

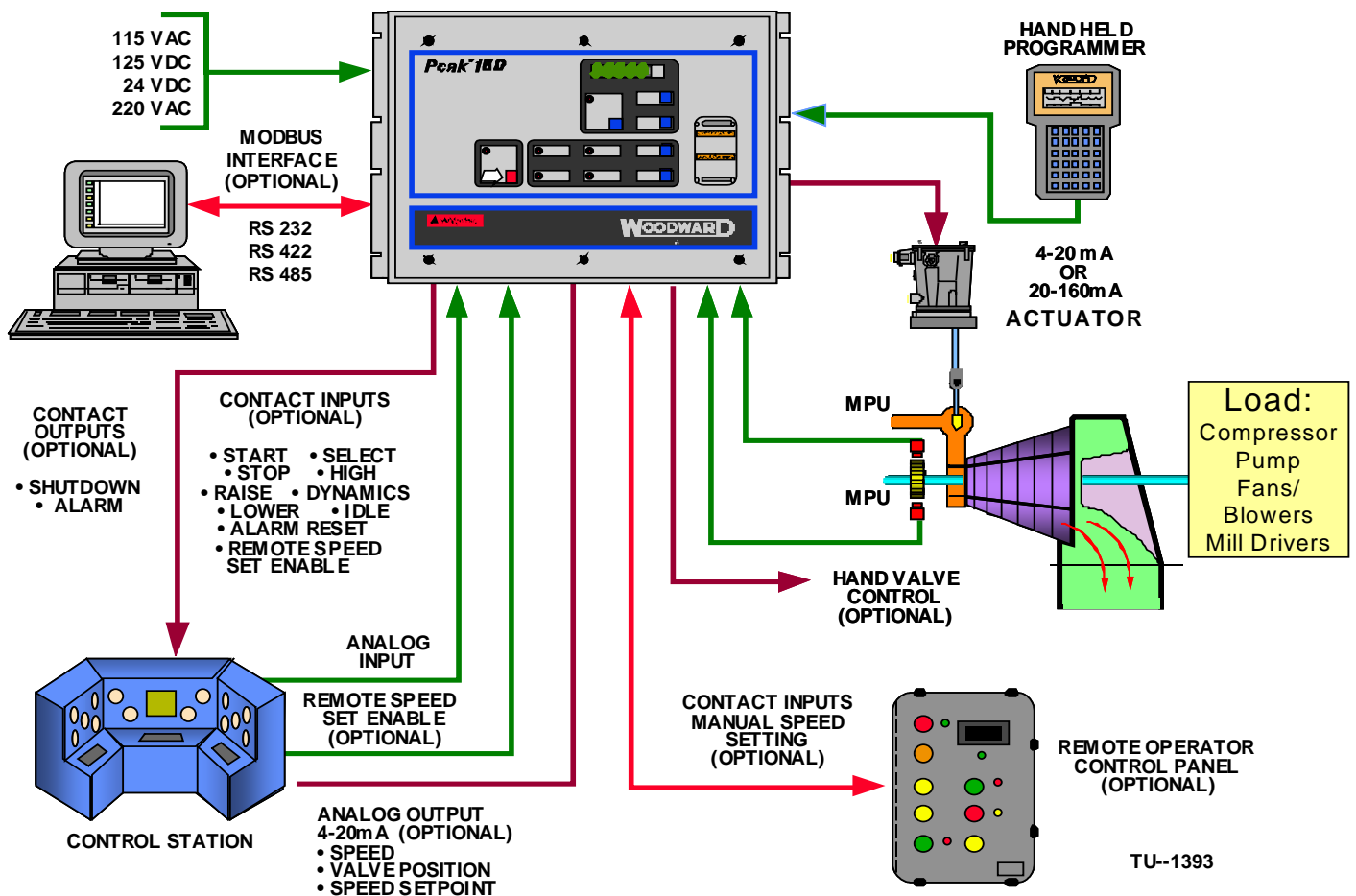
## Simple Mechanical Drive Steam Turbine Applications

Many mechanical drive applications for compressors, pumps, fans/blowers, line shaft drives, and mill drives require tight speed control at a low cost. Woodward's Peak<sup>®</sup> 150 digital control is designed to control steam turbines driving mechanical loads. It provides tight control of speed (NEMA D) and includes an input for a 4–20 mA remote speed control signal, which can be used for a process generated input to control the speed setting. Other features include dual speed control dynamics and overspeed trip test.

The Peak 150 steam turbine control is a low-cost, compact, digital control for single-valve or single-valve rack steam turbines and interfaces with a variety of Woodward actuators as well as commercially available pneumatic actuators. It provides convenient operator control and speed display from the front panel and is housed in a watertight, and dust-tight, enclosure for in-plant installation. A corrosion-resistant enclosure designed to meet NEMA 4X requirements is also available.

### Benefits

- Easy setup and tuning
- Low cost digital technology
- User programmable
- Program security
- Process control interface
- Modbus<sup>®</sup> communications
- Minimal installation time
- Interfaces with hydraulic or pneumatic actuator





The **Peak® 150** digital control is designed to control a single-valve steam turbine driving a mechanical load. It provides tight control of speed (NEMA D) and includes an input for a 4–20 mA remote speed control signal, which can be used for a process-generated input to control the speed setting. Other features include dual speed control dynamics and overspeed trip test capabilities.  
(product spec 85549)



The **TG-13E and TG-17E actuators** are drop-in replacements for TG mechanical governors, and are self-contained electro-hydraulic actuators for use on steam turbines where isochronous control, load sharing, or other functions are required. They can be used with all available Woodward electronic governor controls and accessories.  
(product spec 04044)



The **PGPL Actuator/Driver** is a drop-in replacement for PG-PL mechanical governors, and is an electro-hydraulic actuator with a proportional driver interface which can be used with electronic controls providing a 0 to 200 mA position signal. The actuator is designed for use with Woodward controls.  
(product spec 37520)



The electrically controlled **Hydraulic Amplifier** is a pilot operated, linear servo actuator with up to 3 inches (76 mm) of stroke and up to 4500 lb (20 kN) of force. The amplifier is capable of operating the control mechanisms for steam turbines or large engines which require relatively large forces and work capacity.  
(product spec 89007)



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