Room-temperature strength does not establish the high-temperature service range

Chrome-Moly Steel (Cr-Mo) for High-Temperature Service

Material in a real steam-equipment specification	Temperature limit stated in that document	Selection message
ASTM A106 Gr.B carbon steel	427 °C	Example of the carbon-steel limit used for that equipment
ASTM A335 P11 — 1.25Cr-0.5Mo	510 °C	Cr-Mo is used for a higher-temperature range
ASTM A335 P22 — 2.25Cr-1Mo	565 °C	Higher-temperature duty with different alloy/creep behavior
ASTM A335 P91 — 9Cr-1Mo-V-Nb	649 °C	Modified 9Cr steel for more severe duty in the same equipment family

Source / basis: https://niktrd.com/chrome-moly-steel