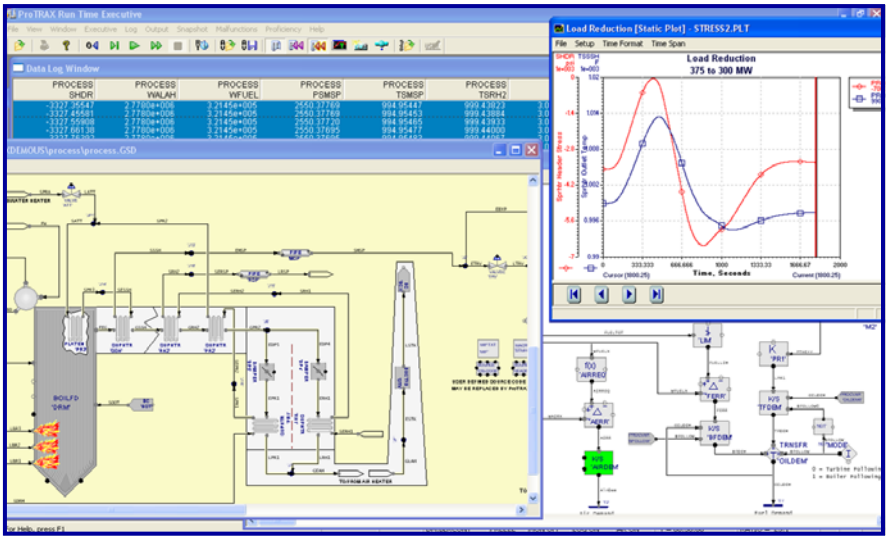
Boiler Modeling

***TRAX Engineering*, a leader in transient analysis, has the tools to allow you to look at all, or part, of your boiler to determine how it behaves both dynamically and at steady state.**



WHY SIMULATE THE BOILER?

There are many reasons to study boiler performance, including:

- **Examining proposed design changes**
- **Load rejection analysis**
- **Furnace implosion studies**
- **Determine temperature and pressure excursions through normal and abnormal operation**
- **Examining boiler performance from Cold Startup through Full Load**
- **Equipment failures**
- **Boiler load ramp testing:**
  - How much energy is stored in the boiler?
  - Time constraints for pulverizer and boiler interactions
  - How rapidly can the boiler ramp up or down?
  - How soon will the boiler be ready for another load ramp?
  - Steaming in the economizer?
- **Boiler controls:**
  - Test operation through major load upsets and trips
  - Examine advanced control strategies
  - Debug and tune controls

EXPEIENCE COUNTS !

***TRAX Engineering* has extensive modeling experience with:**

- New and existing boilers
- Once-through
- Drum
- Circulating Fluid Bed (CFB)
- Sub-critical, super-critical and ultra-supercritical
- Coal, oil, gas or biomass fed
- Corner or wall-fired
- Spiral or vertical waterwalls
- Natural or forced circulation
- Industrial boilers

To ensure accuracy, models are validated against plant data. Our first-principle simulations include leakage, water seals, drum shrink and swell, and temperature control via attemperation, burner tilts or split backpass.

Contact TRAX Engineering today to discuss modeling your boiler.

TRAX INTERNATIONAL™

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