

ROTATING RIGHT

## MODEL W-2250 SINGLE ACTING WELL SERVICE PUMP



### W-2250

A 2250 horsepower 8" stroke intermittent duty single acting well service plunger pump. Equipped with forged alloy steel mono-block fluid end and rated at pump speeds up to 250 RPM and maximum discharge pressures in excess of 19,000 psi. Equipped with external gear reduction unit.

#### Power End Features

- Alloy steel power frame
- Helical gears
- Roller main bearings
- Alloy steel crankshaft
- Replaceable bronze crosshead guides
- Spherical roller pinion bearings

#### Fluid End Features

- Alloy steel mono-block forging
- Autofrettaged fluid block
- Multiple discharge ports
- Mechanical oil drip packing lubricator
- Integral valve cover threads
- Optional Air/Hydraulic packing lubricator
- \*2" 1502 Discharge connection
- \*\*3" 1502 Discharge connection
- Roughneck/service master II valves and seats

# W-2250 Triplex Plunger Pump

## Specifications

### Pump Type:

Intermittent Duty Reciprocating Pump

**Maximum Input Horsepower:** 2250 Intermittent

**Stroke Length:** 8 inches

**Maximum Rod Load:** 250,000 lbs.

**Approximate Weight:** 11,500 lbs.

### Pump Power End:

Fabricated of High-Strength Alloy Steel

**Gears:** Helical

**Gear Ratio:** 6.35:1

**Rod Bearings:** Shell Type Replaceable

**Main Bearings:** Straight Roller

**Pinion Bearings:** Spherical Roller

**Crankshaft:** Alloy Steel Nitrided

**Connecting Rod:** One Piece Forged Steel

**Crosshead:** Cast Steel

**Crosshead Guide:** Bronze Replaceable

**Fluid-End:** Plunger Type Mono-Block Design

**Plunger Diameter:** 4 to 7.5 inches

**Discharge Connection:** 2-inch 1502 Half Union

Forged Steel Connection - Either Side

**Suction:** 6-inch Pipe

**Valves and Seats:** Service Master™ II

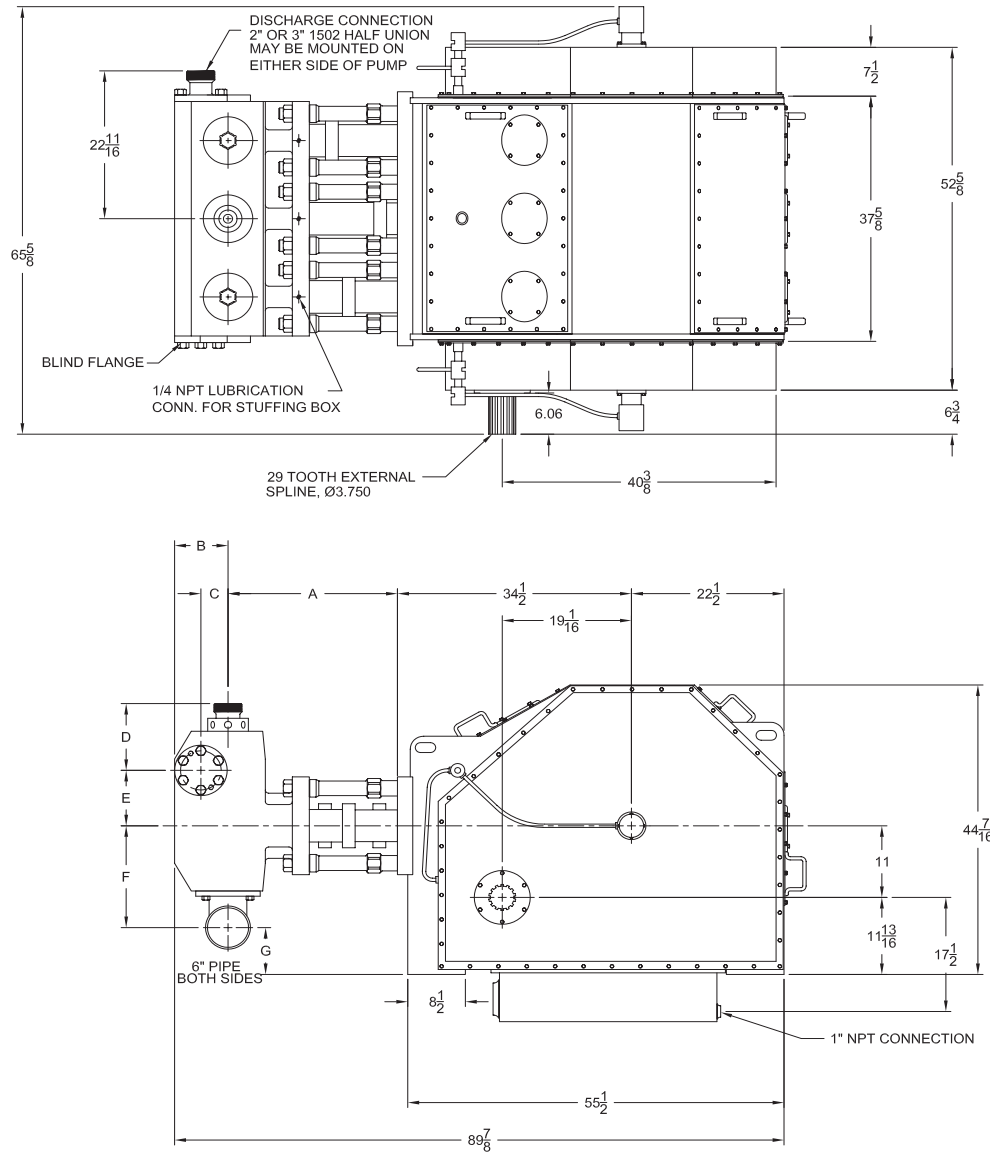
### Power End Lubrication:

