PUMP PRODUCTS

OPI-600S HD

TRIPLEX WELL SERVICE PUMP

600 BHP short well service pump

A compact 600 horsepower, three-plunger pump with a 6-inch stroke, designed for intermittent well service applications including cementing, acidizing, gravel packing and snubbing. The HD configuration provides an enhanced barrier that helps prevent fluid-end contamination from migrating into the power end.



OPI-600S HD | REPRESENTATIVE CONFIGURATION

APPLICATION
Well service and intervention

PLUNGER SIZES
2½″ | 2¾″ | 3″ | 3½″ | 4″ | 4½″

HD CONFIGURATION
Enhanced power-end protection

PACKAGE FLEXIBILITY
Left- or right-hand gearbox mounting

600	100,000 lbf	6 in	3
BHP MAX INPUT	MAX ROD LOAD	STROKE	PLUNGERS

1 OPI-600S HD PUMP ADVANTAGES

HD POWER-END PROTECTION	COMPACT PACKAGE FLEXIBILITY
An enhanced barrier helps prevent well-service fluid and debris from entering the power end.	Short 600 BHP design with configurable left- or right-hand gearbox mounting and multiple gearbox positions.
OPI ENDURACORE™ FLUID END	**OPI CONSUMABLE SUPPORT**
Controlled OPI metallurgy and process controls support strength, toughness and fatigue-resistance potential in demanding duty.	Available with OP standard-duty or XP premium-duty plungers, packing, valves and seats.

2 PUMP SPECIFICATIONS

Specification	Rating	Specification	Rating
Rated maximum brake horsepower	600 BHP	Maximum rod load	100,000 lbf
Maximum pump speed	450 strokes/min	Stroke length	6 in
Gear ratio	4.61:1	Pump weight	4,940 lb (2,241 kg)

3 FLOW RATE AND PRESSURE PERFORMANCE

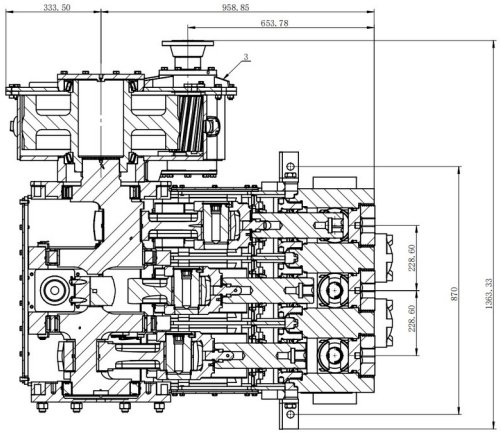
Each pair of performance columns shows pump speed in strokes per minute, pinion speed in revolutions per minute, theoretical flow in US gallons per minute (GPM) and reference pressure in psi.

Plunger diameter	Output per revolution	50 / 230		120 / 552		200 / 920		300 / 1,380		450 / 2,070	
		GPM	psi	GPM	psi	GPM	psi	GPM	psi	GPM	psi
2½″	0.38 gal/rev	19	20,372	46	20,165	76	12,099	115	8,066	172	5,377
2¾″	0.46 gal/rev	23	16,836	56	16,665	93	9,999	139	6,666	208	4,444
3″	0.55 gal/rev	28	14,147	66	14,003	110	8,402	165	5,601	248	3,734
3½″	0.75 gal/rev	37	10,394	90	10,288	150	6,173	225	4,115	337	2,744
4″	0.98 gal/rev	49	7,958	118	7,877	196	4,726	294	3,151	441	2,100
4½″	1.24 gal/rev	62	6,288	149	6,224	248	3,734	372	2,489	558	1,660

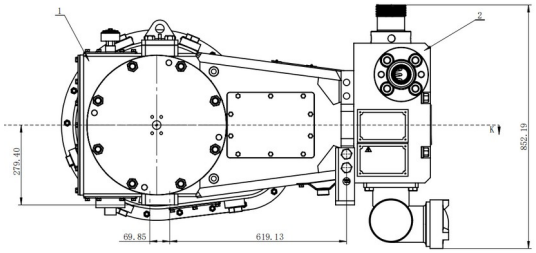
Column headings show pump strokes per minute / pinion revolutions per minute. Flow basis: 100% volumetric efficiency. Pressure basis: 90% mechanical efficiency and intermittent well-service duty. Actual output varies with volumetric efficiency, fluid properties and operating conditions. Application review is required above 15,000 psi. Maximum flow and maximum pressure are not simultaneous operating points.

4 PUMP ARRANGEMENT

Representative views show the short triplex arrangement and configurable gearbox layout.



SECTION AND ENVELOPE VIEW



SIDE AND GEARBOX ARRANGEMENT VIEW

REFERENCE DIMENSIONS ARE SHOWN AS SUPPLIED; CONFIRM DRAWING UNITS BEFORE USING FOR PACKAGE DESIGN.

5 ENGINEERING AND COMMERCIAL NOTES

Product design, materials and specifications may change through continuous engineering development. Final selection, connection ratings, pressure limits, compatibility, performance and compliance are confirmed against the OPI quotation, order acknowledgement and approved technical schedule. Images and arrangement views are representative and do not constitute a manufacturing definition.

SPEAK TO OPI SALES Provide the operating duty, plunger size, pressure, fluid, connections and package interface requirements for configuration support.	**OPI SALES** **sales@optimumpumpingindustries.com**

DOCUMENT ISSUE

Document ID	Revision	Status	Publication
OPI-600S-DS-001	L	Customer release	October 2026