



## Hydrogen Service

Hydrogen is a diatomic gas used in a number of refining and petrochemical processes.

Hydrogen has a high ratio of specific heats, therefore will increase in discharge temperature with smaller increases in compression ratio. Temperature limitations are 250 F (121 C) for selection purposes and no greater than 275 F (135 C) in operation. Shutdown setting should be no greater than 300 F (149 C). Additional stages of compression may be necessary to maintain these lower discharge temperatures.

PRC cylinders and application guidelines are necessary for hydrogen applications. The application guidelines include lower discharge temperatures and lower piston speeds. Helium leak testing is required for cylinders used in Hydrogen service.