



IGNITION
SYSTEMS

ELEVATED FLARE PILOTS FAV SYSTEMS PREMIER



ENERGY EFFICIENT FUEL GAS, RETRACTABLE

DEPENDABLE / USER FRIENDLY / ECONOMICAL

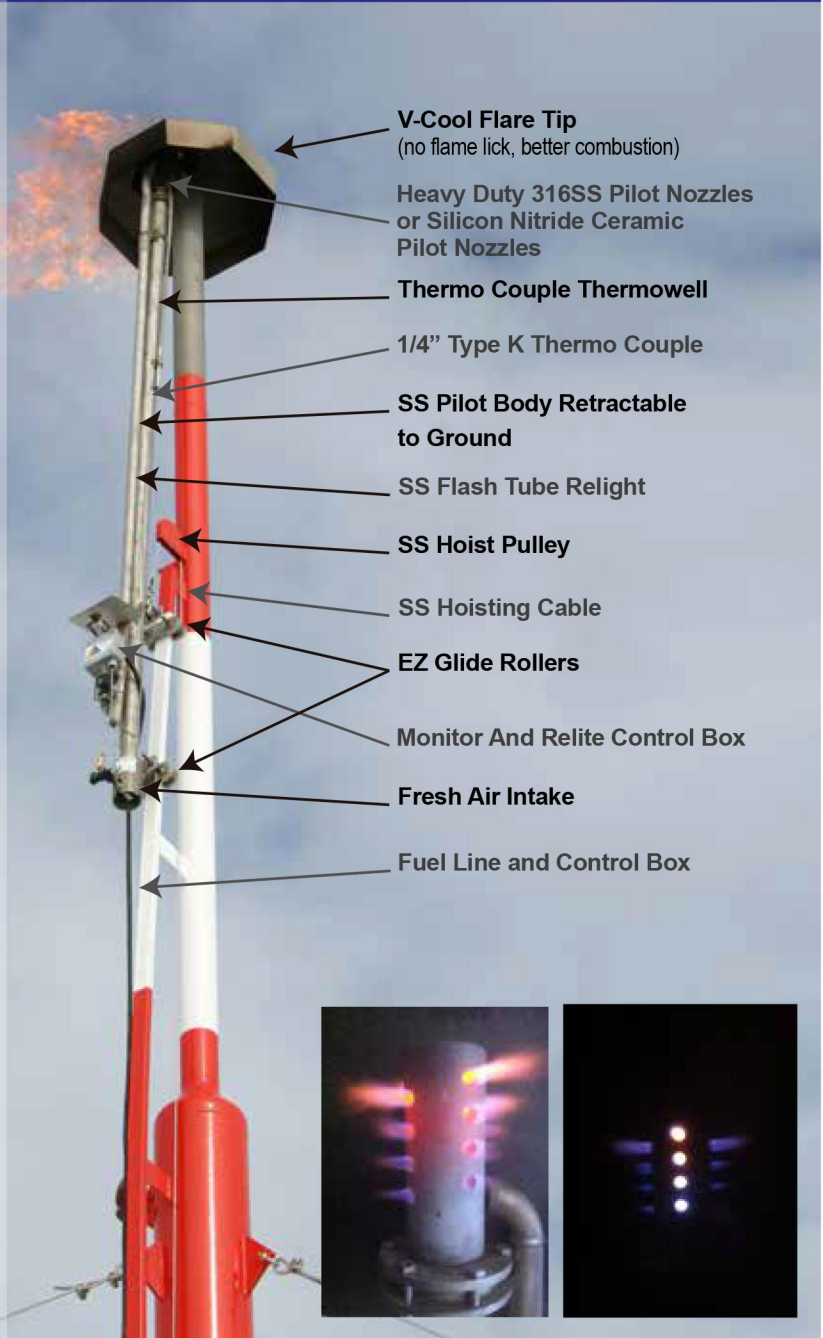
This design has been in service for 28 years and has proven to be Bullet Proof with hundreds of them in service. You will be totally satisfied with the FAV Systems Premier Pilot performance.

Silicon Nitride Nozzles

- Never Break Down
- Unparalleled Dependability
- Energy Efficient 20 SCFH
- Retractable to Ground Level for Inspection
- Proven Track Record

The FAV Systems Premier Fuel Gas pilot is the backbone of our constant pilot systems. There are thousands in service all around Canada and the U.S. These systems are built to last, because they are built of Stainless Steel and ceramic. They are very energy efficient, only consuming 20 scfh of fuel gas. This rate of consumption will save you thousands of dollars during the life span of these systems. The ceramic pilot nozzle ensures long life and stability to the pilot flame. The ceramic nozzle is engineered to protect the pilot flame from wind and the elements. The ceramic nozzles are totally resistant to corrosion due to flame impingement and chemical breakdown. The premium Silicon Nitride is a very dense compressed ceramic that is state of the art material. It is used for drill bits, space shuttle ball bearings, wear bushings, etc. Now FAV System brings it to you for your critical corrosive application.

