



Potassium Hydroxide (KOH) is a highly caustic and reactive chemical, commonly used in applications such as soap production, biodiesel manufacturing, fertilizers, batteries, and chemical synthesis. One of its most relevant modern uses is as an electrolyte in electrolyzers for hydrogen production, where its strong alkaline properties allow efficient water electrolysis.

In these processes, KOH is typically handled in aqueous solution, where its high alkalinity brings significant challenges: severe corrosion risks, chemical burns, stress-cracking of incompatible alloys, and degradation of sealing elements. When combined with pressurized systems, the risks of leakage and accelerated material wear increase considerably.

Vinco's ball valves are engineered for safe and reliable operation in KOH service by using alkali-resistant metallic materials, carefully selected seals, and packing systems resistant to chemical attack, to assure high levels of tightness and operational safety in demanding hydrogen production environments.

BILL OF MATERIALS					
ENCLOSURE	BALL	STEM	SEATS	SEALS	PACKING*
STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	TFM 1600	PTFE GRAPHITE	TFM 1600

*Metal parts in 904L / CN7M and/or packing with FFKM and GRAPHITE are available under request

FEATURES		
Self-adjust live loaded packing ISO 5211 adapter	Double encapsulated body seals Firesafe certified	Fugitive emissions design Anti-static ATEX design

HYDROGEN RANGE	
CFH	XFH
	