

## Open Gearing Design and Engineering Capabilities



## STOCKED GEARING Immediate Availability (over 2,500 stocked varieties)



### Spur Gears

Boston spur gears are designed to transmit motion and power between parallel shafts. Configurations include spur, change gear, stem pinion, rack, pinion wire, and internal gears; most with a selection of bores, keyways and set screws.

- Diametral Pitch 3DP to 64DP with 14-1/2 and 20 degree pressure angles available.

### Worm & Worm Gears

Boston Gear worms and worm gears provide an effective solution for such power transmission applications requiring high-ratio speed reduction, limited space and right-angle non-intersecting shafts.

- Diametral Pitch 3DP to 48DP with single, double and quadruple threads available.



### Miter & Bevel Gears

Boston miter and bevel gears are designed for transmission of motion and power between intersecting shafts positioned at a right angle.

- Straight Miter Gears Diametral Pitch 4DP to 48DP
- Straight Bevel Gears Diametral Pitch 4DP to 18DP
- Spiral Miter Gears Diametral Pitch 5DP to 18DP
- Spiral Bevel Gears Diametral Pitch 8DP to 30DP

### Helical Gears

Boston helical gears are stocked as right and left hand. Designed to transmit motion and power between non-intersecting shafts which are positioned parallel or at 90° angle.

- Transverse Diametral Pitch 6TDP to 24TD with 45 degree helix angle.



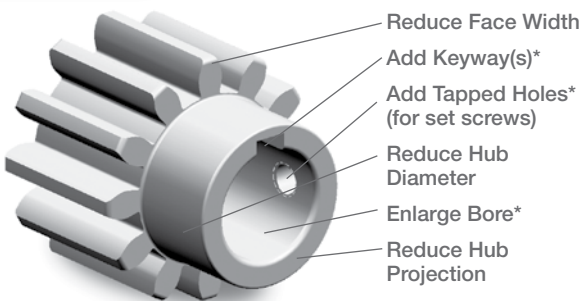
## MODIFIED STOCK GEARS Mounting Flexibility

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 within 24 hours.**

With Boston Gear, stock gear modifications are quick and easy.

\* Inch and metric options available.





## CUSTOM GEARING

Our goal is to provide customers with high quality products based on our engineering expertise. Boston Gear is committed to help you design a solution to suit your gearing needs. Custom gearing doesn't mean expensive with long leadtimes or high quantities required.

### Spur Gears

- Diametral pitch: 1.5DP to 64DP
- Module: 16MOD to 0.4MOD
- Pressure angles: 14 -1/2, 20 and 25 degree
- Quality: up to AGMA Q14
- OD: up to 98" (2,489mm)
- Ring gears: up to 45" OD (1,143mm)
- Internal ring gears: up to 36" OD (914mm)
- Face width: up to 44" (1,117mm)
- Grind: up to 49" OD (1,250mm)
- Crowning, profile and lead modification

### Worm Gears

- Diametral pitch: 3DP to 48DP
- Module: 8MOD to 0.6MOD
- Pressure angles: 14 -1/2, 20 and 25 degree
- Ratio: from 2:1 up to 180:1 in single gear arrangement
- Center distances: up to 48" (1,219mm)
- OD: up to 88" (2,235mm)
- Precision ground available
- Multiple threads design available

### Extended Capabilities

- Machining/stock modification of racks
- Heat treatment, grind and polish, plating/coating, dry lube
- Internal and external splines

### Miter and Bevel Gears

- Diametral pitch: up to 3DP for straight-type
- Module: up to 8MOD for straight-type
- Ratio: up to 10:1 for straight bevels
- OD: up to 6" (152mm) for straight miters
- OD: up to 8.5" (215mm) for straight bevels
- Diametral pitch: up to 4DP for spiral-type
- Module: up to 6MOD for spiral-type
- Ratio: up to 5:1 for spiral bevels
- OD: up to 6.75" (171mm) for spiral miters
- OD: up to 8.5" (215mm) for spiral bevels



