

Flame Front Generators



MODEL 320
FLAME FRONT
GENERATOR

Flame front generator technology is an effective, time proven ignition system which has been widely used in flaring applications for decades. The inherent reliability, rugged construction, and ease of operation as well as its economic advantages have allowed the flame front generator (FFG) to remain one of the most popular forms of pilot ignition in the industry. The FFG is easily adaptable to any pilot system which incorporates an ignition tube and may be installed up to 1 mile (1600m) from the base of the flare stack. AEREON's Flare Industries designs and manufactures several styles of FFG systems which can operate in automatic or manual mode.

Flame Front Generators first meter and then combine fuel gas and air, thereby creating a combustible air/gas mixture in the ignition line. This metering and mixing process is accomplished through the use of small valve trains placed on the FFG control panel.

Model 300 Flame Front Generator

The Model 300 Manual Flame Front Generator is a manual system which requires an operator to physically initiate the ignition process by depressing a button on the FFG control panel. Once the ignition line is filled with this combustible mixture, a spark is

created within the ignition chamber and igniting the mixture. Next, a flame front or "fireball" propagates through the ignition tube and ignites the pilot(s). Once the pilots are lit, the flare is ready to ignite the process gas exiting the flare tip.

Model 320 Automatic Flame Front Generator

The Model 320 initiates ignition and re-ignition automatically while continually monitoring the ignition system via a UVI 550 pilot monitor or thermocouple.

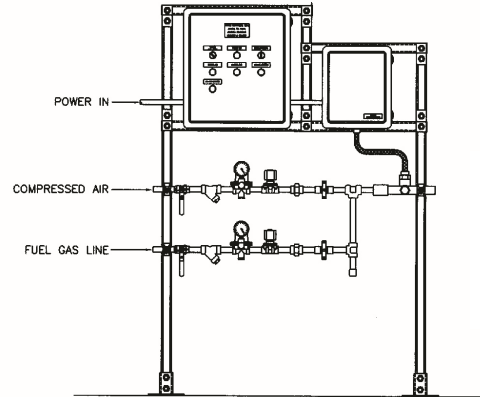
Model 310/330 Self Inspiring Flame Front Generator

The Model 310 is AEREON's Flare Industries' manual self inspiring flame front generator while the Model 330 boasts an automatic control system for ignition and re-ignition. These two models do not require instrument air as they are designed to inspire ambient air. AEREON's Flare Industries employs this technology when a client does not wish to supply instrument air or when located in a remote area where instrument air may not be available. This extremely reliable and easy to operate ignition system uses the same basic design principles and possesses most of the same features as the Models 300 and 320.

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Advantages

- Reliable time tested pilot ignition technology
- Manual or automatic/manual operation
- Low maintenance expenses
- Cost effective ignition solution
- Self inspirating (no instrument air required) – Models 310/330



FLAME FRONT GENERATOR

Design Features

- Stainless steel valve trains
- Optional pilot gas valve train
- Pilot status indication via thermocouple on the pilot

Specifications

Models:	300, 310, 320, 330	
Dimensions:	60" w x 48" t (1.52 mx 1.22)	
Model:	300	Manual
	310	Manual self inspirating
	320	Automatic/Manual
	330	Automatic/Manual self inspirating
Classification:	Weather proof – NEMA 4X/EEExe Explosion proof – NEMA 7/EEExd	
Weight:	150 – 350 lbs.	

Utilities:	Electrical	120 VAC (220 VAC, 480 VAC, 24 VDC options)
	Gas	150 SCFH at 10 – 250 psig of natural gas (4.2 m ³ /hr at 0.70 – 17.6 kg/cm ²)
	Air	1500 SCFH @ 10 – 150 psig (42.4 m ³ /hr at .0.70 – 10.5 kg/cm ²) *Models 310 and 330 do not require air.
Alarms:	Form "C" dry contacts	