MAXIMIZE PERFORMANCE and PROFITS
of your steam turbine and electronic governor!

Install BAFCO Model 701 electro-hydraulic steam throttle valve actuators, servovalve, servoamplifier and trip systems to precisely position the steam valves.

BAFCO …. The premier electro-hydraulic valve actuator and control system manufacturer for CRITICAL PROCESS CONTROL for the worldwide petrochemical industry for over 40 years! From Catalytic Cracking Units to High Pressure Polyethylene Reactors to Rocket Engine Test Facilities, users know they can depend on BAFCO!

BAFCO MODEL 701 STEAM THROTTLE VALVE SYSTEMS include:

❖ high response linear hydraulic actuator
❖ LVDT for position feedback
❖ servoamplifier mounted in NEMA-4X control box
❖ receives 4-20 ma output from ANY electronic governor
❖ 2 or 3 stage servovalve and trip manifold
❖ electro-hydraulic trip controls for high speed trip
❖ duplex filtration for most sensitive components
❖ outputs for monitor and alarm
❖ adaptors for turbine shell or floor mounting

Bulletin STVC
STANDARD SYSTEM FEATURES:
- Output shaft extends to open steam throttle valve
- Thrust output 2,500 to 25,000 lbs.
- Stroke length 1” to 12”
- Speed (Throttling) < 2.50 sec. - others available
- Speed (Trip) < .400 sec. - others available
- Input signals - throttling 4-20 ma - others available
- Solenoid valve (trip) 24 vdc - others available
- Linearity < 1%
- Hysteresis < .5%
- Repeatability < .2%
- Response level < 0.03 ma
- Resolution < .1%
- Power source - electrical 24 vdc, 110 vac, 220 vac,
- Electrical classification NEC Class 1, Div. 2 & Cenelec
- Power source - hydraulic 90 to 300 psi
- Filtration 10 micron nominal
- Flow requirements - quiescent 2 gpm at 100 psi
- Ambient temperature -15°F to +150°F
- Materials of construction
  - Manifolds aircraft grade aluminum - anodized
  - Cylinder/cylinder heads carbon steel - nickel plated
  - Piston stem stainless steel

OPTIONAL SYSTEM FEATURES:
- Manual control station electric pushbutton control
- Output shaft retracts to open steam throttle valve
**SERVOAMPLIFIER BOX**

- NEMA-4X enclosure
- Servoamplifier
- Dual power supplies
- Terminal strips
- Dual digital readouts
  - Shaft position
  - Governor Signal
- LED power supply
- LED fault indicators
  - Loss of command signal
  - Loss of power supply
  - Loss of feedback signal
  - Loss of coil

**TRIPLE REDUNDANT TRIP MANIFOLD**

- 2 out of 3 solenoid tripping logic
- Solenoids can be changed on the fly
- Solenoids rated NEC Class 1, Div. 1 & Cenelec
- De-energize solenoid to trip
- Trip voltages - 24 vdc, 110/220 vac
- Auto reset on restoration of power
- Dual trip cartridges for increased reliability
- Anodized aluminum manifold
- Multiple 1" inlet & drain connections
- Hydraulic pressure gage connection
- Outputs for monitor & alarm

**OPTIONAL FEATURES**

- Manual trip
- Other solenoid voltages available
OTHER BAFCO PRODUCTS

SLIDE & PLUG VALVE ACTUATORS
For FCC Refineries

BUTTERFLY VALVE ACTUATORS
For Expander Turbines

FREQUENCY RESPONSE ANALYZERS

CENTRAL HYDRAULIC SYSTEMS

FURNACE DAMPER ACTUATORS

FIELD MANIFOLDS

ADDITIONAL PRODUCTS BY BAFCO
- INLET GUIDE VANE ACTUATORS & CONTROLS FOR LARGER AXIAL COMPRESSORS -
- HIGH PRESSURE SOCKET WELD TUBING & PIPE FITTINGS per SAE CODE 61 -