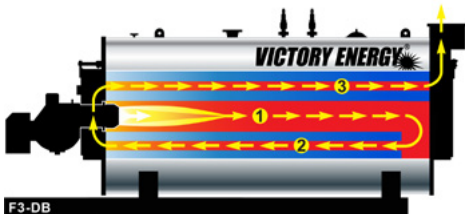


# FIRETUBE BOILER

## 3-PASS DRYBACK



### 3-PASS TECHNOLOGY

- Liberal steam disengaging area
- Rear flue gas outlet
- All standard boilers have rifled tubes in the second pass, improving overall thermal performance

### DRYBACK DESIGN

- Full access to front and rear tubesheets for ease of maintenance
- Lower capital cost



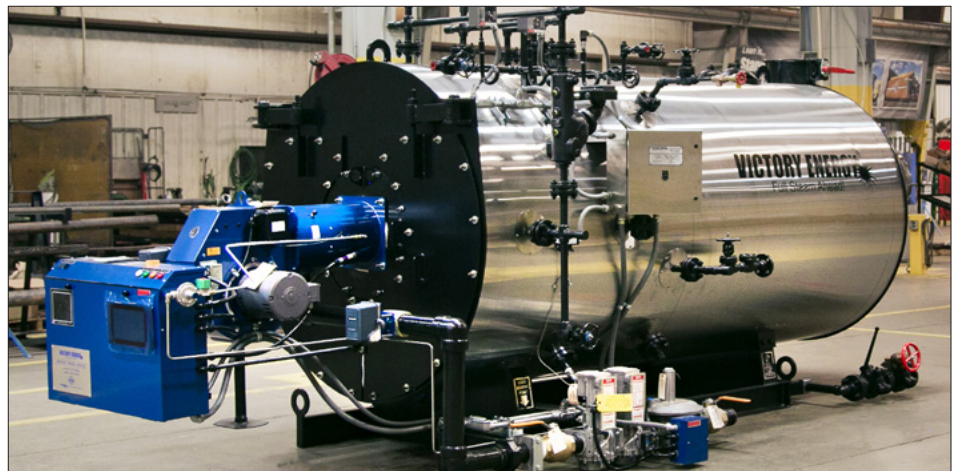
**SPECIAL REFRACTORY IS NEARLY IMPERVIOUS TO EXPANSION STRESS CRACKING**

## EXCELLENCE IN THE MAKING

Every FRONTIER<sup>®</sup> firetube boiler is produced against a company-wide “Concept to Completion” credo that exists from project inception through to boiler commissioning and start-up. Our manufacturing facilities are equipped to deliver on the diversity of firetube applications across multiple industries.

Our firetube team works seamlessly from in-house engineering and project management on through to manufacturing, logistics and field service to deliver a flawless product. Victory Energy controls the quality and timeliness on all project engagements to ensure that the product arrives on time and on budget.

## HP RANGES FROM 50 HP - 2,500 HP



### F3-DB FEATURES / OPTIONS

- ✓ Center-fired furnace
- ✓ Ring groove technology
- ✓ Front davited doors
- ✓ Rear davited entry door to furnace and entry of 2nd pass
- ✓ Large boilers come with two hinged rear doors for 3rd pass
- ✓ Heavy-duty gauge tubes - 0.105" MW
- ✓ .75-inch minimum tubesheet wall thickness
- ✓ Refractory-backed reversing chamber
- ✓ Heavy-duty steel frame
- ✓ Stainless steel jacket with 2-inch mineral wool insulation
- ✓ Note: Corrugated furnace will be offered on any size if high pressure designs are required and if customer prefers over plain furnace.



**HEAT RECOVERY OPTION INCLUDES FACTORY INSTALLED INTEGRAL ECONOMIZER**

# FIRETUBE BOILER

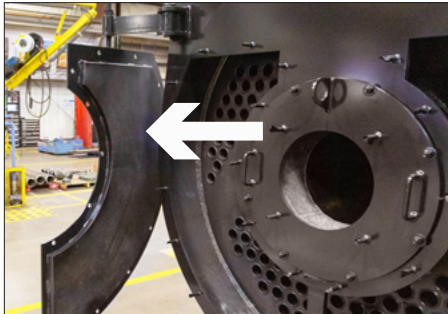
## 3-PASS DRYBACK

### LARGE FURNACE

Generous furnace is suitable for all burners and fuels, also facilitates low emissions.

