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POWER USERS

Mega Event

2023 Conference and Vendor Fair

Omni Atlanta Hotel at CNN Center • August 28 – 31

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GCUG COMBINED CYCLE USERS GROUP

GTG GENERATOR USERS GROUP

STUG STEAM TURBINE USERS GROUP

POWER PLANT CONTROLS USERS GROUP

Best Practices Awards (p 87)

Amman East Power Plant (Jordan) • Broad River Energy Center
H O Clarke, Topaz, and Braes Bayou • Exira Station
River Road Generating Plant • Ventanilla Combined Cycle (Perú)





Other content

Miscellany

Users visit Continental Controls during WTUI 2023

Western Turbine Users Inc, the world's largest organization of aeroderivative gas turbine owner/operators, conducted its 32nd conference last March at the San Diego Convention Center. With nearly 1000 industry participants from around the globe just 15 minutes from company headquarters, WTUI exhibitor Continental Controls Corp opened its doors to present CCC's recently expanded capabilities and resources for the manufacture of fuel-gas control valves.

With over 20,000 ft² under roof, Continental Controls offers in-house manufacturing and testing, vertically integrated with an internal machine shop, electronics assembly, and R&D lab.

CCC President Dave Fisher (Fig 1) and his management team conducted a facility tour, showcasing the latest technology used in producing parts for the company's products—like its AGV10 advanced gas-turbine fuel valve (Fig 2). Assembly and product testing stations were available for the users to explore, providing a comprehensive and first-hand understanding of operations while introducing them to the engineers and technicians who do the work.

First stop on the tour was the assembly area for the AGV10 valves used to meter fuel to gas turbines rated up to 28.5 MW—about the output of an LM2500 engine. There are only minor differences in the valve models (Fig 3) to accommodate specific turbine engines.

The valves are designed to provide an optimum interface between the control system and gas turbine. Valve control is linear—that is, fuel flow is proportional to the 4-20-mA fuel demand signal from the PLC.

1. President Dave Fisher welcomes turbine users to CCC's new San Diego facility

Keith Flitner, VP sales and marketing, said the valves have exceptionally fast response times and provide outstanding transient performance when used in gen-set applications. Plus, they also provide superior turbine performance in any mechanical-drive application (compressor and pump).

The high accuracy of the valve in the start fuel range assures the turbine will have excellent light-off and consistent starting characteristics.

At the second stop, Sales Engineer Eric Allen walked visitors through the company's Gas Substitution System (GSS) that allows fuel oil to be substituted for natural gas. Advanced substitution control is achieved through direct interface between the GSS and Engine Control Unit (ECU).

2. Keith Flitner, VP sales and marketing, explains the AGV assembly area to guests

3. The AGV10 valve meters fuel to gas turbines

At nearly any load condition and application, the GSS substitutes the maximum amount of diesel oil without sacrificing engine performance or power output. The GSS uses proven technology, field-tested with years of successful performance.

An upgrade to CCC's ECV5 fuel-valve-based system for NO_x control also was mentioned at the open house. It is capable of achieving near-zero ppm NO_x, capitalizing on the company's long history of advanced control logic software development and system integration experience.

4. Eric Allen, sales engineer, explains the gas substitution system to attendees

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