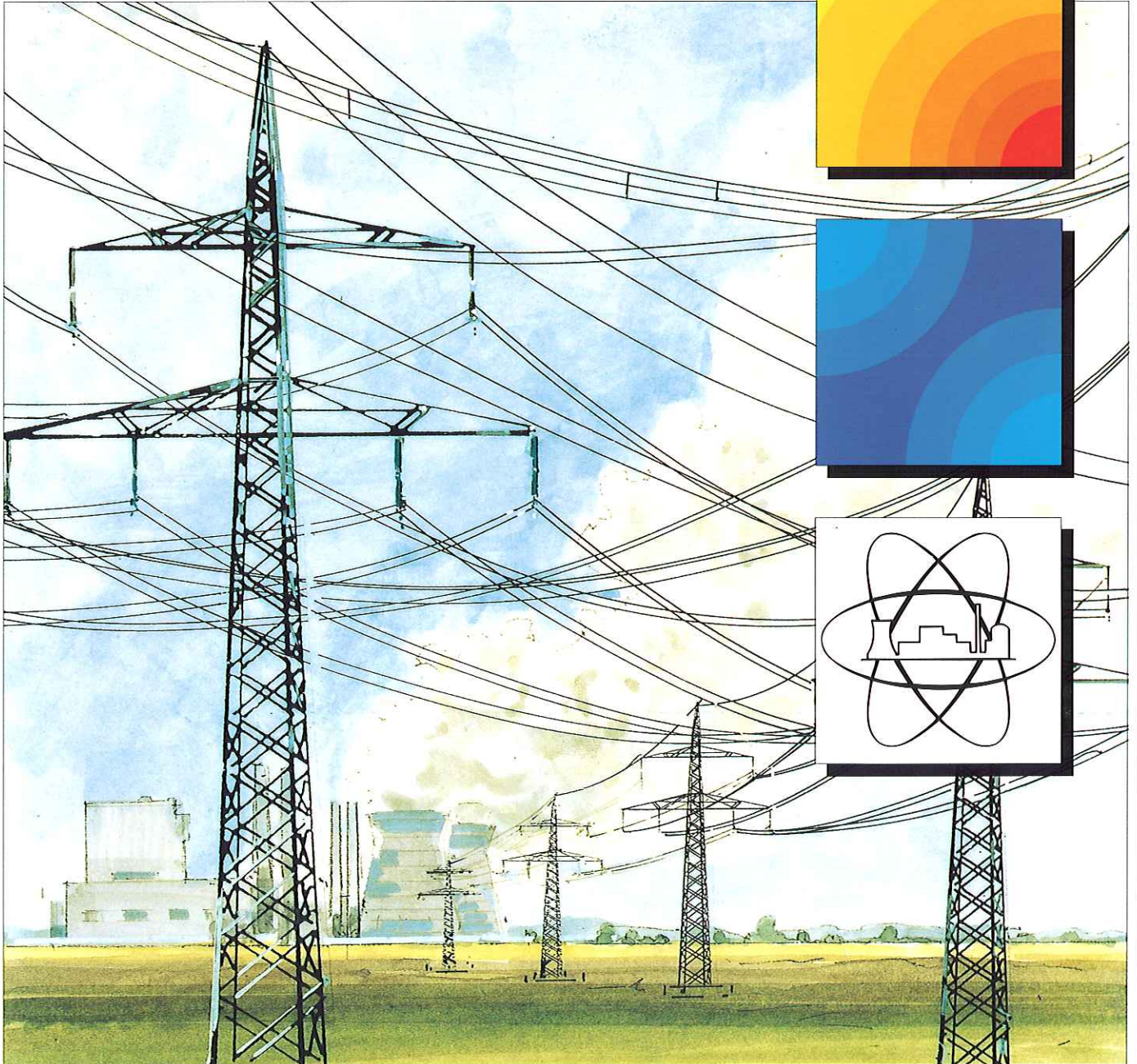


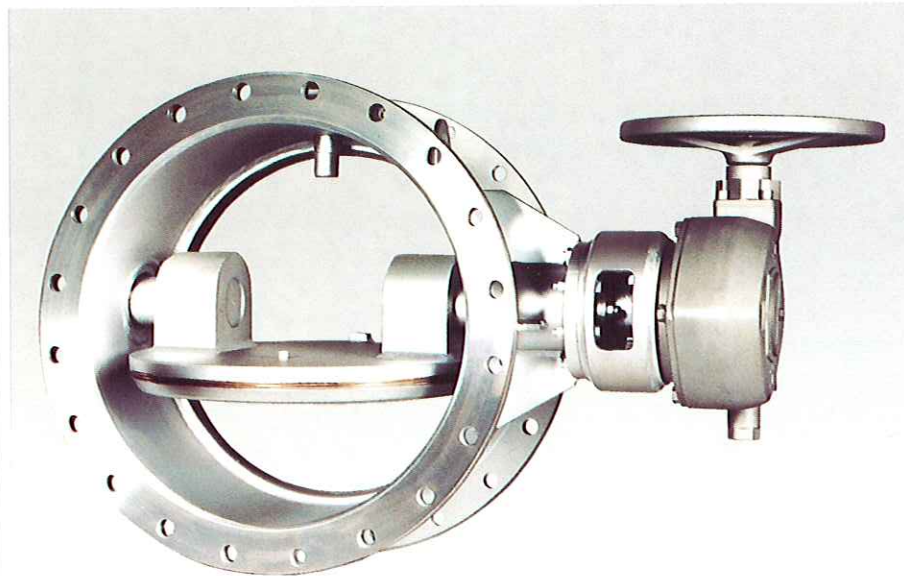
Valves for power station technology



For **condensers**,
 FRIATEC offers a range of
 specially-developed double eccentric butterfly valves
 with metal-to-metal seat and special shaft seal
 for low-pressure steam systems.



Zertifikat-Reg. Nr.
 71 100 6 064
 For FRIATEC AG
 Valve Division



Example:

FRIASEAL® - Type 442

FRIASEAL® Type 442 double eccentric butterfly valve in fabricated version with flanges to DIN or ISO.

- for gas and vaporous media up to 650 °C (~1200 °F)
