THE PREFERRED RETROFIT BURNER FOR CLEAVER-BROOKS™ BOILERS

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THE PREFERRED RETROFIT BURNER FOR CLEAVER-BROOKS[™] BOILERS

Applications:	Single burner: firetube, Cleaver-Brooks™ package boiler
Fuel:	No. 2 through No. 6 fuel oil, and/or natural gas (consult factory for Bio-Residual Oil™, Renewable Fuel Oil (RFO), or waste fuels).
NO _X Emissions:	Natural gas: less than 30 ppmc. No. 2 fuel oil: less than 90 ppmc (maximum 0.01% FBN) without FGR. No. 6 fuel oil: less than 250 ppmc (maximum 0.30% FBN) without FGR. BRO & RFO: consult factory
Burner Efficiency:	Any fuel: 1.5 - 2.5% excess oxygen 50 - 100% firing rate (exclusive of "tramp" air) VFD motor control for maximum electrical efficiency of combustion air.
Turndown:	10:1 on gas firing; 8:1 on oil firing.
Burner Control & Monitoring:	Firing Rate Control: BurnerMate Universal Parallel Positioning/Fully metered controller. Oxygen sensor: Model "ZP" In-Situ sensor, reliable zirconium oxide detector Monitoring: SCADA/Flex remote monitoring and control system. Instruments: UV & IR Flame Scanner
Additional Options:	Draft control, drum level control, low fire fuel changeover, dual/redundant flame scanning, smoke opacity monitoring and alarm, atomizer post purge capability, flue gas temperature indication alarm, emergency boiler shutdown.
	Note: Furnace geometry and heat release rate affect NO_X performance. Lower NO_X emissions are attainable with more FGR.





SIMPLE REPLACEMENT USES ORIGINAL HOUSING AND FAN

INCREASED EFFICIENCY

HIGHER TURNDOWN; LOWER EXCESS AIR

An innovative, low cost combustion solution to meet sustainability goals, emission reduction requirements, and extreme efficiency improvements.

SUSTAINABLE FUEL CAPABILITIES

BURNS BIO-RESIDUAL Oil[™] & RFO

NO CUTTING OR WELDING

MADE TO CUSTOM FIT

OWER EMISSIONS LOW NO_X, CO, CO₂, ETC.

UPGRADE FOR A FRACTION OF THE COST

Upgrading your burner to our Preferred retrofit burner for Cleaver-Brooks™ boilers will not require the removal of the front or rear doors, but acts as a direct replacement insert for the existing burner. Preferred Utilities will reuse the existing combustion fan, making no cuts or modifications in the original front door. This specialized API-Ranger burner and controls upgrade will give you the ability to burn Renewable Fuel Oil, Bio-Residual oil™, natural gas, or #2 oil.

DISCLAIMER: Preferred Utilities is not an authorized re-seller or service provider of Cleaver-Brooks™, is not affiliated with or sponsored by, nor selling Cleaver-Brooks™ parts. Preferred Utilities products and services are not covered by or part of any warranties or sales terms of Cleaver-Brooks™.

PATENTED TECHNOLOGY



Brochure: 010419



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