





IL Burner

The IL Burner from SELAS Heat Technology is an industrial burner designed for many types of low-temperature air heating applications. The IL burner is constructed using a series of modules. Each 6-inch (150mm) module is capable of an output of 256,000 BTU/hr (75kW) with a head pressure of 4"wc (10mbar) when using natural gas. With propane, the output increases to 341,000 BTU/hr (100kW) at a head pressure of 7.2"wc (18mbar). The IL Burner is assembled into various sizes and shapes, providing design flexibility. Ideal for applications such as Make-Up Air Plants, Air Handling Units, Heating Schemes, and more.

An alternate variation of the burner, the IL-HC model, offers an enhanced output of 512,000 BTU/hr (150kW) per 6 inches (150mm) and sustains a flame length of 23.6 inches (600mm) at full fire. This model allows for high heat release applications for even more design flexibility.

Applications

- Make-up Air Plants
- Air Handling Units
- **Heating Schemes**
- **Industrial Dryers**
- **Industrial Ovens**
- **Grain Dryers**

Features	Benefits
Modular Construction	Accommodates most duct layouts
Cast Iron or Aluminum Manifold	Offers versatility in construction
Utilizes Process Air	Ensures efficient operation
Wide range of sizes and shapes	Suits various application needs
Operates on Natural Gas or LPG	Provides flexibility in operation
Turndown ratio of up to 25:1	Ensures efficient fuel usage



How It Works

The IL Burner is available in either a cast iron or cast aluminum manifold. It can be fitted into process air ducts with 0.08 m/s to 0.42 m/s velocities, requiring uniform airflow across the air duct upstream and downstream of the burner. The process air supplies all the air required for combustion, ensuring efficient operation.

The velocity of the air across the burner and the oxygen content of the process air must be known. Process temperatures up to 125°F (40°C) can be accepted upstream of the burner, while downstream temperatures should be limited to 400°F (205°C).

The burner is available in modular sections. 6" units of "straight", "X", and "T" sections enable burner configurations to accommodate most duct layouts. The units can operate at gas pressures as low as 8"wc (20mbar), but higher pressures can be accommodated. The typical flame length for the IL burner is 12in (300mm) at full fire, and for the IL-HC burner, it's 24in (600mm) at full fire. Natural gas, or LPG, is suitable for operation on the IL burner and boasts a turndown ratio of up to 25:1.