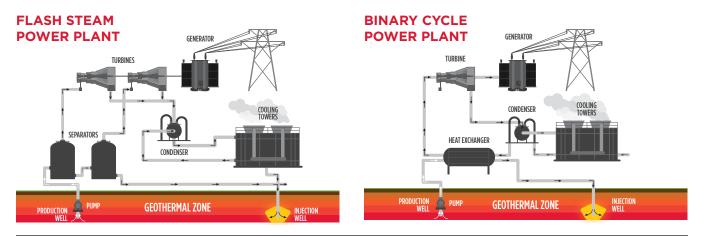
ð Bray

Bray Valves and Automation Offer Reliable Performance in Geothermal Power Production

Valves and automation in geothermal power plants are subject to demanding process conditions, such as high temperatures, pressure differences, flashing and scaling. Bray can meet our customers requirements with our versatile range of products, proven industry experience and extensive knowledge of choosing the proper valve type and tailored actuation and controls to ensure a leak-free and reliable process.



Bray McCannalok Double Offset Butterfly Valves

- Proven in high cycle applications to maintain shutoff capability.
- Have a field replaceable seat.
- > Provide field adjustable low emission packing.

These valves are applied in block and flow control applications on isopentane service to the turbine and to the condenser in binary design geothermal power systems.

Tri Lok Zero Leak, Triple Offset Butterfly Valves

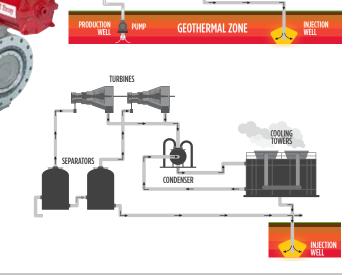
- Easy maintenance field replaceable seat and seal ring.
- Zero leakage metal-to-metal seating.
- > Bearing seals to prevent ingress of line media.
- > Proprietary seat material hardening, twice as hard as Stellite for less wear and longer seat life.

In a Binary designed system, Tri Lok Valves are applied to control the flow of hot brine from the well into the heat exchanger and on the outlet of the heat exchanger controlling flow to the injection well.

In a Flash design system, Tri Lok Valves are installed on the outlet of the steam separator to control the flow steam to the turbine, on the condenser line and flow to the reinjection well. Also installed as block valves to the rock box muffler.



HEAT EXCHANGER



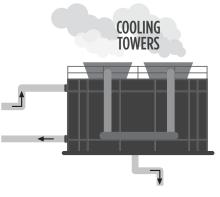
GEOTHERMAL SOLUTIONS

Bray Resilient Seated Butterfly Valves

- > Industry leading high Cv capacity.
- Bubble tight shutoff, low torque.
- Heavy duty bearing to absorb side thrust to extend service life.
- Field adjustable stem packing.
- Field replaceable seat.
- Low cost of ownership.

These valves are currently installed in cooling water piping to and from the cooling tower in both level control and block applications.





Bray provides a single-source solution of expertise for automation packages.

Bray Series 98 Actuator

- Easy to maintain with field replaceable > components.
- > Ingress protection IP66/67/68 rated.
- > Independently tested and field proven to 1,000,000 cycles under full load.
- > Suitable for fast acting ESD service.
- SIL3 capable.
- Available in pneumatic, hydraulic, and electro-hydraulic configuration.

S98 Actuators provide a rugged modular design to handle tough environmental and process conditions.

Bray also provides a complete range of accessories such as SMART positioners, rugged valve status monitors and a robust valve health monitoring capability.

Bray manufactures a broad scope of valves to meet the needs of corrosive and abrasive processes in mineral extraction.



PFA lined and PTFE lined valves provide long service life and personnel protection from corrosive mineral extraction process fluids.

S19/S19L Segmented control valves offer:

- Ability to handle high velocity abrasive media.
- > High rangeability (300:1)
- Field replaceable

These valves control steam/hot water from the wellhead to the separator and brine to the reinjection well.

