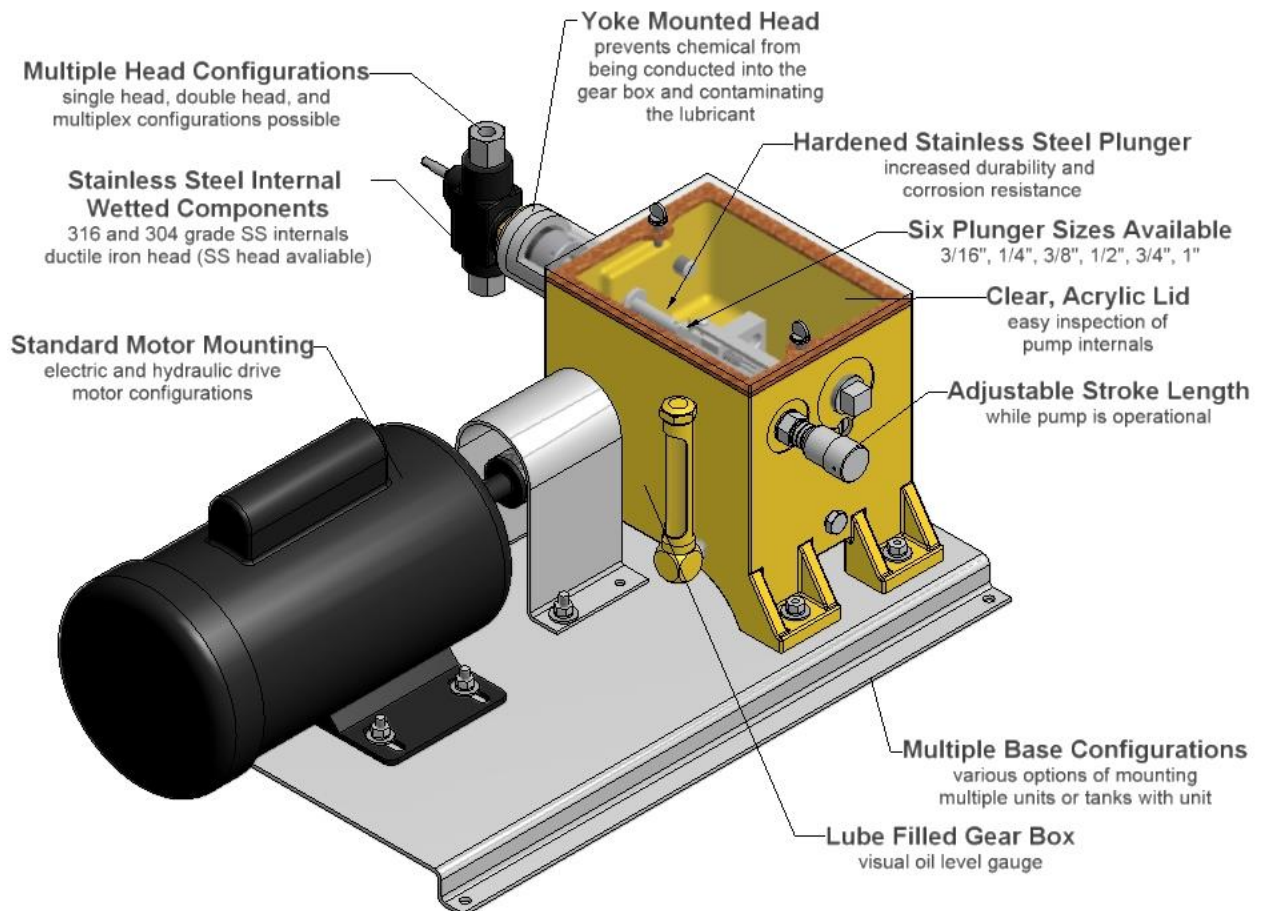




# BR4300

## Electric Driven Chemical Injection Pump

The **Bruin BR4300 Chemical Injector Pump** is a rotary driven, single or double head, positive displacement plunger type pump utilizing an integral worm gear drive. Capable of operation with electric (12V, 110V and 230V, explosion proof) or hydraulic drive motor configurations, available in 6 plunger sizes, 3 gear ratio configurations and with infinite plunger stroke length adjustability the pump can handle output volumes to 271 gallons per day per head and discharge pressures up to 5000 psig. Each unit can be configured as a single or double head, and multiple units can be connected together so that up to 8 heads can be run off a single motor. Conversion for handling of various chemicals is easily accomplished by the change out of the plunger packing set and the fluid end seals.



