



High Flow  
CRUDE OIL  
PIPELINE  
INJECTION  
PUMPS

HEAVY DUTY  
TWIN GEAR  
PUMP

EXPERIENCE

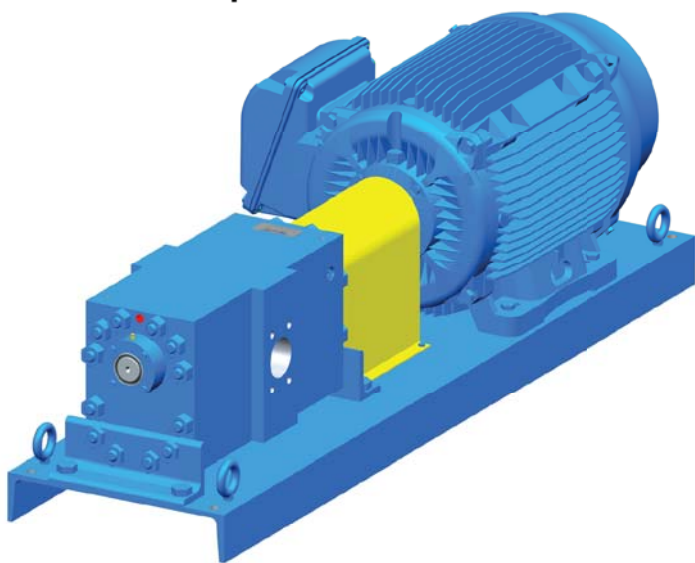
RELIABILITY

SAFETY



## FEATURES & BENEFITS

- Discharge pressures up to 1440 PSI
- Very smooth pulse free flow
- Easily varied flow output
- No elastomers or stators
- Competitively priced
- Short lead times
- Small Footprint



For over 85 years Northern has been manufacturing the most reliable gear pump in industry. We pride ourselves on regularly accomplishing for our customers what no other pump company can achieve. Northern's ability to produce discharge pressures up to 1440 PSI and a broad turn-down ratio has made it the ideal pump for crude oil injection for pipeline applications. Whether the application is discharging from a LACT unit or providing boost for systems that have become inadequate due to increasing line pressures, Northern has performed flawlessly.

At approximately 30% of the size of a progressive cavity pump, Northern is so much more user friendly and there are no elastomer stators to swell or seize.



**HIGH FLOW  
CRUDE OIL  
PIPELINE  
INJECTION  
PUMPS**

**EXPERIENCE  
RELIABILITY  
SAFETY**

**Phone: 800-366-1410**

[www.northern-pump.com](http://www.northern-pump.com)

E-mail:  
[info@northern-pumps.com](mailto:info@northern-pumps.com)

Office:  
340 W Benson Aveune  
Grantsburg WI 54840



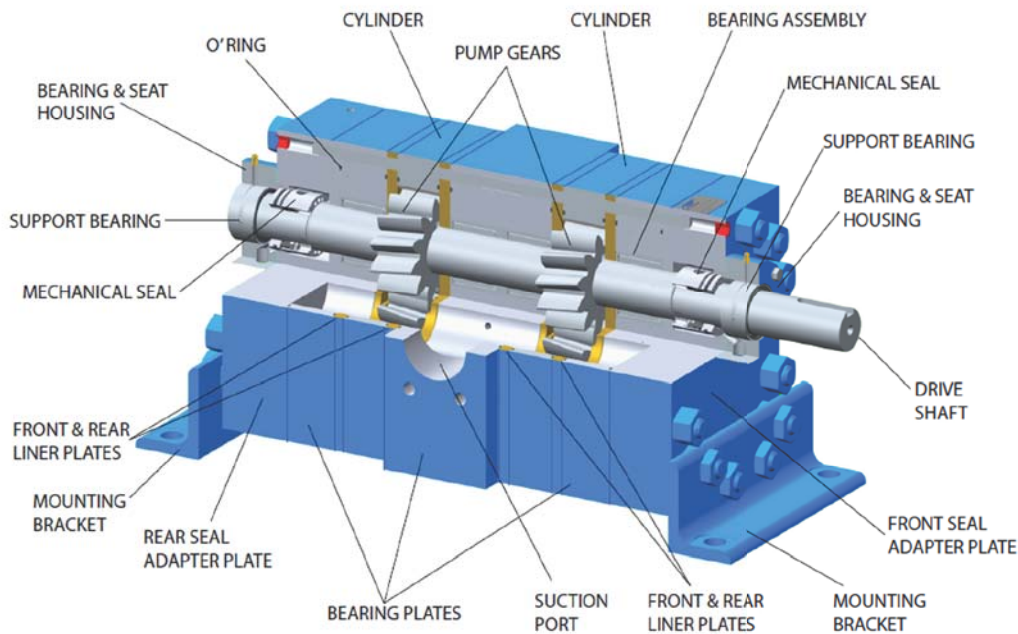
## Specifications:

Flow: Up to 390 GPM / 13371 BPD

Pressure: Up to 1440 PSI

| Pressure Differential | Flow Rates |      |          |      |         |      |         |       |         |       |
|-----------------------|------------|------|----------|------|---------|------|---------|-------|---------|-------|
|                       | 4902-10    |      | 4902-15  |      | 4902-20 |      | 4902-25 |       | 4902-30 |       |
| PSI                   | GPM        | BPD  | GPM      | BPD  | GPM     | BPD  | GPM     | BPD   | GPM     | BPD   |
| 200                   | 127        | 4354 | 193      | 6617 | 259     | 8880 | 324     | 11109 | 390     | 13371 |
| 400                   | 120        | 4114 | 184      | 6309 | 248     | 8503 | 313     | 10731 | 377     | 12926 |
| 600                   | 112        | 3840 | 175      | 6000 | 238     | 8160 | 301     | 10320 | -       | -     |
| 800                   | 105        | 3600 | 166      | 5691 | 228     | 7817 | -       | -     | -       | -     |
| 1000                  | 97         | 3326 | 157      | 5383 | -       | -    | -       | -     | -       | -     |
| Max $\Delta$ Pressure | 1440 PSI   |      | 1165 PSI |      | 875 PSI |      | 700 PSI |       | 580 PSI |       |

*\*Flow calculations are at 1750 RPM, assuming 4 cP crude oil.*



## Materials of Construction:

**Gears:** Hardened and Ground 8620 Alloy Steel

**Shafts:** Hardened and Ground 8620 Alloy Steel

**Bearings:** AISI 52100 Roller Bearings

**Shaft Seal:** Type 8B-1 or 8-1 Mechanical Seal

**Inlet/Outlet Connections:** SAE J518 Code 61  
NPT, Flanged or Other adapters available

Northern is 100% US manufactured which provides for quick deliveries and easy serviceability.

*Contact us with your application today!*



HIGH PRESSURE  
DIFFERENTIAL

RUGGED  
DESIGN

PRECISION  
MANUFACTURING



Made in the USA



## NORTHERN PUMP

Manufacturing the Highest Quality Pumps for over 85 years



**Phone: 800 - 366 - 1410**

[www.northern-pump.com](http://www.northern-pump.com)

E-mail: [info@northern-pump.com](mailto:info@northern-pump.com)

340 W Benson Avenue, Grantsburg WI 54840

Fax: 715-463-5174