- nominal sizes up to DN 2200 mm (~88")
- pressure ratings PN 1 to PN 6 bar (~15 to 90 psi)
- installation in any position
- tight shut-off in both flow directions
- wide selection of actuators based on modular system
- special anti-corrosion protection to customer's requirements

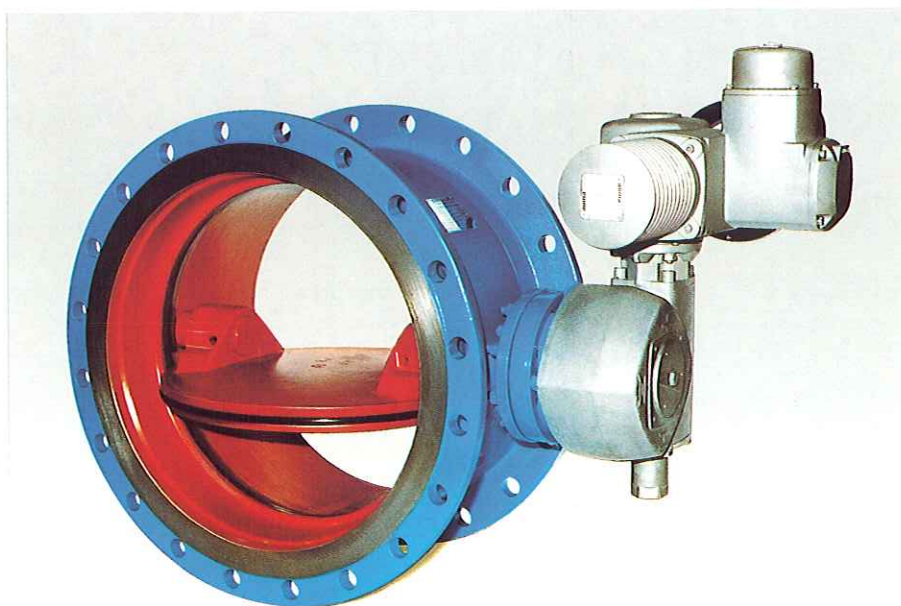
For **primary cooling circuits** FRIATEC supplies shut-off butterfly valves, wedge-gate valves and check valves in a variety of materials and protective coatings, salt water resistant version included.

