

Dresser-Rand® Gimpel™ Valve

Replacement Valve Operative Sections - “Top-Works”

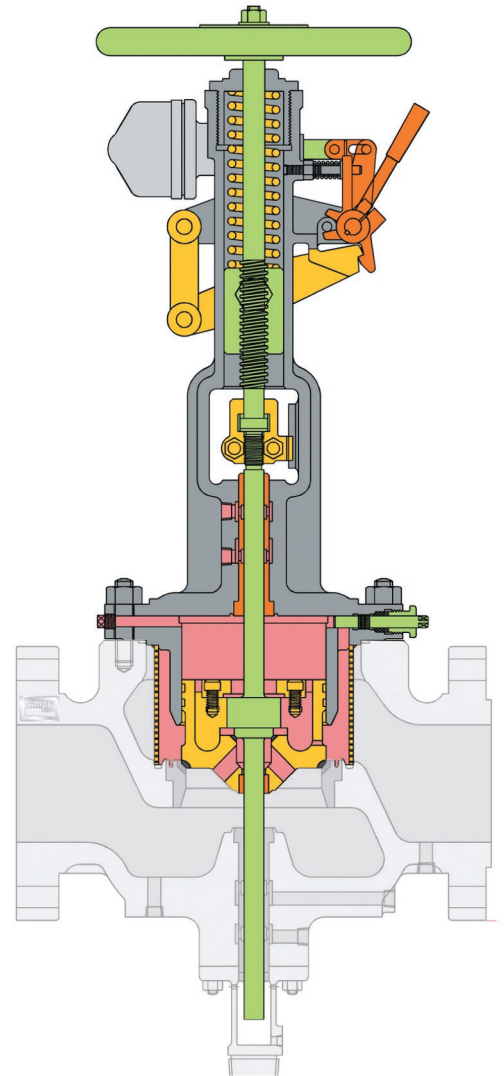
Many three-, four- and six-inch inlet size, single-governor-valve steam turbines are designed with a steam chest containing separate trip and governor valves. Dresser-Rand may be able to adapt a Gimpel mechanical latch-type trip throttle valve, “Top Works,” (*i.e.* operating section) to the existing valve body for improved reliability and operation.

The replacement operating section can be actuated using lubrication oil, process air, or a solenoid trip arrangement. If hydraulic or pneumatic actuation is used, the supply system must be retrofitted with a solenoid “dump valve” that responds to the electric signals produced by the overspeed protection system.

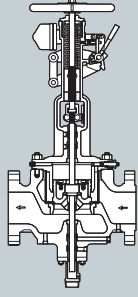
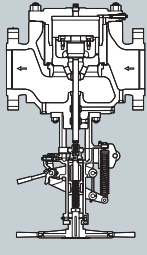
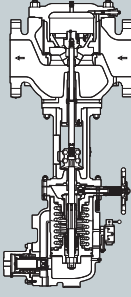
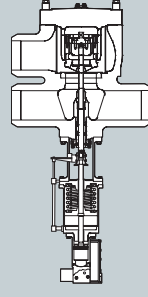
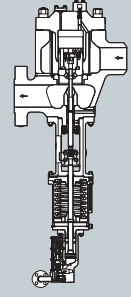
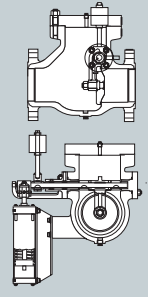
The “Top Works” system retains the existing valve body, thereby eliminating modifications to the supply steam piping.

Benefits:

- Improved reliability and operation
- Retention of existing valve body
- Availability of hydraulic, pneumatic, and solenoid actuation



Gimpel™ Valve Matrix

| | Mechanical Latch | | Oil (hydraulic) Operated | | | Swing Disc Non-Return |
|--|--|---|---|--|---|--|
| | TMTTV Top-Mechanism Trip Throttle Valve  | INTTV Inverted-Trip Throttle Valve  | OOTTV Oil-Operated Trip Throttle Valve  | OOPSV Oil-Operated Position Stop Valve  | OOTV Oil-Operated Trip Valve  | SDNRV Extraction/Induction Power Assisted Valve  |
| Operation | Push-to-Close | Pull-to-Close | Pull-to-Close | Pull-to-Close | Pull-to-Close | Free-Swinging |
| Size NPS —inches DN —(mm) | 2-14 (50-350) | 3-20 (80-500) | 3-24 (80-600) | 6-24 (150-600) | 3-24 (80-600) | 4-36 (100-900) |
| Pressure ANSI Class | 150-1500 | 150-1500 | 150-2500 | 150-2500 | 150-2500 | 150-900 |
| Temperature °F (limit) °C (limit) | 950 510 | 950 510 | 1004 540 | 1004 540 | 1004 540 | 950 510 |