



For more information:

Jared Miller

Cleaver-Brooks

(229) 227-4410

jmiller@cleaverbrooks.com

Debbie Dryden

Cleaver-Brooks

(770) 974-9741

ddryden@cleaverbrooks.com

AHR Booth N2937

Cleaver-Brooks Releases New Video

A Revelation in Boiler Technology: The Most Efficient Firetube Boiler on the Market

CHICAGO (Jan. 22, 2024) -- Cleaver-Brooks is debuting its new video [*A Revelation in Boiler Technology: The Most Efficient Firetube Boiler on the Market*](#) at AHR Expo 2024. The video centers on the CBEX-3W with proprietary EX technology. Engineers designed the CBEX-3W to optimize every component of the boiler, including the burner, the furnace, and the tubes, in order to provide optimally balanced heat release zones and minimizing thermal stresses in the boiler.

What sets the CBEX-3W apart is its integral head burner and economizer. Its state-of-the-art burner achieves 10:1 turndown with 3% O₂ across the full operating range, leading to lower fuel consumption over the life of the boiler.

Extended heat transfer tubes, only found in EX systems, use computational fluid dynamics (CFD) calculations to optimize the geometry of the tube and increase heat transfer by 85%. By optimizing the heat transfer of the tubes and furnace, the CBEX-3W requires less heating surface to achieve the same capacity output, facilitating a more compact design.

“Integration of the core components is the key to CBEX systems,” said Don Betts, product manager, Packaged Firetube for Cleaver-Brooks. “The CBEX-3W seamlessly combines the boiler, burner, heat recovery and controls, resulting in the most-efficient and lowest-emission firetube system every built.”

The CBEX-3W is capable of firing natural gas, propane, and #2 light oil, as well as alternate fuels such as hydrogen, biodiesel, and more. It meets the lowest possible emissions of <5 ppm NO_x and <10 ppm CO without selective catalytic reduction (SCR), helping achieve both emissions reduction and decarbonization goals.

Available in sizes ranging from 250 to 800 HP and suitable for a variety of processes, the CBEX-3W is capable of generating steam up to 300 psig and hot water up to 125 psig.

(more)

Cleaver-Brooks Releases New Video
Page 2

The CBEX-3W is engineered to be environmentally responsible and meets the strict performance and sustainability criteria to earn the Cleaver-Brooks Sustainability Seal. Also available on the CBEX-3W is an optional integral, pre-piped feedwater economizer, further enhancing its eco-friendly credentials.

To learn more about the CBEX-3W, contact your local [Cleaver-Brooks representative](#).

About Cleaver-Brooks

Cleaver-Brooks, a world-renowned provider of boiler room products and systems, is committed to delivering efficient solutions that help its customers and the industry reduce energy usage, cost and environmental impact. As the pioneer of packaged firetube and watertube boilers, Cleaver-Brooks is one of only a few manufacturers in the world to offer an entirely integrated boiler plant solution for any size application. Its products are backed by a world-class representative network offering superior aftermarket service and solutions. Visit cleaverbrooks.com for more information.