# **ProTRAX Simulation Software**



### What is ProTRAX?

ProTRAX is a modular, dynamic simulation system designed for use on standard computers. TRAX's proprietary, state-of-the-art system, it is an industry standard for both engineering analyses and training simulations. ProTRAX models have a tremendous user base with hundreds of man-years of independent verification and validation.

With over 300 training simulators delivered worldwide, and modeling covering many types of plants, we have the experience to simulate today's new technologies as well as traditional applications.

Over the last 30 years, ProTRAX has been trusted to deliver high fidelity modeling of plant processes for use in engineering studies, plant simulation, controls testing and design.







## **Base System**

- GCPARM Model Building and Parameterization Program
- RTEXEC Run Time Executive
- Compiler and documentation
- Analyst's Instruction Manual comprehensive software documentation provided in .pdf format
- Training Two-day training course for two engineers at TRAX offices in Virginia
- **Support** 40 hours of remote technical support, provided within 90 days of software delivery
- System module set
  - Boundary condition modules
  - ISA/SAMA control system modules
- · Balance of Plant module set
  - Steam turbine
  - Feed water train components

#### **Available Module Sets**

#### **AC Electrical**

- Generator
- Motors
- Power distribution components

#### **Auxiliary**

- Gas and oil components
- Simplified electrical components

#### **Boiler**

- Once-through boiler
- Drum boiler
- Boiler associated components

#### **CFB**

Circulating Fluidized Bed (CFB) boiler components

#### **Combined Cycle**

- Gas turbine components
- HRSG components

#### **Environmental**

Pollution control equipment, including FGD and SCR

#### **Multi-Component**

 Flow stream compositions for approximately 25 mixtures for various applications, including gasification, pulp & paper, wastewater, sulfuric acid, etc.

#### **Additional Features and Tools**

- Runtime License with multi-computer use (RTSUPV)
- ProTRAX Dynamic Graphics Screen Editor (GSEDIT)
- I/O Utility (IOGEN)
- OPC Server or OPC Client (for use with various control systems)
- Virtual DCS Interface (most major virtual control systems supported, including GE, Emerson, and ABB)
- · Translators and emulators