Example:

FRIASEAL® - Type 413/415

The FRIASEAL® Type 413/415 shut-off butterfly valve manufactured in nodular cast iron or fabricated. Soft-seated for liquids up to 100 °C (~210 °C) and gases up to 150 °C (~300 °F).

- flange acc. to DIN and ISO and international standards
- nominal size up to DN 3400 mm (~136")
- pressure ratings PN 2.5 to PN 40 bar (~37.5 to 600 psi)
- installation in any position
- tight shut-off in both flow directions
- wide selection of actuators based on modular system
- special anti-corrosion protection to customer's requirements
- also available as combined shut-off/check butterfly valve.



For **turbine and pump protection** in hydroelectric power stations, FRIATEC has developed a combined shut-off/check butterfly valve with a special drive system for particularly effective operating reliability (German patent pending). FRIATEC also provides wedge-gate flat body valves and check valves.

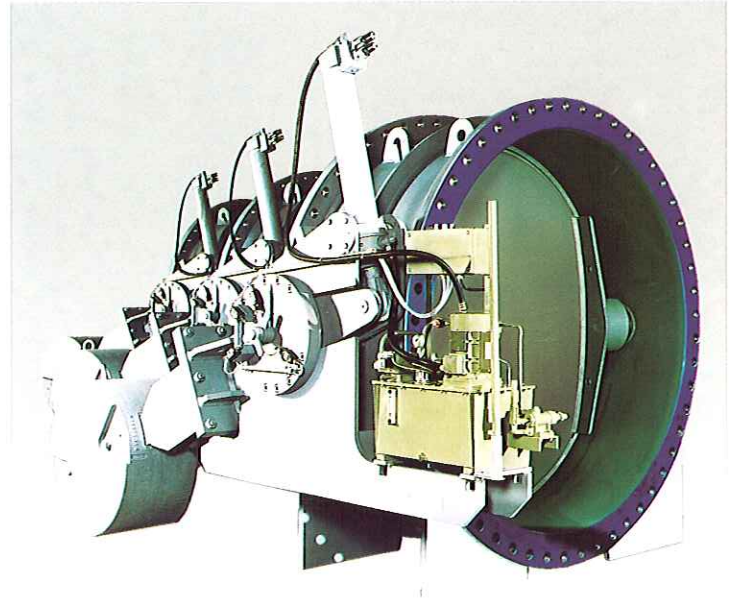
**TH. JANSEN
+RHEINHÜTTE
VALVES**

Example:

FRIASEAL® - Type 415

The FRIASEAL® Type 415 safety shut-off butterfly valve with special drive system (German patent pending) for pump protection.

- in cast nodular iron or fabricated
- flange acc. to DIN and ISO and international standards
- nominal size up to DN 3400 mm (~136")
- pressure ratings PN 2.5 to PN 40 bar (~35.5 to 600 psi)
- installation in both flow directions
- wide selection of actuators based on modular system
- special anti-corrosion protection to customer's requirements
- salt-water resistant versions available.



