Spiral Wound Universal Pressure Boiler

**SWUP™**

**Design features:**
A once-through boiler for supercritical applications, usually applied to systems with a capacity of 400 MW or larger; the design features a water-cooled dry-bottom furnace, superheater, reheater, economizer, and air heater components — designed for both base load and full boiler variable pressure load cycling operation as well as on/off cycling operation.

**Capacity, steam output:**
From 2,000,000 lb/h (252 kg/s) to more than 10,000,000 lb/h (1260 kg/s).

**Operating pressure:**
Supercritical, usually at 3500 psi (24.1 MPa) throttle pressure with 5% overpressure; higher pressures available.

**Superheater steam temperatures:**
As required, currently in the 1100F (595C) range.

**Fuels:**
Pulverized coal.
Universal Pressure Boiler

UP®

**Design features:**
A once-through boiler for supercritical applications, usually applied to systems with a capacity of 400 MW or larger; the design features a water-cooled dry-bottom furnace, superheater, reheater, economizer, and air heater components — designed for variable superheater pressure load cycling and base load operation.

**Capacity, steam output:**
Typically 2,000,000 lb/h (252 kg/s) to more than 10,000,000 lb/h (1260 kg/s).

**Operating pressure:**
Supercritical, usually at 3500 psi (24.1 MPa) throttle pressure with 5% overpressure.

**Superheater steam temperatures:**
As required, currently in the 1100F (595C) range.

**Fuels:**
Pulverized coal.
Vertical Tube Universal Pressure Boiler
VTUP™

Design features:
A once-through boiler for supercritical applications, usually applied to systems with a capacity of 400 MW or larger; the design features a water-cooled dry-bottom furnace, superheater, reheater, economizer, and air heater components — designed for both base load and full boiler variable pressure load cycling operation as well as on/off cycling operation.

Capacity, steam output:
From 2,000,000 lb/h (252 kg/s) to more than 10,000,000 lb/h (1260 kg/s).

Operating pressure:
Supercritical, usually at 3500 psi (24.1 MPa) throttle pressure with 5% overpressure; higher pressures available.

Superheater steam temperatures:
As required, currently in the 1100F (595C) range.

Fuels:
Pulverized coal.