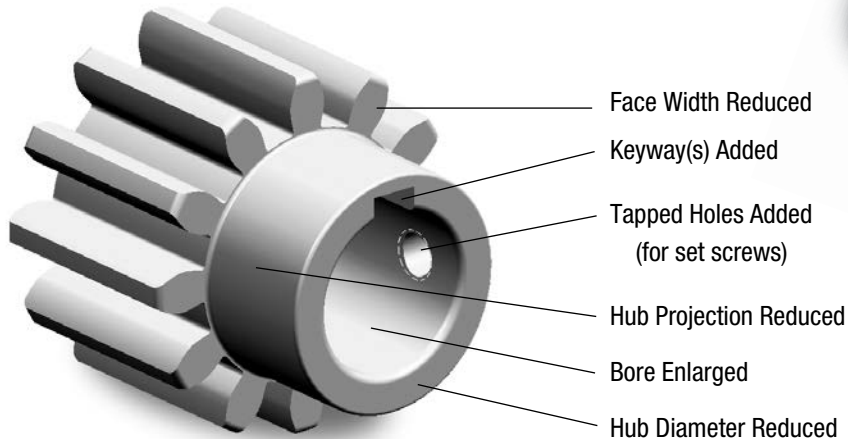


## Modified Stock Gearing

With thousands of stock gears available, chances are we've got just what you're looking for. If you find a stock gear that's close to what you need, but not precisely right, that's not a problem. We can modify most stock gears to meet your requirements and ship it within 24 hours. The full range of modifications we can provide are shown below.

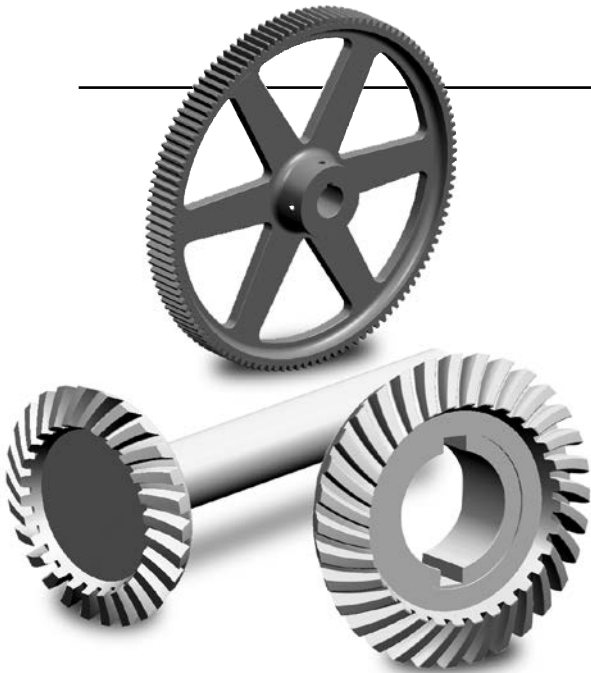


Keyways and bores available in common metric sizes.

**24 HOUR  
MODIFIED STOCK GEARING  
SHIPMENT**

With Boston Gear, stock gear modifications are quick and easy. Give us a call at **800-825-6544**.

## Custom Gearing



Not every job is alike and not every job requires the same solution. That's why Boston Gear will configure a custom gear to suit you. Even though we have built our reputation on supplying a breadth of standard products for virtually any industry, we have forged a name for ourselves as makers of quality custom gears. Custom doesn't have to mean expensive and it doesn't have to mean that it requires long lead times.

Depending on the amount of tooling required and the complexity of the job, your custom gear solution can be delivered in days, not weeks. No matter how small or how large your job is, contact our custom engineering team for a customized quote.

To request a quote for a custom gear solution from Boston Gear, simply fill out the "Request For Quotation Form" on page 5, and **FAX to 800-387-0130**. Or give us a call at 800-816-5608.

# Custom Gearing Capabilities

## Gear Types

- Spur
- Helical
- Miter & Bevel
- Worm & Worm Gear

## AGMA Classes

**AGMA 9** Non-Heat Treated, Spur & Helical Gears only

**AGMA 8** Heat Treated & Non-Heat Treated, all other gears

Note: Worm & Worm Gears do not have AGMA Class listings, however Boston Gear manufacturing tolerances relate to AGMA 8.

