenomenon helps to reduce the temperature below the burning surface in case of class A fire.

Due to continuous R&D Work, effects of product improvements are incorporated in the specifications as and when required.

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