Reciprocating Grate

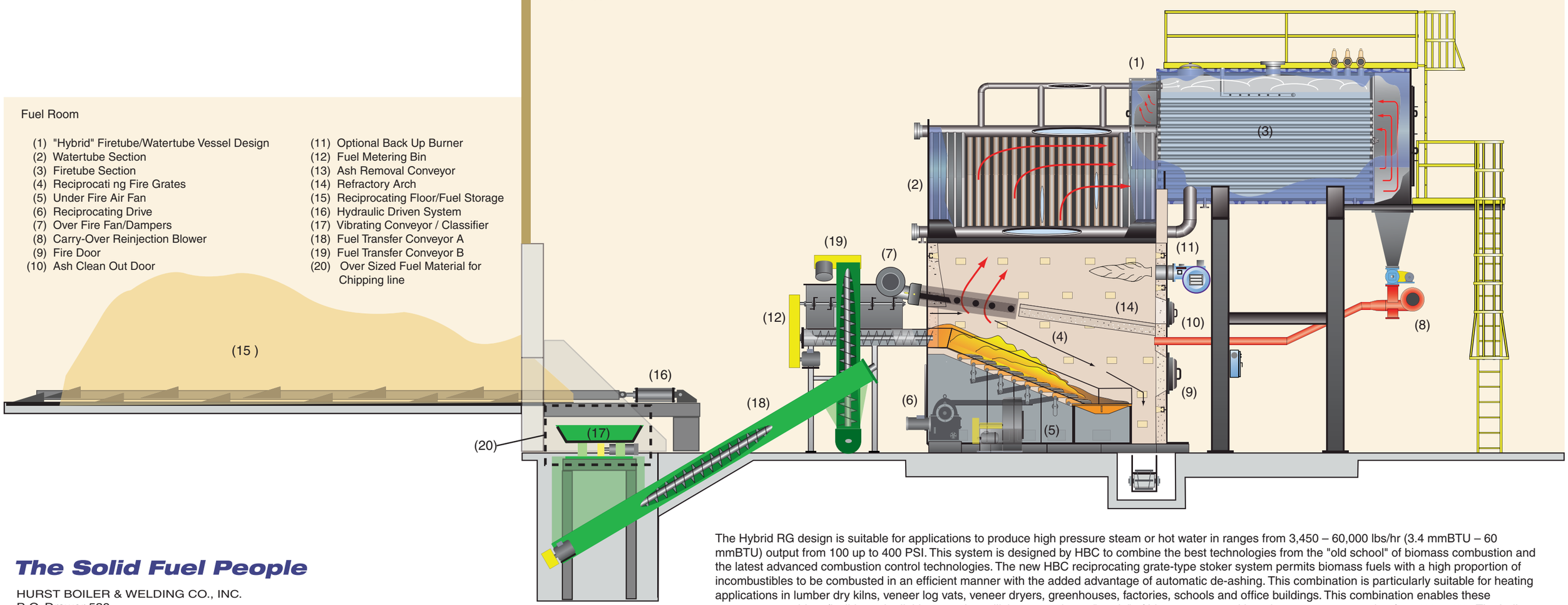
Combustion System

HURST

Fuel Room

(1) "Hybrid" Firetube/Watertube Vessel Design
(2) Watertube Section
(3) Firetube Section
(4) Reciprocati ng Fire Grates
(5) Under Fire Air Fan
(6) Reciprocating Drive
(7) Over Fire Fan/Dampers
(8) Carry-Over Reinjection Blower
(9) Fire Door
(10) Ash Clean Out Door
(11) Optional Back Up Burner
(12) Fuel Metering Bin
(13) Ash Removal Conveyor
(14) Refractory Arch
(15) Reciprocating Floor/Fuel Storage
(16) Hydraulic Driven System
(17) Vibrating Conveyor / Classifier
(18) Fuel Transfer Conveyor A
(19) Fuel Transfer Conveyor B
(20) Over Sized Fuel Material for Chipping line

Boiler Room



The Hybrid RG design is suitable for applications to produce high pressure steam or hot water in ranges from 3,450 – 60,000 lbs/hr (3.4 mmBTU – 60 mmBTU) output from 100 up to 400 PSI. This system is designed by HBC to combine the best technologies from the "old school" of biomass combustion and the latest advanced combustion control technologies. The new HBC reciprocating grate-type stoker system permits biomass fuels with a high proportion of incombustibles to be combusted in an efficient manner with the added advantage of automatic de-ashing. This combination is particularly suitable for heating applications in lumber dry kilns, veneer log vats, veneer dryers, greenhouses, factories, schools and office buildings. This combination enables these systems to provide a flexible and reliable operation utilizing a consistent "grade" of biomass waste with moisture contents ranging from 30 – 50%. The boiler vessel is a two pass hybrid design incorporating a water tubed boiler-type water membrane and a two-pass fire tube scotch marine vessel. This vessel's advantages over standard water tube boilers include much larger steam disengagement area providing high quality steam, larger steam storage capability for quicker response to sudden steam demand and much larger thermal storage that provides fast demand response times and safer operation.

The Solid Fuel People

HURST BOILER & WELDING CO., INC.
P. O. Drawer 530
21971 Highway 319 N.
Coolidge, Georgia 31738
Toll Free: 1-877-994-8778
Tel: (229) 346-3545
Fax.(229) 346-3874
Email: info@hurstboiler.com

CAT # B-08 **HYBRID RG**

Reciprocating Grate System **Modular Packaged**