## Capabilities

Gear Type	Diametral Pitch	Pitch Diameter	Face Max.
Spur	64DP-3DP	.250"-36.000"	5.000"
Helical	64DP-3DP	.337"-24.000"	5.000"
Internal Spur	64DP-3DP	1.000"-24.000"	5.000"
Bevel & Miter	64DP-3DP	.500"-24.000"	3.000"
Worm	48DP-3DP	.333"-4.000"	12.000"
Worm Gear	48DP-3DP	.420"-24.000"	5.000"
Splines	Consult Engineering		

Module	Diametral Pitch	Circular Pitch (in.)
.4	63.500	.0495
.5	50.800	.0618
.6	42.333	.0742
.8	31.750	.0989
1	25.400	.1237
1.25	20.320	.1546
1.5	16.933	.1855
2	12.700	.2474
2.5	10.160	.3092
3	8.467	.3711
4	6.350	.4947
5	5.080	.6184
6	4.233	.7422
8	3.175	.9895

Note: Circular Pitch (.0491"-1.0472") or Module Pitch (.4mm-8mm) within the Diametral Pitch Limits are optional (refer to page 309).

## Tolerances

Features	≤ 2" Diameter	≥ 2" Diameter
Bore Diameter	.0005"	.0010"
Ground O.D.	.0005"	.0010"
Turned O.D.	.0020"	.0020"
Bore Length	.0020"	.0020"
Keyway Width	.0020"	.0020"
Keyway Depth	.0100"	.0100"
Tapped Holes	2B Thread	

## Geometric Dimensioning

Features	≤ 2" Diameter	≥ 2" Diameter
Perpendicularity	.0010"	.0010"
Parallelism	.0010"	.0010"
Circular Runout	.0010"	.0010"
Flatness	.0010"	.0010"
Concentricity	.0005"	.0010"

## Backlash

Refer to Engineering Information found on pages 310 and 309.

Refer to engineering for backlash related to helical and worm gearing.

## Lot Sizes

**25 pcs** Minimum Quantity on 6" OD and less

## Finishes

**63 RMS** Minimum on gear teeth

**32 RMS** Minimum on Bores, Shaved Gear Teeth, Ground Worms, and Machined Surfaces







## Material

Description	Designation
Low Carbon Steels	11L17, 12L14, 12L15
Medium Carbon Steels	11L41, 1045
Low Carbon Alloy Steels	86(L)20* (*86L20 or 8620)
Medium Carbon Alloy Steels	41(L)30, 41(L)40, 41(L)50
Preheat Treated Steels	4140, 4150
Stainless Steels	17-4PH, 303, 304
Cast Iron	Grade 25, Grade 30
Brass	Free Cutting, Half Hard
Bronze	
Non-Metallic	Phenolic (NEMA "C"), Delron, Nylon

# Custom Gearing “Request For Quotation” Form

Company Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City/State \_\_\_\_\_ Zip \_\_\_\_\_  
 Tel. No. \_\_\_\_\_ Fax No. \_\_\_\_\_  
 Contact Name \_\_\_\_\_  
 email \_\_\_\_\_

Date \_\_\_\_\_  
 Ref. \_\_\_\_\_  
 Quantity Req. \_\_\_\_\_  
 P.O. No. \_\_\_\_\_

	Gear Type					
						
	Spur	Helical	Miter	Bevel	Worm	Worm Gear
No. of Teeth						
Pitch (DP, CP MOD)						
Pressure Angle						
Helix Angle						
Hand (LH, RH)						
Material						
Face Width						
Length Through Bore						
Hub Diameter						
Hub Projection						
Bore Diameter						
Keyway						
Setscrew(s)						
Teeth in Mating Gear						
Center Distance						
Mounting Distance						
No. of Starts (Thread)						
Outside Diameter						
Heat Treat — Yes/No						
Depth of Hardness						

Special Information \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**FAX to 800-387-0130.** Or give us a call at 800-816-5608.