



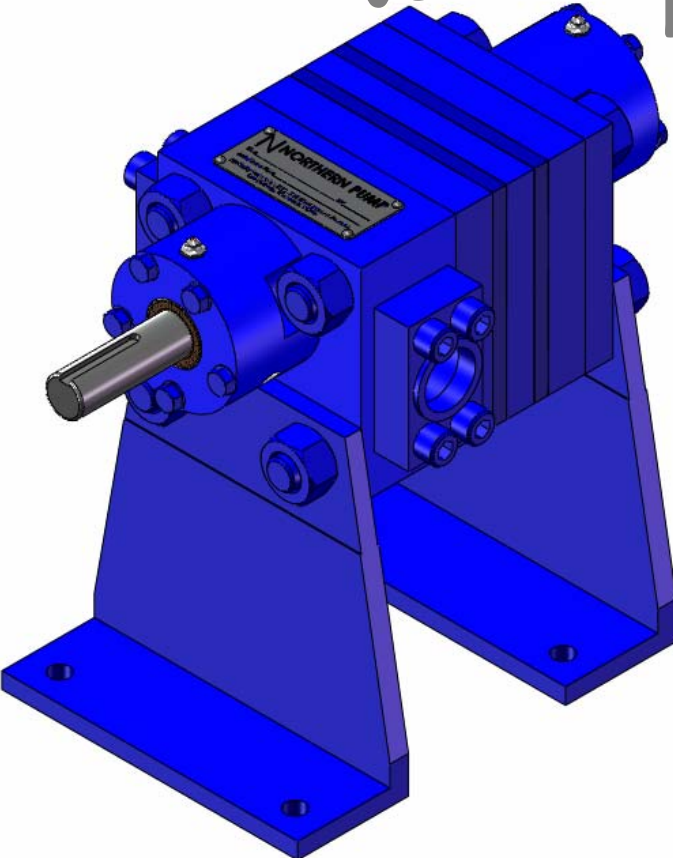
P&PE

PUMPS & PROCESS EQUIPMENT INC.

To Request a Quote,

CALL US 1-847-882-8116

Gear Pump 101



N NORTHERN PUMP
Size 4600-15-C3840 SN 1234
Rotation & Flow  CW
McNally Industries, LLC., 340 West Benson Avenue
Grantsburg, Wisconsin 54840

Gear Pump 101

Lesson 4:

Northern pump Model Numbers

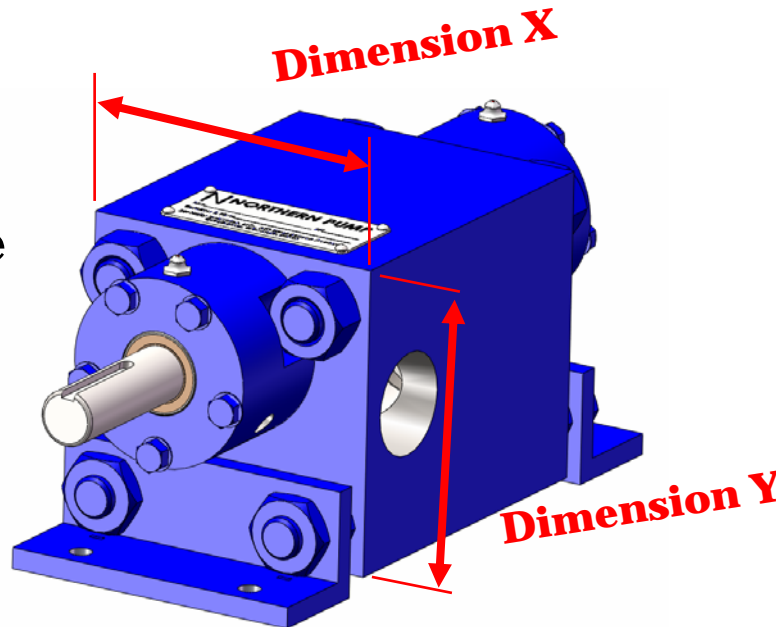
● Introduction

Northern[®] Pumps are available to accommodate virtually any specific flow rate over our entire flow range. This is done by sizing our pumps using a combination of overall frame size and gear length. Displacement is either increased or decreased by these overlapping series sizes and gear lengths. [\(See Pump 101 Lesson 2 for an explanation of displacement\)](#)

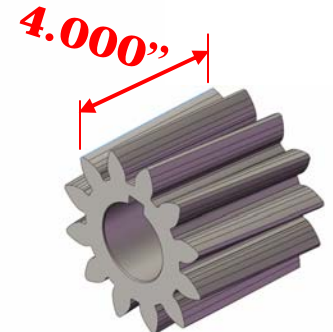
This is one of the many reasons that Northern[®] Pumps are able to deliver a precise and predictable rate of flow to meet your demands.