Also the pilot head assembly is retractable to ground level by a tracking and hoisting system that allows easy access for maintenance inspections. The retractable package is very reliable and built sturdy for trouble free operation. The retracting rail is made of 1" x 2" HSS with sturdy standoffs. The hoisting pulleys are built of Stainless Steel to ensure that the pulley does not seize up and malfunction as our competitor's models do. The hoisting cables on our standard packages are also 316 Stainless Steel to ensure dependability and long life. All key components are built of Stainless Steel, which translates, into quality. The systems are built to last, not to sell spare parts for. The pilot systems can be equipped with the Torpedo Tube pilot monitoring and auto relite system (Look to Pilot Monitoring and Auto Re-ignition Devices for a full description)



V-Cool Flare Tip
(no flame lick, better combustion)

**Heavy Duty 316SS Pilot Nozzles
or Silicon Nitride Ceramic
Pilot Nozzles**

Thermo Couple Thermowell

1/4" Type K Thermo Couple

**SS Pilot Body Retractable
to Ground**

SS Flash Tube Relight

SS Hoist Pulley

SS Hoisting Cable

EZ Glide Rollers

Monitor And Relite Control Box

Fresh Air Intake

Fuel Line and Control Box



SPECIALIZED IN PREVENTING FUGITIVE EMISSIONS

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The FAV Systems pilot systems are designed for permanent service where fuel gas is piped to the base of the elevated flare of choice. These systems can be adapted to all types of flares such as: utility, air assisted smokeless, steam assisted smokeless, gas assist, pressure assist, etc. The system is widely used for emergency relief high volume or continuous process applications, any situation that requires ignition can be fitted with a retractable ignition head. These rugged built; energy efficient, constant pilot systems offer ignition of waste gas at any flow rate.

The Flame Torpedo Tube is designed so that it can be bolted piggy back to a Pro Pilot or a FAV System Premier pilot head. The workings are basic but the performance is great. There are thousands of these systems in service all around Canada, United States and other countries. These Torpedo Tube re-lights are built to last because of their Stainless Steel construction. They are very simple and user friendly. The greatest feature is that the Torpedo Tube Relight device fires immediately when required. The way the Torpedo Tube Re-light operates is as follows.

1) There is a 1/4" Type K thermocouple that is housed in a 1/4" diameter, thick wall thermowell. The thermocouple slides through the thermowell and into the base of the ceramic pilot nozzle. The thermocouple is totally protected from external flame impingement and corrosion. The thermocouple slides into the nozzle and detects the pilot flame itself. We can adjust the operating temperature of the thermocouple by sliding it in and out of the internal pilot flame. We set our operating temperature at 500 °F, which is well under the operating range of the thermocouple. Combined with a protected thermocouple and lower operating temperatures our systems last for long periods of time, which reduces operating costs and saves you money. We would like to mention again that the thermocouple is inside the pilot nozzle so it is protected and you do not get false signals because external crosswinds cannot blow the flame away from the thermocouple. Other manufacturers have trouble with false alarms and premature thermocouple breakdown.

2) The thermocouple wire leads are fastened to the flexible fuel line that runs between the pilot head and the base of the stack. The sensing leads can be run to any convenient location around the base of the stack. At that point there is a thermocouple controller. This controller is a fail-safe design that if a wire becomes disconnected it will alarm and show failure. This controller and thermocouple continuously monitor the pilot status. If the pilot were to go out due to lack of fuel caused by a plugged fuel line problem, the thermocouple controller would trip and send back out an electrical current through another set of wires back up to the control box, which consists of a small igniter transformer and a 1/4" solenoid valve. The 1/4" solenoid valve is energized and opens allowing fuel to jet through a venturi air mixer to the top of the Torpedo Tube. Then the high voltage transformer ignites the premix and launches a flame front up the 10' long tube to the pilot nozzle. The flame front immediately ignites the pilot and tells the thermocouple that things are back to normal and it can shut down. If the pilot were not to ignite and clear the controller, the timer would wait 3 minutes then send an alarm status to what ever equipment is appropriate for the location alarm system. These thermocouple controllers have wet or dry contacts and are available in most power inputs. These systems have proven themselves time and time again that they can re-ignite and monitor your pilot more dependably.

