



Hydrogen (H<sub>2</sub>) is a highly flammable and reactive gas with a high energy density but with the lowest density known. To enhance this property it is pressurized, increasing its volumetric density, to improve the storage and transportation efficiency. It is mainly used in ammonia synthesis, refinery operations and recently as a fuel replacement, where higher pressures are required.

H<sub>2</sub> pressurized comes with some challenges as flammability, high pressures, fugitive emissions and hydrogen embrittlement susceptibility.

Vinco ball valves are design to operate in hydrogen service by using compatible materials, AED/RGD O - rings and resistant packing to assure high levels of tightness and fire safe design.

BILL OF MATERIALS					
ENCLOSURE	BALL	STEM	SEATS	SEALS	PACKING
CARBON ST. (✓ΔP)	STAINLESS STEEL	STAINLESS STEEL	C-RPTFE (✓ΔP)	C-RPTFE	FKM AED
STAINLESS ST. (✓ΔP)			PEEK (✓ΔP)	GRAPHITE	GRAPHITE

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	GFH	HFH
			