Lesson 4 is “geared” toward helping you understand how our pump model numbers are arranged.

Frame Size



Gear Length



Gear Pump 101

Lesson 4:

Northern Pump Model Numbers

● Name Plates

The example below explains the meaning of the information on a typical nameplate.


Gear Length = 1.5" Nominal

Frame Size = 4600

Northern Drawing C3840 Shows Detail of Pump Layout

The nameplate is a rectangular metal plate with four mounting holes. It features the Northern Pump logo (a large 'N') and the text 'NORTHERN PUMP'. Below this, the 'Size' is listed as [4600][1.5][C3840], with 'SN' 1234. The 'Rotation & Flow' section shows a right-pointing arrow and the code [CW]. At the bottom, the manufacturer's name and address are provided: 'McNally Industries, LLC., 340 West Benson Avenue, Grantsburg, Wisconsin 54840'. Colored arrows point from the text blocks to specific parts of the nameplate: a red arrow from 'Frame Size = 4600' to the '4600' in brackets; a green arrow from 'Gear Length = 1.5" Nominal' to the '1.5' in brackets; a cyan arrow from 'Northern Drawing C3840 Shows Detail of Pump Layout' to the 'C3840' in brackets; and a blue arrow from 'Designed for Clockwise Rotation Only' to the '[CW]' code.

Size [4600][1.5][C3840] **SN** 1234

Rotation & Flow  [CW]

McNally Industries, LLC., 340 West Benson Avenue
Grantsburg, Wisconsin 54840

Designed for Clockwise Rotation Only

Gear Pump 101

Lesson 4:

Northern Pump Model Numbers

● Pump Series

Northern[®] Pumps are commonly driven using an electric motor at standard motor speeds. This is often done at 1150, 1750, or 3600 revolutions per minute (RPM). However, Northern[®] Pumps are often driven with Variable Frequency Drives (VFD)

Northern[®] 4000 Series Pumps are available in 6 different “Frame Sizes”. They are 4300, 4400, 4500, 4600, 4800, and 4900.

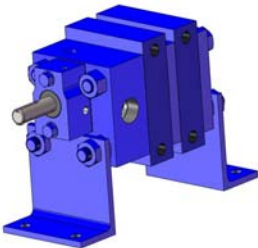
Additionally, Northern[®] Pump offers an NPC Series, as well as a line of vertical pumps.

For purposes of this lesson, we will discuss only the 4000 Series.

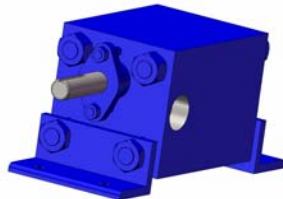
4300



4400



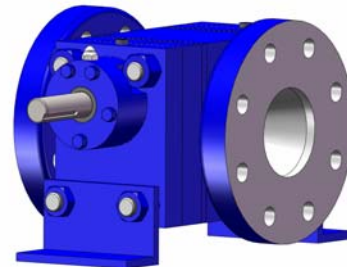
4500



4600



4800



4900



Gear Pump 101

Lesson 4:

Northern Pump Model Numbers

● 4300 Series Frame Size

The 4300 Series is available in a variety of configurations, material, and with many special features. For flow rate information visit: http://www.northern-pump.com/product_information_packets.htm

