Tech Sheet #124
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RELIEF VALVES VS. RUPTURE DISCS

Relief valves and rupture discs protect the condenser shell from over pressurization. They are designed to "trip" or "rupture" when the condenser shell pressure rises above the set pressure. This phenomenon normally occurs due to loss of circulating water flow to the condenser. . .

	RELIEF VALVE	RUPTURE DISC
Capital Cost	• Higher Initial Cost	• Lower Initial Cost
Reliability	• Excellent • Good for numerous open and close cycles.	• Moderate • Good for single use. • Must have spare on site in case of rupture.
Design	• Valve supports must handle valve weight and trust loads. • Valve hangers may be required if not mounted directly to the condenser shell. • Personnel protection must be considered. • Water seal around valve disc is required. • Manual lifting device is required.	• Designer shall consider erosion and corrosion when selecting location. • Personnel protection must be considered. • No water seal is required
Installation	• No special requirements	• Care must be taken during installation to protect the disc and prevent mechanical damage.

Please refer to the latest edition of the Heat Exchange Institute Standards for Steam Surface Condensers for more information.

This Tech Sheet was developed by the members of the Heat Exchange Institute's (HEI) Condenser Section. HEI is a trade association comprising the leading manufacturers of heat exchange and vacuum equipment. HEI Tech Sheets are information tools and should not be used as substitutes for instructions from individual manufacturers. Always consult with individual manufacturers for specific instructions regarding their equipment.