



MATERIAL RECOMMENDATIONS FOR CHLORINE VALVES

Environment	Service	Max. Chlorine Conc. PPM of H₂O	Recommendation for Ball and Stem Material
Clean (no chlorine in the air)	Mid-Line	20 ppm	Monel Ball & Stem
		50 ppm	Hastelloy C Ball, Monel Stem
		150 ppm	Hastelloy C Ball & Stem
Chlorine Contaminated	Mid-Line	150 ppm	Hastelloy C Ball & Stem
Chlorine	End of Line	150 ppm	Hastelloy C Ball & Stem

Note: Metal corrosion is caused by the presence of water in a piping system. It is virtually impossible to guarantee a moisture-free system due to the moisture in atmosphere introduced during construction and installation. According to the Chlorine Institute the definition of dry chlorine is chlorine having less than 150 parts-per-million (ppm) of water. However, amounts of water as low as 20 ppm are enough to cause corrosion.

Features of Ball Valve for Chlorine Applications

Chlorine Institute Specifications (Pamphlet #6, Piping Systems for Dry Chlorine)

Relief Hole in Ball- Vents excess ball cavity pressure in closed position.

Relief Hole in Stem Slot- Vents cavity pressure in open position.