4300-01

4300-02

4300-03

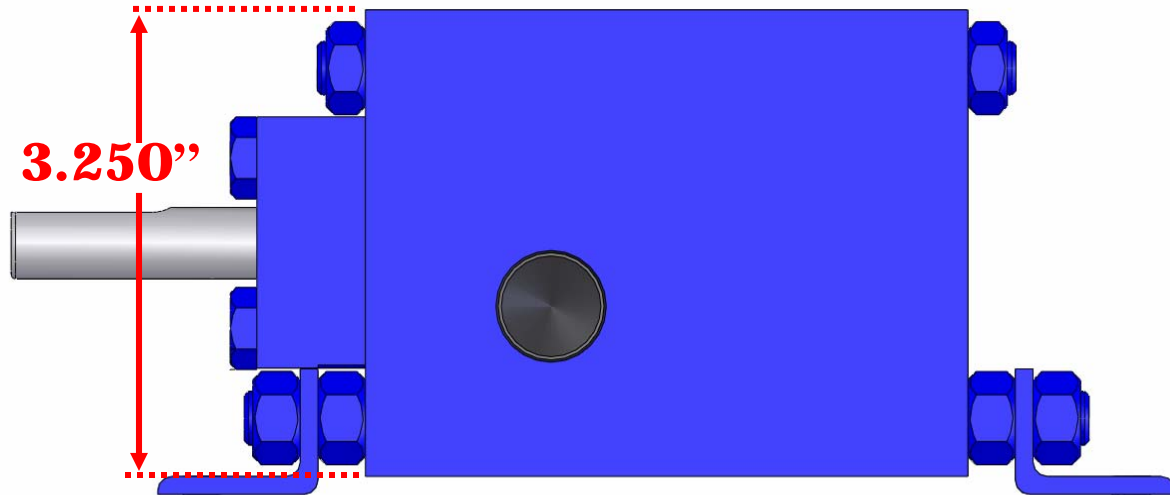
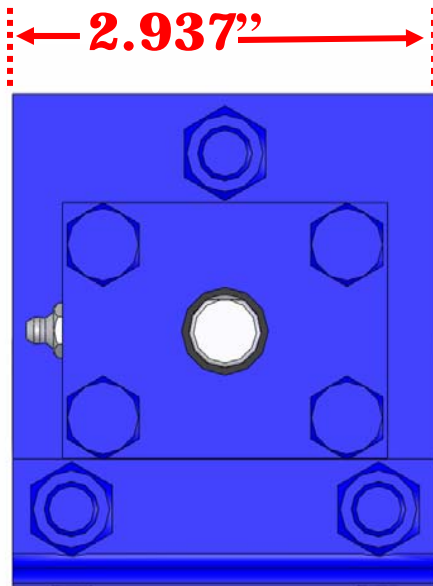
4300-04

4300-06

4300-08

4300-10

4300-12



Gear Pump 101

Lesson 4:

Northern Pump Model Numbers

● 4400 Series Frame Size

The 4400 Series is available in a variety of configurations, material, and with many special features. For flow rate information visit: http://www.northern-pump.com/product_information_packets.htm

4400-05

4400-07

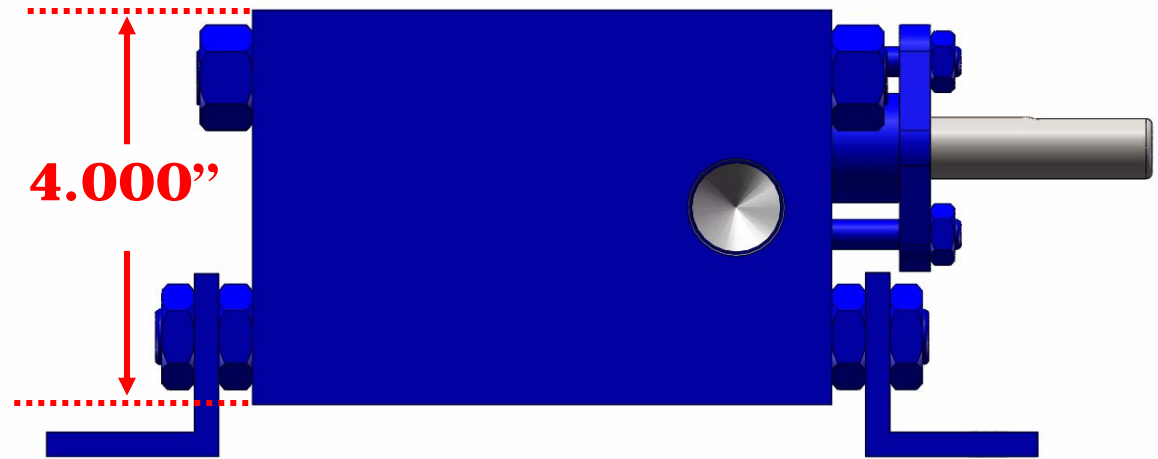
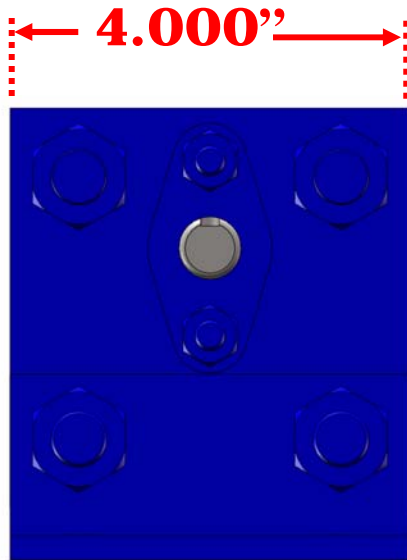
4400-10

