# Fossil-Fired Utility Controls Benchmarking and Tuning

Provecta Process Automation offers an exceptional level of experience and expertise in the area of control system benchmarking and tuning. Within Provecta we have staff that have been responsible for the benchmarking and tuning of major power stations throughout Australia, in Vietnam, Sth Korea and the USA.

Response analysis tool

Benchmarking – Provecta can offer detailed benchmarking services to assist organisations in assessing the performance of their control systems and identifying associated deficiencies in plant performance. In particular, benchmarking prior to DCS replacement or upgrade can identify processes that would benefit from advanced control strategies, and help quantify those benefits.

Tuning - Provecta staff utilise specialised PC based tools to provide advanced analysis and optimization of system performance. *Highly controlled procedures* customized for each loop to minimise the impact of tuning on plant operations. Characteristics are calculated over the full operating range to ensure gain and phase margins are maintained under all conditions. System ID tools are applied for high-order systems. Closed loop responses are simulated using Simulink® and Protuner® prior to applying settings to the actual plant.
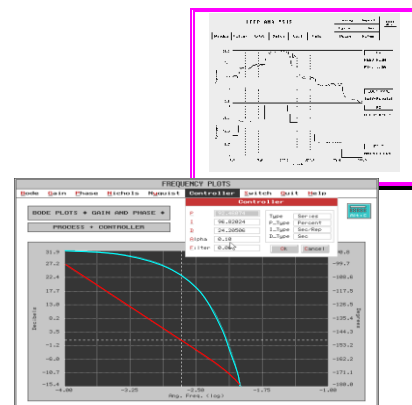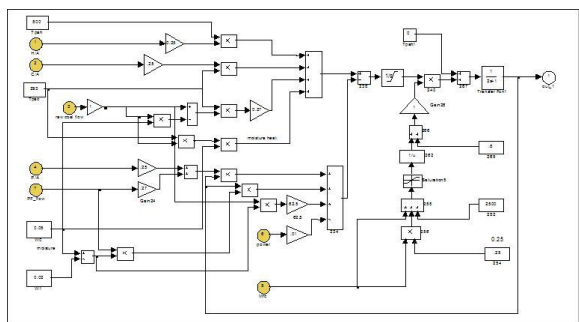
Pulverizer Thermal model

Performance Analysis – Response data is used to construct complex interactive plant models on which advanced control strategies may be applied.

Benefits to Clients – Through the proven experience and expertise of Provecta's staff, your plant can reap the benefits of improved efficiency, extended plant life, increased stability and improved responsiveness – all leading to the ultimate goal of maximum productivity for your plant.

Should you wish to discuss any aspects of system benchmarking, or tuning, please contact our benchmarking or tuning expert, Mr Don Parker at the following contact details:

Mr Don Parker MEng RPEQ
don.parker@provecta.com
P +1 (224) 420 7982
M +1 (224) 714 7952

Certified System ™
Quality
ISO 9001
SAI GLOBAL

AUS. HEAD OFFICE – Level 6, 28 Foveaux St, Surry Hills, NSW 2010 p +61 2 8204 5400
www.provecta.com.au
U.S. HEAD OFFICE – Suite 600, 1603 Orrington Ave Evanston, IL 60201 p +1 224 714 7952
www.provecta.com

provecta
PROCESS AUTOMATION