

# LARGE OIL-FREE COMPRESSOR FOR HYDROGEN LIQUEFACTION

## H<sub>2</sub> FEED AND REFRIGERATION COMPRESSORS

### APPLICATION DESCRIPTION

Typically hydrogen is produced far from where it is consumed. For long distance transportation of large quantities of hydrogen, the liquefied hydrogen (LH<sub>2</sub>) with much higher density offers clear advantages compared to gaseous hydrogen. LH<sub>2</sub> trailers allow substantially more energy being transferred per transportation charge. Oil-free compressors are essential for a reliable operation of H<sub>2</sub> liquefaction processes.

Burckhardt Compression H<sub>2</sub> compressors on order, in execution and delivered enable more than doubling the global (2020) LH<sub>2</sub> production capacity with a comprehensive portfolio of H<sub>2</sub> feed and refrigeration compressors.

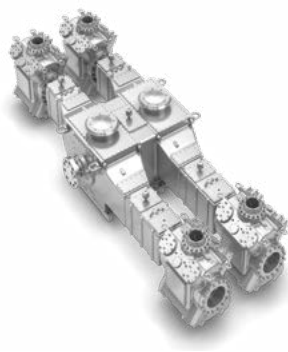
### CUSTOMER BENEFITS

- Burckhardts unique agile engineering support for perfect compressor solution fit to specified operation parameters.
- Superior compressor Mean Time Between Overhaul (MTBO) due to unrivaled Redura® non-lube sealing technology (up to 27'000 h MTBO)
- Remote compressor supervision and condition monitoring solutions to minimize plant down times and eliminate unplanned outages
- Global Burckhardt footprint & supply chain ensures reliable on time deliveries for high quantities of large size compressors.
- Global trusted service organization ensures smooth commissioning & start-up, operation, maintenance & life cycle support.

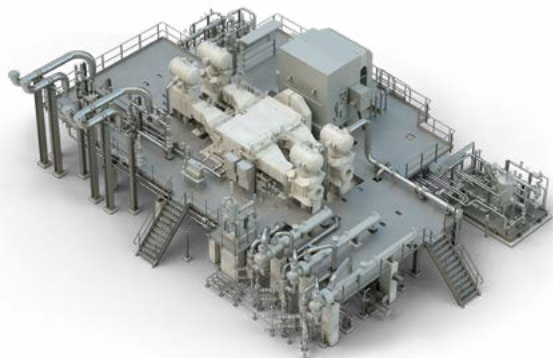
**Compressors for a Lifetime™**

# OIL-FREE H<sub>2</sub> FEED AND REFRIGERATION COMPRESSOR

## COMPRESSOR DESIGNS



## ARRANGEMENT EXAMPLE



## TECHNICAL DATA

Type	Max. Speed rpm	Rated Power kW / hp	Max. Rod Load kN / lbs	Width mm / in	Height mm / in	Length mm / in	Cranks
BA	500	9'500 / 12'700	550 / 124'000	8'000 / 314	1'390 / 54	1'000 / 40	2
						2'800 / 110	4
						4'600 / 181	6
						6'400 / 251	8
BC	450	16'000 / 21'700	900 / 200'000	9'500 / 374	1'600 / 63	1'500 / 59	2
						3'500 / 138	4
						5'500 / 216	6
						7'500 / 295	8
BE	429	31'000 / 42'100	1'700 / 382'000	11'500 / 453	1'900 / 75	1'800 / 70	2
						4'000 / 158	4
						6'200 / 244	6
						8'800 / 347	8