4400-15

4400-20

4400-25

4400-30



Gear Pump 101

Lesson 4:

Northern Pump Model Numbers

● 4500 Series Frame Size

The 4500 Series is available in a variety of configurations, material, and with many special features. For flow rate information visit: http://www.northern-pump.com/product_information_packets.htm

4500-05

4500-07

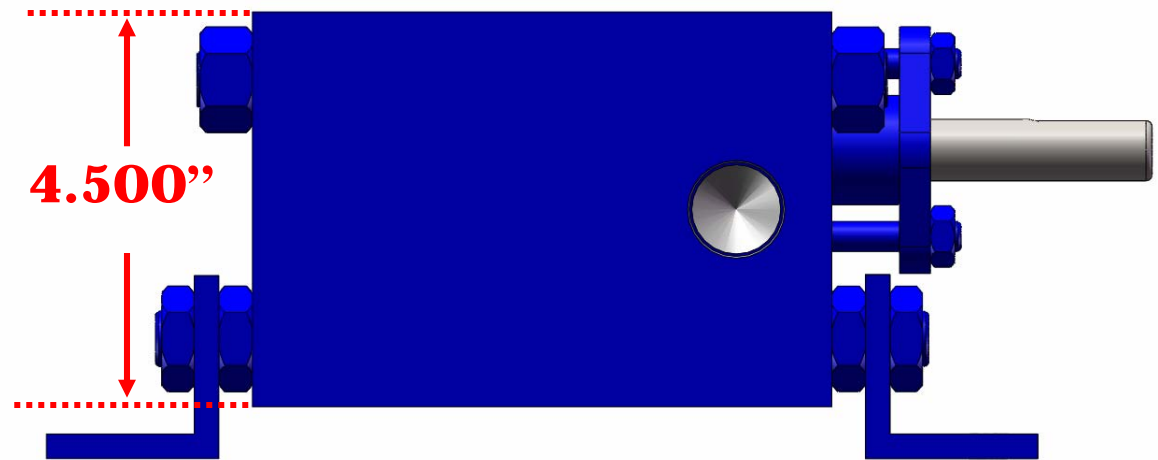
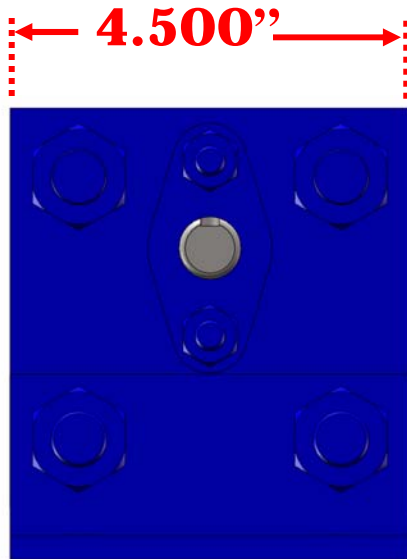
4500-10

4500-15

4500-20

4500-25

4500-30



Gear Pump 101

Lesson 4:

Northern Pump Model Numbers

● 4600 Series Frame Size

The 4600 Series is available in a variety of configurations, material, and with many special features. This is one of the most popular Northern® Pump frame sizes. For flow rate information visit: http://www.northern-pump.com/product_information_packets.htm