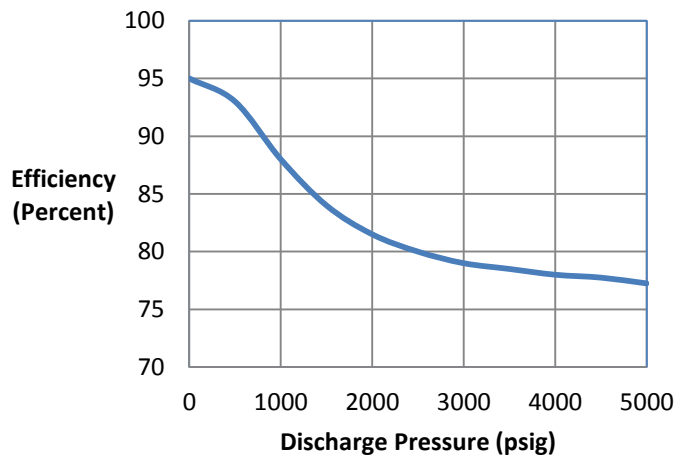
# Performance Specifications

The **Bruin Pumps BR4300** series pump is gear driven, utilizing an electric motor as a power source. Pumps are available with up to eight injection heads and in gear ratios of 25:1, 50:1, 100:1 and plunger sizes from 3/16", 1/4", 3/8", 1/2", 3/4" & 1". Pumps are available with electric motor, base, tanks, gauges, etc.

Plunger Size	Maximum Discharge Pressure (psig)	Maximum Volume (Imp. GPD) per Head								
		Model No.	100:1 Ratio 17.5 spm		Model No.	50:1 Ratio 35 spm		Model No.	25:1 Ratio 70 spm	
			0 psig discharge	1000 psig discharge		0 psig discharge	1000 psig discharge		0 psig discharge	1000 psig discharge
3/16"	5000 - Hard Packing 3000 - Soft Packing	BR4324	2.4	2.2	BR4304	4.8	4.4	BR4334	9.5	8.8
1/4"	2400	BR4321	4.2	3.9	BR4301	8.5	7.8	BR4331	16.9	15.7
3/8"	1200	BR4323	9.5	8.8	BR4303	19.1	17.6	BR4333	38.1	35.3
1/2"	600	BR4325	16.9		BR4305	33.9		BR4335	67.8	
3/4"	300	BR4326	38.1		BR4306	76.2		BR4336	152.5	
1"	150	BR4327	67.8		BR4307	135.6		BR4337	271.1	

\* Volumes shown are at pressure indicated and at 1750 rpm motor speed  
SPM = strokes per minute

## Discharge Head Efficiency



NOTE: With an increase in discharge pressure, the volumetric pumping efficiency of the pump head decreases as shown in the chart.

EXAMPLE: A 3/8" plunger will provide approximately 19.1 imperial gallons per day (95% efficiency) maximum at 0 psig discharge pressure with a 50:1 gear ratio gearbox. If the discharge pressure increases to 1000 psig, the pump runs at approximately 88% efficiency, so the maximum volume is reduced to 17.6 imperial gallons per day.

NOTE: Discharge head efficiency is theoretically determined based on testing and may vary between applications and assemblies.

## Horse Power Requirements for Multi-Headed Units

Number of Gear Boxes	Gear Ratio		
	25:1 BR433_	50:1 BR430_	100:1 BR432_
1	1/4	1/4	1/4
2	1/2	1/2	1/3
3	3/4	3/4	1/2
4	1	1	3/4

two heads can be mounted on each gear box

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