

COMPRESSED GAS PROCESSING

Horizontal Pumping Systems
for NGL & CO2 Applications



Reduce OPEX and Non-Productive Time with Low-Maintenance Centrifugal Pumps

For plant operators needing agile pumping solutions, Valiant offers AQUARIUS® Horizontal Pumping Solutions (HPS) designed with specialized construction for liquefied or compressed gases.

Why Choose an HPS?

Horizontal multi-stage pumps are a proven alternative to reciprocating, split-case, and vertical can pumps, with NGL operators benefiting from shorter lead times, simple servicing, 20-year run life, and utility cost savings.

The Valiant Advantage

Backed by in-house engineering and knowledgeable field support, Valiant has a track record of continuously exceeding our customers' service expectations.

We do this by thoroughly understanding the customer's goals and recommending cost-effective solutions fit for each application.

From standard and custom designs to legacy-compatible retrofitting, we have built or serviced over 250 systems and counting.

AQUARIUS® Design Specifications

- **Ni-Resist pump metallurgy** rated for corrosion-resistance and high-temperatures
- **Metal-impregnated graphite construction** accommodates low-viscosity fluid properties
- **V-Series thrust chambers** feature a cooling-fin housing and low-friction bearings to efficiently dissipate heat and minimize vibration
- **Custom monitoring and VSD controls** allow precise measurement and variable programming

Applications

- › Processing light hydrocarbons under .60 specific gravity
- › Liquid CO2 transfer
- › Dry start and running conditions
- › Pressures up to 4,000 psi

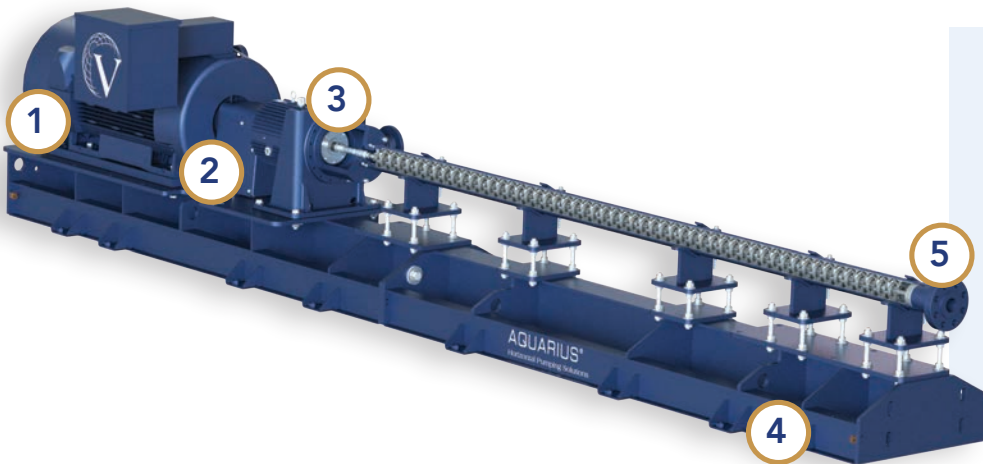
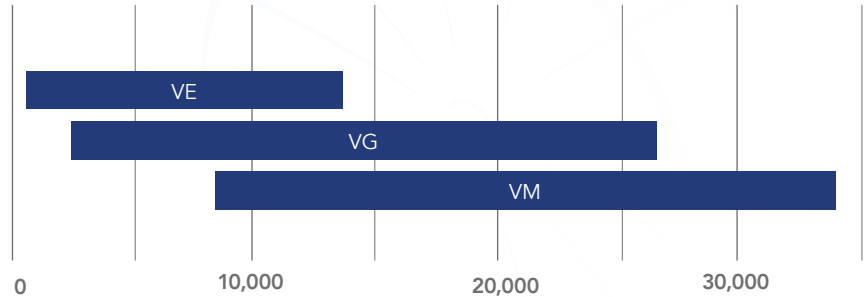
Features & Benefits

- › **Run for Years with Minimal Upkeep**
Tune-up twice a year and maximize uptime with same-day replacements
- › **Industry-Proven Radial Wear Protection**
Self-lubricating graphite bushings enable continuous-contact operation
- › **Shorter Lead Times for a Lifetime**
Simple installation and on-demand inventory reduces equipment bottlenecks over the life of the system

Pump Series, Construction & Flow Rate (60Hz)				Pump Metallurgy	Motor (60Hz)
VE 5.62" (142.75 mm)	Floater, ARM, or Compression	400–14,000 bpd	11.7–408 gpm	Ni-Resist Type 1	Up to 2500HP (60Hz)
VG 7.25" (184.15 mm)	Compression	2,200–26,300 bpd	64–767 gpm		
VM 9.00" (228.6 mm)	Compression	8,333-34,300 bpd	243–1,000 gpm		

Standard Pump Operating Ranges

(bpd)



- High-Pressure Pump Connections Reinforce System Integrity at Higher Rates
- Tested to Meet API 11S2 Specifications
- Versatile Retrofit Capabilities for Multiple Manufacturers

1. Motor

Can be customized to meet any desired specifications, including **TEFC, TEACC and WPII, NEMA or IEC** standards

2. Thrust Chamber

Thrust Limit:
V7: **7,000 lbs**
V30: **30,000 lbs**

3. Suction & Discharge

Flange: **ASME B16.5**
Configuration: **RF or RTJ**

4. Skid

Modular Constructions: **A1000, A2500**
Extension Options: **6 ft to 38 ft**

5. Instrumentation

We can customize any system to provide additional features or instrumentation, including:

- Pressure
- Vibration
- Oil Temp (TC)
- Oil Level
- Local Displays



Energy Providing Energy



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