4600-05

4600-07

4600-10

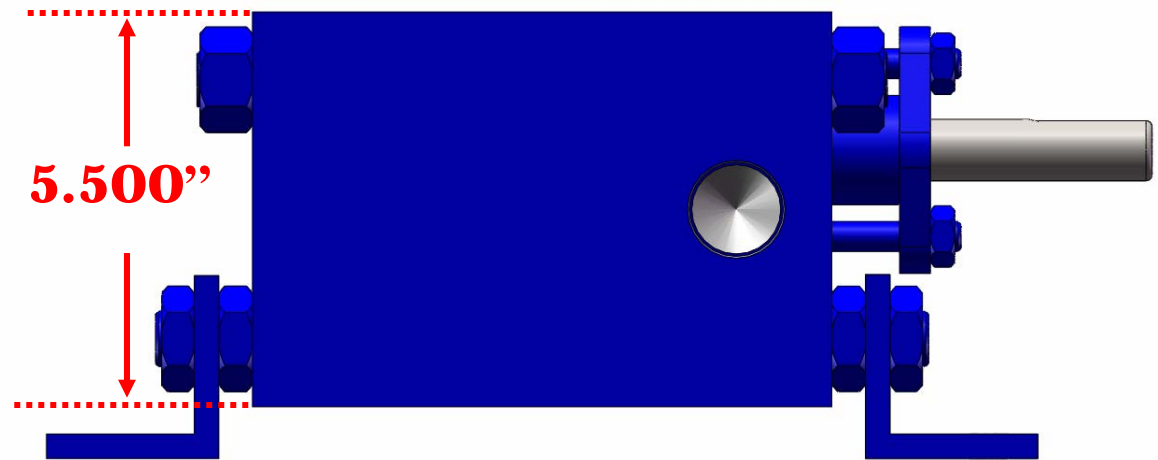
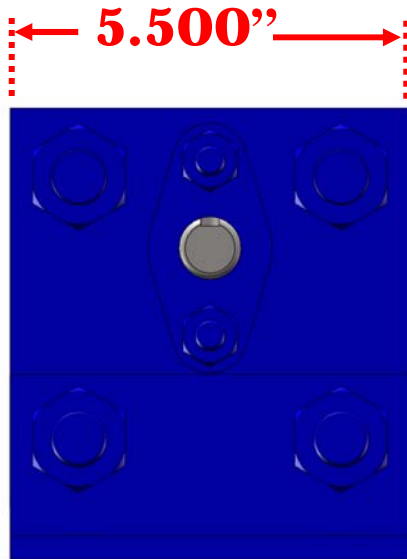
4600-15

4600-20

4600-25

4600-30

4600-40



Gear Pump 101

Lesson 4:

Northern Pump Model Numbers

● 4800 Series Frame Size

The 4800 Series is available in a variety of configurations, material, and with many special features. For flow rate information visit: http://www.northern-pump.com/product_information_packets.htm

4800-05

4800-07

4800-10

4800-15

4800-20

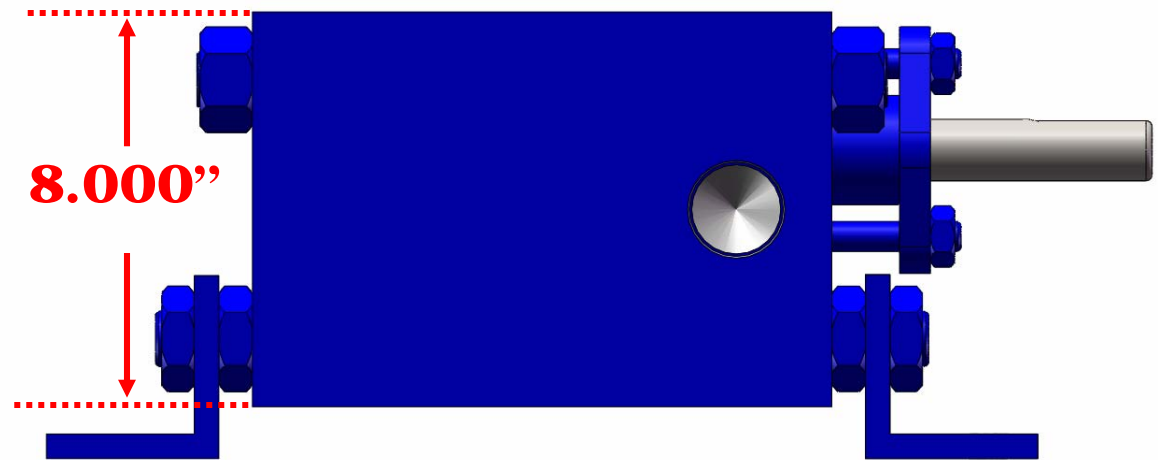
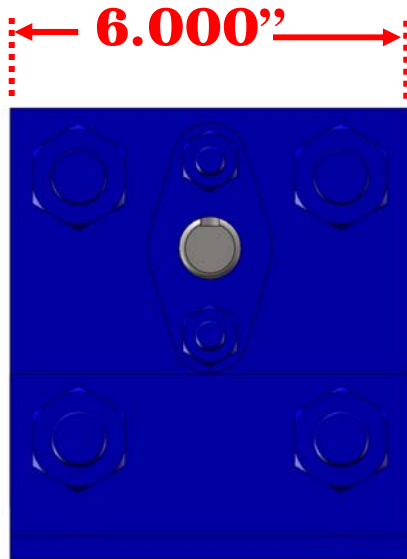
4800-25