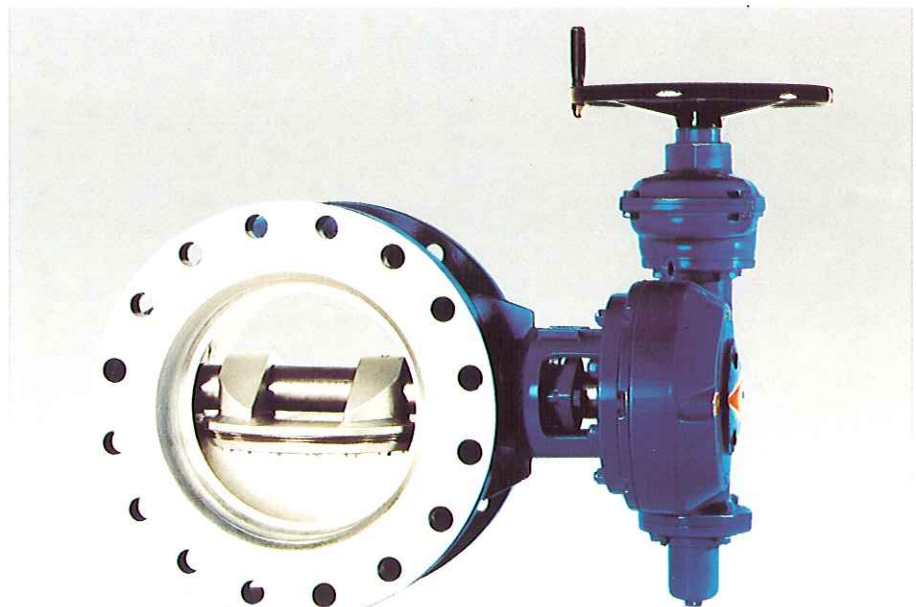
For **district heating systems** (low-pressure steam or hot water), FRIATEC has developed a shut-off butterfly valve with a special sealing system for high functional reliability.

Example:

FRIASEAL® - Type 441

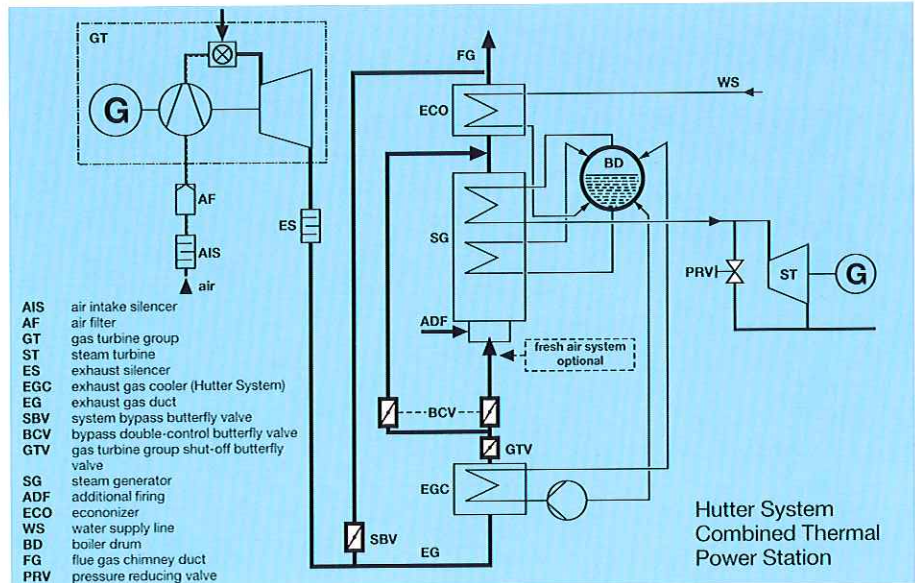
The FRIASEAL® Type 441 district heating system butterfly valve for operating temperatures up to 450 °C (~840 °F).

- flanged version to DIN and ISO or with weld ends
- available in a variety of materials
- nominal size DN 200 to DN 1200 mm (~8" to 48")
- pressure ratings PN 10 to PN 40 bar (~150 to 600 psi)
- installation in any position
- tight shut-off in both flow directions
- wide selection of actuators based on modular system



Also in the FRIATEC product range:

- wedge-gate valves for ash removal
- three-lever valves double seated and with sealing agent connection for reactor building ventilation in nuclear power stations
- tilting butterfly check valves



For this "Hutter System" combined gas turbine/steam turbine thermal power station, FRIATEC has developed a range of special valves for control and shut-off tasks in co-operation with Colenco Thermische Energieanlagen AG.

Additional areas of activity

Shut-off valves for ● water ● gas
● chemical processes ● iron & steelworks

Please send me free and non-binding details of your shut-off valves for:

- condensers
- primary cooling circuits
- turbine and pump protection
- district heating systems
- I would like to receive a visit.
Please call to arrange.

Tel. _____
Company _____
Contact _____
Address _____
Town/city _____

Attach
stamp

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