

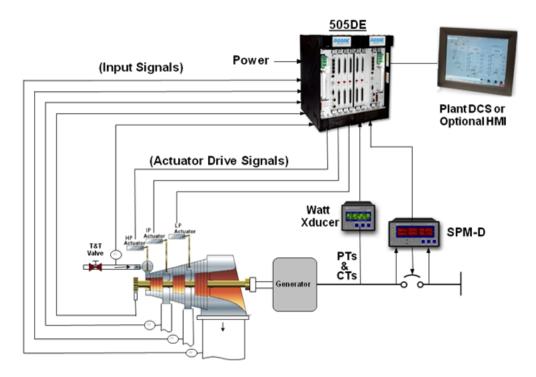
Application Note 51336 (Revision NEW, 7/2008)
Original Instructions

505DE Steam Turbine Controller Product Release Announcement

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Introduction

Woodward is pleased to announce the release of its 505DE steam turbine control product line. The 505DE product line is designed to control industrial steam turbines of all sizes and applications. This steam turbine controller includes specifically designed algorithms and logic to start, stop, control, and protect industrial steam turbines driving generators or compressors. The 505DE control's unique PID structure makes it ideal for applications where it is required to control steam plant parameters like turbine speed, load, and inlet, extraction, or exhaust header pressures.



Ideal for plants wanting to standardize, this configurable controller allows users to configure it for use on:

- Single valve turbines
- Single extraction turbines
- Double extraction turbines (with one or two inlet valves)

Simplex 505DE controller models are available for cost-sensitive applications, and dual-redundant models are available for system-critical applications requiring a higher level of availability.

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Feature/Capability	Benefit
Field-proven software	Low risk of site problems
10 millisecond scan rates	Accurate and fast speed, frequency, and load control
Simple to program and use	Does not require OEM or Woodward to make changes
Bumpless mode switching	Stable plant operation
Functions like popular 505 controller	Plant operators and engineers understand operation

505DE Success Story

A 505DE control was installed in January 2007 at Windalco's aluminum smelting plant on the island of Jamaica. Windalco wanted to replace an old mechanical control system on their Dresser Rand double-auto extraction steam turbine to improve their turbine generator frequency control, and allow all three of their turbine generator sets to share plant load. Windalco chose the OEM's recommendation, the Woodward 505DE, because of its tight frequency control and simple-to-use design. The 505DE now successfully holds plant frequency stable even with large load changes, and allows their other two turbine generators to share load as desired.



Regards, Rich Kamphaus Turbomachinery Controls Product Line Manager Woodward (rich.kamphaus@woodward.com)

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