4800-30

4800-40

4800-50

4800-60



Gear Pump 101

Lesson 4:

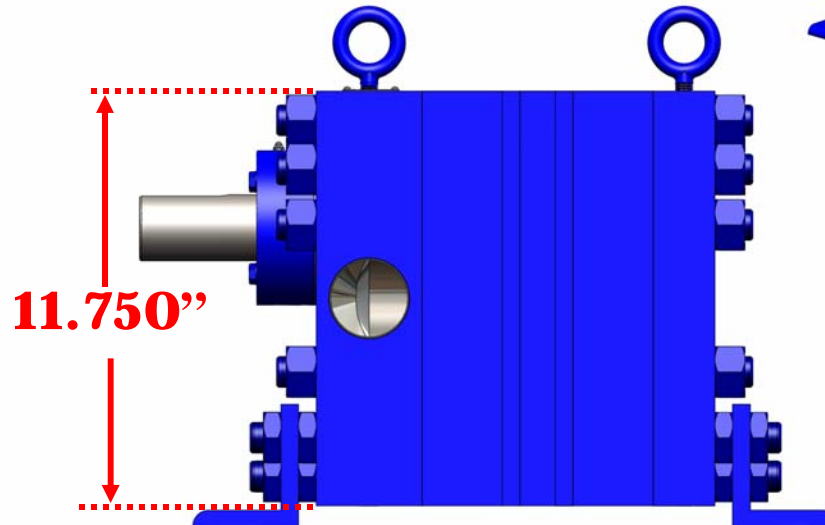
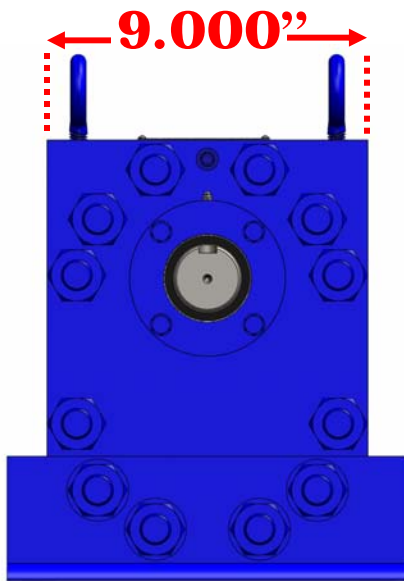
Northern Pump Model Numbers

● 4900 Series Frame Size

The 4900 Series is available on a limited basis. The current largest frame Northern® Pump occasionally shows up in the gear pump world when the application demands it! With recent Northern® success in the pipeline industry, a more regular return of the 4900 series seems very likely.

4900-10

4900-50



Gear Pump 101

Lesson 4:

Northern Pump Model Numbers

● Gear Length

Northern[®] Pumps combines the different frame sizes and gear length to accomplish specific flows. The corresponding gear length and dash numbers are:

-01



.125"

-02



.200"

-03



.300"

-04



.400"

-05



.500"

-06



.600"

-07



.750"

-10



1.000"

-15



1.500"

-20



2.000"

-25



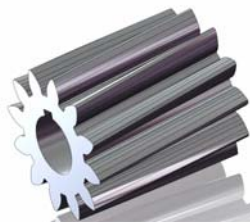
2.500"

-30



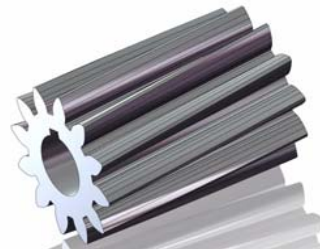
3.000"

-40



4.000"

-50



5.000"

-60



6.000"