

REDA HPS G3

Horizontal multistage surface pumping system

APPLICATIONS

- Lean amine recirculation
- Crude oil pipeline
- CO₂ injection
- Mine dewatering
- Natural gas liquids pipeline
- Water injection
- Salt dome leaching
- Saltwater disposal
- High-pressure wash for refineries
- Boiler feed
- Geothermal injection
- Industrial high-pressure facilities

BENEFITS

- Saves time and minimizes cost with no daily maintenance and ease of commissioning and piping alignment
- Reduces downtime and quick repair, thanks to simple reconfiguration of pumps and motors
- Extends run life due to minimal vibration-related wear and stress

FEATURES

- Numerous API 610-specification-compliant features
- New bearing sections with enhanced pump-pressure capabilities and less heat generation
- Seals
 - One mechanical seal at the low-pressure end of the pump
 - Standard-mount single, double, and tandem cartridge seals
- Skid
 - Adjustable clamp and motor mount locations
 - Rigid box, steel frame construction
 - Standard or custom skid designs
 - Intake that orients 270° in 45° increments

The REDA* HPS* G3 horizontal multistage surface pumping system is the third generation of REDA horizontal multistage surface pumps. A reliable, cost-effective solution, the centrifugal pump provides up to 1,864 kW [2,500 hp] in a single unit. Flexible enough to be modified in the field, the system features reliable product enhancements that lessen downtime. The modular design makes the unit suitable for a wide variety of applications, from simple water injection to more complex refinery services and crude oil transfer. It has also proven to be an efficient alternative to split-case, vertical turbine, and positive displacement pumps.

Prepackaged units are provided as a whole system from a single-source vendor and are delivered preassembled to a site. The skid package is typically prewired with instruments and cabling

to a central junction box. Intake and discharge flanges and power hookups are usually the only required connections. When necessary, major components can be replaced or resized to track changes in applications within 2 to 3 hours, and, due to its modular design and factory alignment, aligning the unit before restarting the pump is kept to a minimum.

Designed for years of trouble-free service, the REDA HPS G3 system requires no daily maintenance. There are no V-belts or packing to service, and a typical routine maintenance schedule is a quarterly lubricant change and component check. The smooth performance extends equipment life and greatly reduces the chance of leakage from associated piping.



The modular design of the REDA HPS G3 pumping system provides rapid change-out capabilities of system components.

Performance Specifications

Capacity, galUS/min [m ³ /min]	40 to 2,500 [0.15 to 9.5]
Discharge pressure, psi [kPa]	Up to 6,650 [45,850]
Suction pressure, [†] psi [kPa]	Up to 4,000 [27,579]
Temperature range, [‡] degF [degC]	-20 to 280 [-29 to 138]
Power (single skid), kW [hp]	Up to 1,864 [2,500]
Testing capability, kW [hp]	Up to 1,864 [2,500]

[†]Fluid dependent

[‡]Modifications required

Material Specifications

Impellers and diffusers	Ni-Resist™, 5530 alloy, coatings as required
Shafts	17-4 PH, MONEL®, and INCONEL®
Intake and discharge	Carbon steel and 316 stainless steel
Sleeve bearings	Ni-Resist, ceramic, tungsten carbide, silicon carbide, and Graphalloy®
Flanges	ANSI 150 to 2,500 RF and RTJ