



APPLICATION

ZENITH is a compact natural draft burner designed for use in firetube appliances e.g. line heaters, reboilers, dehydrators, tank heaters etc.

Operating at pressures from 5 – 25PSI to deliver a maximum 1MM BTU/Hr heat release, 3:1 turndown and compatible with firetubes diameters 6" and upwards.

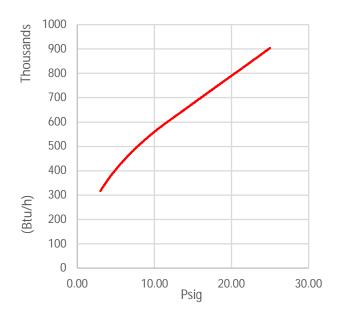
The low maintenance bolt-on package is complete with B149.3 compliant fuel train, SUPERVISOR I Burner Management System, Unifire high efficiency mixers and unique low back pressure main burner tip with integrated pilot. High voltage ignition and ionization rod flame safeguard is standard with options for high energy ignition and UV scanners.

High and Low fuel pressure trips are provided by an inline 4-20mA pressure transmitter with additional process trip inputs field wired to discrete switch inputs of SUPERVISOR I.

The package is optimized to deliver stable combustion and class leading emissions across a wide operating range. Tuned as necessary using easily accessible secondary and primary air adjusters.

Bath temperature is controlled by the optional Unifire Thermocouple/RTD temperature switches or by external process controllers integrated with SUPERVISOR I.

PERFORMANCE & EMISSIONS

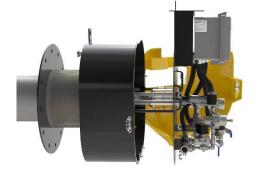


NOX	18 – 40 PPM
02	4-5%
CO	0%

SERVICE & MAINTENANCE

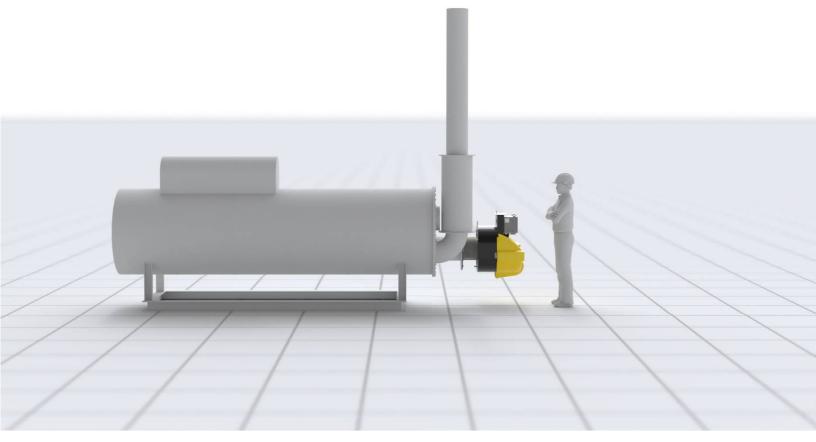
Fast and efficient field service. The package is designed to give easy access to serviceable components. Orifice cleaning requires no access to the burner plenum. The oversized Flame arrestor can be vacuumed easily from the front of the burner and is oversized by 80%. Ensuring adequate combustion air is readily available even in the harshest of operating conditions. Ignition and flame detection rods are held in controlled positions to minimize spurious trips and downtime













SPECIFICATIONS

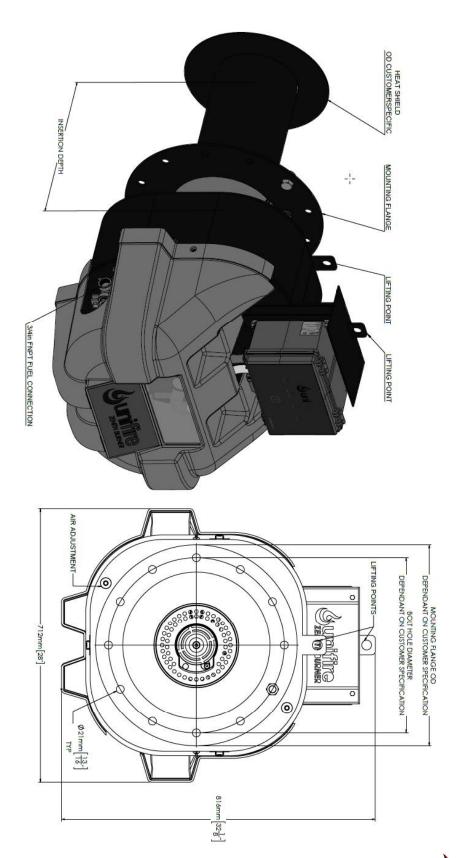
Operating Pressure	5 – 25psig (Pilot <5psi)
Heat Release	300,000 – 1MM BTU/HR
Emissions	18-40ppm NOX, 4-5% O2, 0% CO
Operating Temperature	-45°C to 65°C
Fuel Train	3/4" 304 SS B149.3 Compliant Fuel Train
High and Low Pressure Trips	4-20mA Pressure Transmitter
Flame Arrestor	API-12N, ISO 16852 Compliant
Burner Management System	SUPERVISOR I BMS UL 60730-2-5
Bath Temperature (Process) Control	Discrete ON/OFF with Unifire RTD or Type K/J Temp Switches.
Power	24VDC, Max 10A, <1A Quiescent
Hazardous Locations	Class I Div 2, Grps A-D, T3
Environmental	NEMA 4X IP67
Flame Safeguard	Ionization Rod
	Thermocouple*
	UV Scanner*
Ignition	High Voltage
	High Energy*
Pilot	Continuous / Interrupted

^{*}optional





DIMENSIONS





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