35 GPM Required, Optional Hydraulic Lubrication

System w/Sump Available

**Packing Lubrication:** Optional Air Driven Air/Oil or

Mechanical Oil Drip System Available



Pump Model	Flange Connections	
	Discharge Connection Sizes	Suction Connection Sizes
W-2250	2 (50.8) 1502 Half Union 3 (76.2) 1502 (Optional)	6 (152.4) Grooved Pipe

Dimensions (Inches)

FE Size	A	B	C	D	E	F	G
4	24 3/4	8 1/8	3 1/4	11 9/64	7 1/8	14 1/16	8 3/4
4 1/2	24 3/4	8 1/8	3 1/2	11 9/64	7 1/8	14 1/16	8 3/4
5	24 3/4	8 1/8	3 1/2	11 9/64	7 1/8	14 1/16	8 3/4
5 1/2	24 3/4	7 1/8	3	11 1/2	7 5/8	15 3/16	7 5/8
5 3/4	24 3/4	7 1/8	3	11 1/2	7 5/8	15 3/16	7 5/8
6 1/2	25	7 7/8	4	11 1/2	8 1/2	15 11/16	7 1/8
6 3/4	25	7 7/8	4	11 1/2	8 1/2	15 11/16	7 1/8

# W-2250 Triplex Plunger Pump

## Performance Data

Plunger Diameter	Displacement Factors* @ 100% V. E.	Pump Speed in Crankshaft Revolutions Per Minute (RPM)										
		100			150		200		250		330	
		Flow @ 100% V. E.	Max Press.	@ Flow	Flow @ 100% V. E.	Max Press.	Flow @ 100% V. E.	Max Press.	Flow @ 100% V. E.	Max Press.	Flow @ 100% V. E.	Max Press.
		U.S. Gal. per Rev.	U.S. Gal. per Min.		U.S. Gal. per Min.	@ Flow	U.S. Gal. per Min.	@ Flow	U.S. Gal. per Min.	@ Flow	U.S. Gal. per Min.	@ Flow
Inches	GPR	GPM	PSIG	GPM	PSIG	GPM	PSIG	GPM	PSIG	GPM	PSIG	
7.50	4.590	459	5659	688	4761	918	3571	1147	2857	1515	2164	
7.00	3.998	400	6496	600	5466	800	4099	1000	3279	1319	2484	
6.75	3.718	372	6986	558	5878	744	4408	929	3527	1227	2672	
6.50	3.448	345	7534	517	6339	690	4754	862	3803	1138	2881	
6.00	2.938	294	8842	441	7439	588	5908	734	4464	969	3381	
5.75	2.698	270	9628	405	8100	540	6075	674	4860	890	3682	
5.50	2.468	247	10523	370	8853	494	6640	617	5312	815	4024	
5.00	2.040	204	12732	306	10713	408	8034	510	6428	673	4869	
4.50	1.652	165	15719	248	13225	330	9919	413	7935	545	6012	
4.00	1.306	131	19894	196	16738	261	12554	326	10043	431	7608	
Input Power	Brake** Horsepower	1783		2250		2250		2250		2250		
Pinion RPM @ 6.35:1 Gear Ratio		635		953		1270		1588		2096		

\* V.E. = VOLUMETRIC EFFICIENCY, \*\*BHP (Brake Horsepower) is based on 85% Mechanical Efficiency

The information and data on this sheet is accurate to the best of our knowledge and belief, but are intended for general information only. Applications suggested for the materials are described only to help readers make their own evaluations and decisions, and are neither guarantees nor to be construed as express or implied warranties of suitability for these or other applications. National Oilwell makes no warranty either express or implied beyond that stipulated in National Oilwell Standard Terms and Conditions of Sale.

## Accessories

Rotating Right offers a full line of accessories to ensure long trouble free and safe operation of your multiplex pumps.

### Accessories Include:

- Pulsation Dampeners - Suction & Discharge
- Vibration Shock Switches
- Liquid Level Gauges & Switches
- Pressure Safety Valves
- Plunger Lubricators
- Fire Safety Valves
- High Discharge Pressure Switch
- Condensate Drain
- N.A.C.E. Valving
- Lubricator Level Controller
- API Valves
- Drive Options



## Expendables



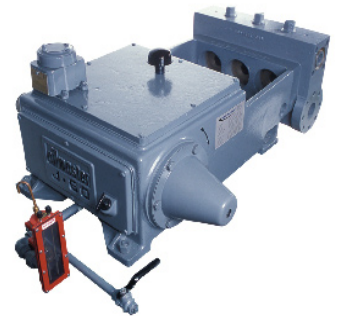
With our worldwide buying power Rotating Right is well equipped to provide a wide range of replacement parts & expendables for virtually all multiplex plunger pumps regardless of make or model.

Our expendables inventory includes plungers, packing, brass, valves, bearings, crankshafts, connecting rods and seals.



## Repair & Overhauls

Rotating Right service technicians follow strict quality control procedures for every pump repair and overhaul. The use of consistent and reliable re-manufacturing techniques ensure your equipment is returned to you in "Like New" condition.



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