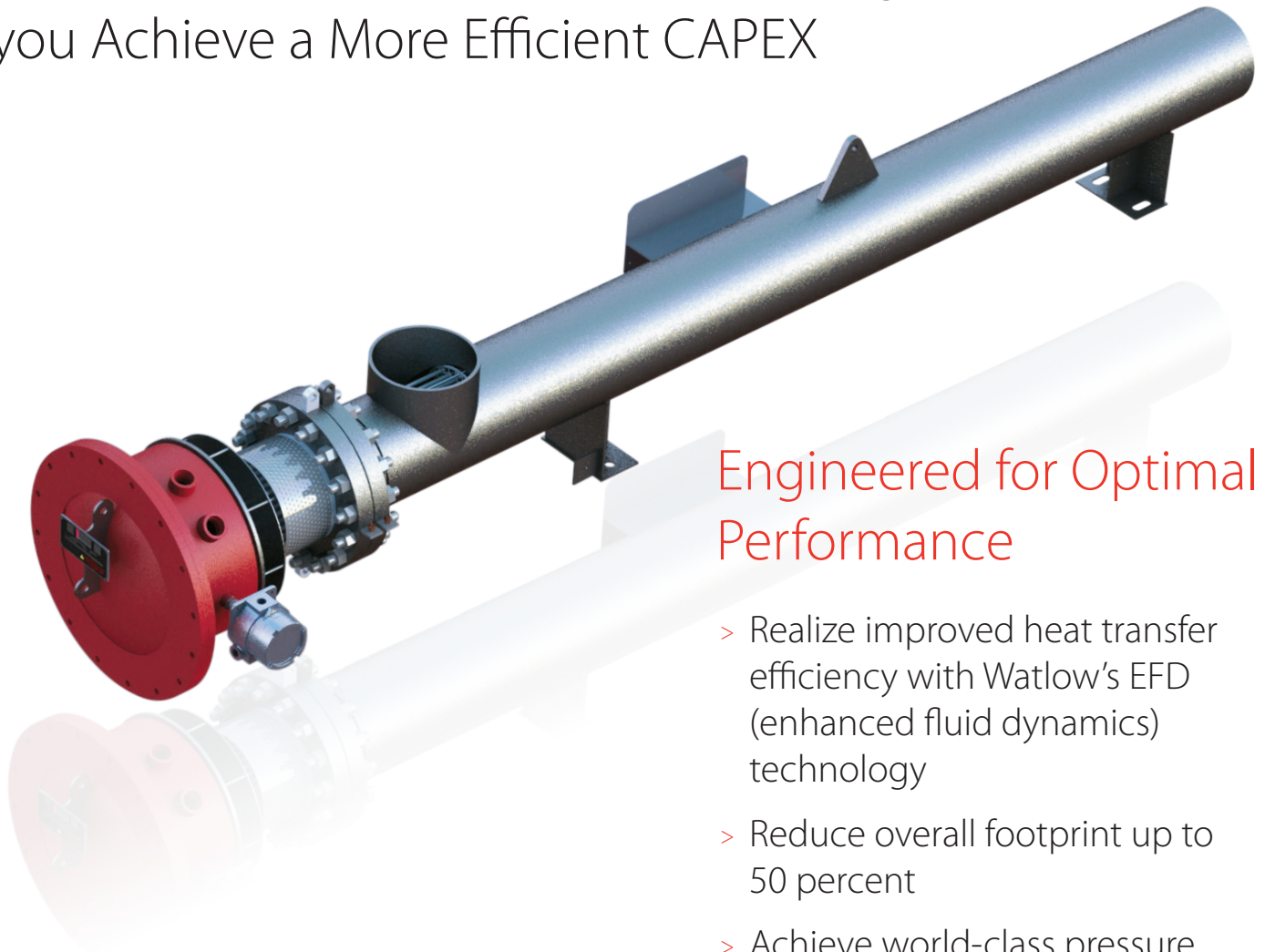


Watlow's New OPTIMAX<sup>®</sup> Heat Exchanger Helps you Achieve a More Efficient CAPEX

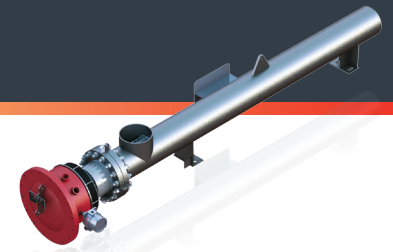


## Engineered for Optimal Performance

- > Realize improved heat transfer efficiency with Watlow's EFD (enhanced fluid dynamics) technology
- > Reduce overall footprint up to 50 percent
- > Achieve world-class pressure drop performance



**Watlow's**  
OPTIMAX<sup>®</sup> Heat  
Exchanger



# Engineered for Optimal Performance

Watlow has over 40 years of experience designing and manufacturing heat exchangers, and we have the knowledge, experience and expertise required to create optimal heating solutions. Watlow has taken the tried and true, critical design criteria and improved it to create a new generation heating technology – the OPTIMAX® Heat Exchanger.

