Gear Pump 101
Lesson 1: Gear Pump Basics

When your reputation depends on it!
Northern® Lesson 1: Gear Pump Basics

- Positive Displacement Rotary Gear Pumps
  - two gears of equal size
- Drive Shaft and Gear are Rotated by a Motor or Auxiliary Motion shaft
- Drive Gear Turns the Driven Shaft and Gear.
Northern® Lesson 1: Gear Pump Basics

- Hydraulic Vacuum Pulls Fluid Into Pump
- Charge Pump Only Needed for Extremely High Viscosities or High Flow Rates
Northern® Lesson 1: Gear Pump Basics

• Fluid is Pushed Through the Gears in the Area Between the Teeth.

• As Gears Mesh Mechanical Force Generates High Hydraulic Pressure

Northern® Fast Fact.....
Northern 4000 Series pumps are typically rated to generate up to 2000 pounds per inch² (PSI)
• Determine Pump Rotation as Clockwise, or Counter Clockwise.

Northern® Fast Fact…..
Northern pumps can be designed to operate in either direction, however they can only operate in the manner they are designed.