### EROSION PROTECTION

Rather than using hardener over insulation on davited doors, as most competitors do, Victory Energy takes the extra step of providing a high performance metal covering to protect insulation.



### RIFLED TUBES

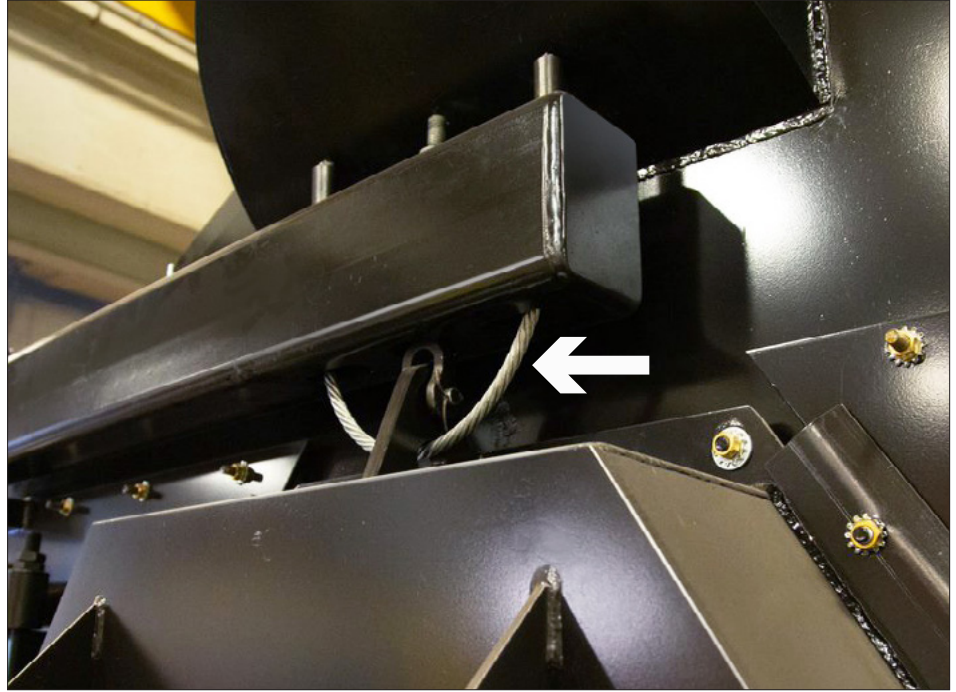
Because of their internally rifled shape, the rifled tubes are more efficient. The rifling creates turbulent flow which enhances heat transfer between the fireside and the waterside.

### MINIMAL THERMAL STRESS

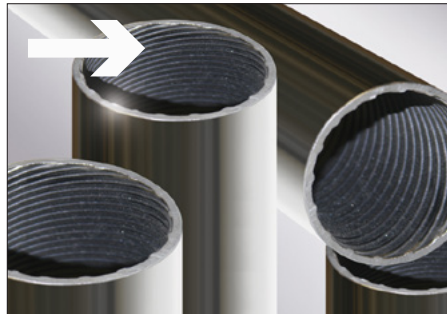
Less thermal stress means reduced maintenance and repair costs.

### RING GROOVE ENGINEERING

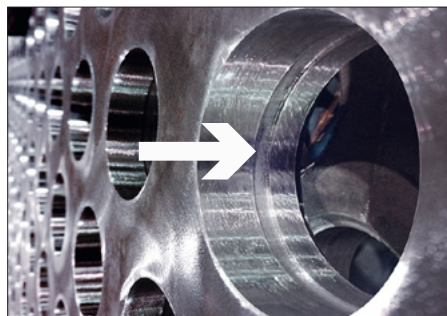
Exclusive Victory Energy "ring groove" tube attachment results in a very robust tube to tubesheet connection. The added ring groove creates a 40% stronger joint.



**EXCLUSIVE HINGED DOOR SAFETY CABLE ASSEMBLY**



**RIFLED TUBES**



**RING GROOVE WITH 3/4 INCH LIGAMENTS**



**HEAVY-DUTY DAVITED DOOR AND HINGE ASSEMBLY**

### NOTE:

For dimensions and data info, contact your firetube rep for Document F3-DB-NE.