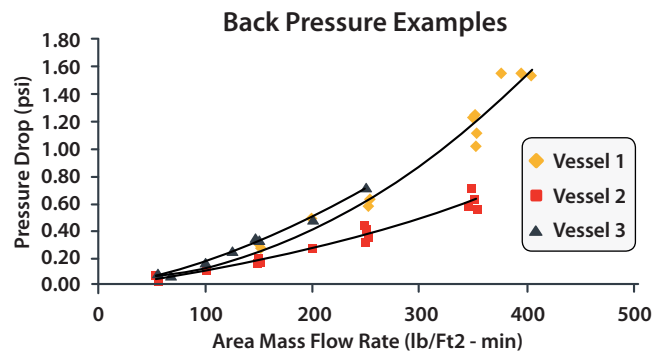
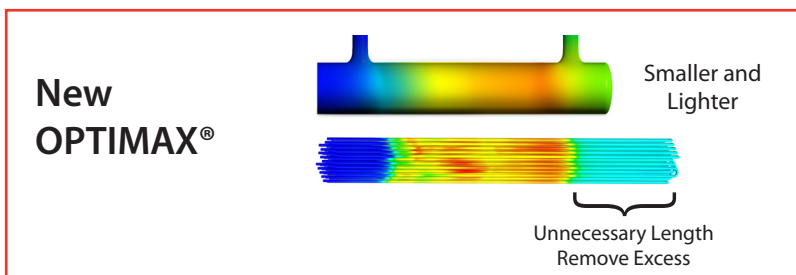
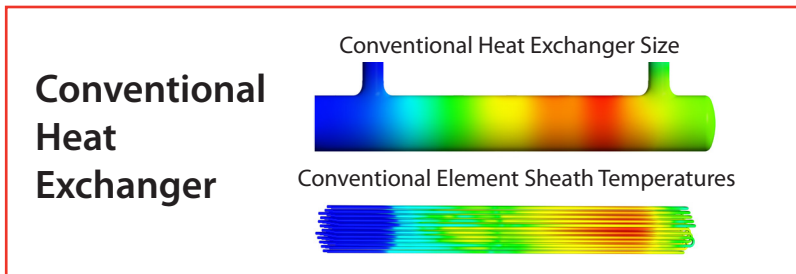
Watlow's new OPTIMAX technology combines optimal fluid dynamics, efficient heat transfer, low pressure drop and a compact and reliable package to create a world-class system solution.

Watlow's EFD (enhanced fluid dynamic) technology provides advanced flow throughout the system without compromising the integrity of the fluid, heating elements and/or vessel. Fluid temperatures are further optimized through the use of OFT (optimized film temperature) technology in the heating elements. These, coupled together, provide an accelerated heat transfer rate, allowing the vessel to perform consistently at shorter lengths, or smaller shell diameters. In addition, the OPTIMAX can be designed for backwards compatibility with existing designs.

Watlow's has validated these technologies through CFD/FEA modeling, as well as over 5000 hours of laboratory testing.

## Performance Capabilities

- Wattages up to three megawatts
- UL® and CSA component recognition up to 600VAC and IEC and ATEX recognition up to 690VAC
- ANSI compatible 3 through 48 inch flanges
- Hazardous area ratings:
  - ATEX 2 G Ex d IIC, T1 – 6 Gb
  - IEC Ex d IIC: T1 – 6 Gb
  - ATEX 2 G Ex e IIC T1 – 6 Gb
  - IEC Ex e IIC T1 – 6 Gb
  - Class 1, Divisions 1 & 2, Groups B, C & D
  - PESO, Zone 1 Group IIC
- ASME code welding
  - Flange assemblies and pressure vessels can be provided with an ASME Section VIII, Div. 1 or Section IV code stamp upon request
- OPTIMAX is compatible with Watlow's control panel systems
  - Contact your Watlow representative for more details



## Powered by Possibility

Watlow® and OPTIMAX® are registered trademarks of Watlow Electric Manufacturing Company. UL® is a registered trademark of Underwriter's Laboratories, Inc.