Member of American Gear  
Manufacturer's Association

### Helical Gears

- Diametral pitch: 1.5NDP to 32NDP
- Module: 16MOD to 0.8MOD (normal)
- Pressure angles: 14 -1/2, 20 and 25 degree
- Quality: up to AGMA Q14
- Single and Double Helical
- OD: up to 98" (2,489mm)
- Face width: up to 44" (1,117mm)
- Grind: up to 49" OD (1,250mm)
- Crowning, profile and lead modification

### Materials

Commonly used materials by Boston Gear for stock products are low carbon steels, medium carbon steels, low carbon alloy steels, medium carbon alloy steels, pre heat-treated steels, stainless steels, cast iron, brass, bronze, plastic. Other materials available upon request.

### Engineering

Boston Gear Engineering can assist in design or selection of gears to maximize performance. Our in-house test lab can simulate, evaluate and troubleshoot applications.

### Quality

Boston Gear Quality focuses on pursuing excellence in our products, processes and systems. Our gear measuring machine (GMM) provides complete geometry analysis. Boston Gear is ISO 9001-2008 certified.

### Customer Service & Technical Support

With unparalleled delivery programs and superior customer service, the gearing customer who demands the best count on Boston Gear. Our experienced staff is here to help with your applications and selection of the proper gears.

Customer Service 800-825-6544  
Technical Support 800-816-5608



**SEE OUR COMPLETE PRODUCT OFFERING**

## Boston Gear Facilities

### North America

#### USA

701 Carrier Drive  
Charlotte, NC 28216 - USA  
704-588-5610

*Enclosed and Open Gearing,  
Electrical and Mechanical  
P.T. Components*

#### Customer Service

1-888-999-9860

#### Application Support

1-800-816-5608

## The Brands of Altra Motion

### Couplings

**Ameridrives**  
[www.ameridrives.com](http://www.ameridrives.com)

**Bibby Turboflex**  
[www.bibbyturboflex.com](http://www.bibbyturboflex.com)

**Guardian Couplings**  
[www.guardiancouplings.com](http://www.guardiancouplings.com)

**Huco**  
[www.huco.com](http://www.huco.com)

**Lamiflex Couplings**  
[www.lamiflexcouplings.com](http://www.lamiflexcouplings.com)

**Stromag**  
[www.stromag.com](http://www.stromag.com)

**TB Wood's**  
[www.tbwoods.com](http://www.tbwoods.com)

### Linear Systems

**Thomson**  
[www.thomsonlinear.com](http://www.thomsonlinear.com)

### Geared Cam Limit Switches

**Stromag**  
[www.stromag.com](http://www.stromag.com)

### Engineered Bearing Assemblies

**Kilian**  
[www.kilianbearings.com](http://www.kilianbearings.com)

### Electric Clutches & Brakes

**Matrix**  
[www.matrix-international.com](http://www.matrix-international.com)

**Stromag**  
[www.stromag.com](http://www.stromag.com)

**Warner Electric**  
[www.warnerelectric.com](http://www.warnerelectric.com)

### Belted Drives

**TB Wood's**  
[www.tbwoods.com](http://www.tbwoods.com)

### Heavy Duty Clutches & Brakes

**Twiflex**  
[www.twiflex.com](http://www.twiflex.com)

**Stromag**  
[www.stromag.com](http://www.stromag.com)

**Svendborg Brakes**  
[www.svendborg-brakes.com](http://www.svendborg-brakes.com)

**Wichita Clutch**  
[www.wichitaclutch.com](http://www.wichitaclutch.com)

### Gearing & Specialty Components

**Bauer Gear Motor**  
[www.bauergears.com](http://www.bauergears.com)

**Boston Gear**  
[www.bostongear.com](http://www.bostongear.com)

**Delevan**  
[www.delevan.com](http://www.delevan.com)

**Delroyd Worm Gear**  
[www.delroyd.com](http://www.delroyd.com)

**Nuttall Gear**  
[www.nuttallgear.com](http://www.nuttallgear.com)

### Engine Braking Systems

**Jacobs Vehicle Systems**  
[www.jacobsvehiclesystems.com](http://www.jacobsvehiclesystems.com)

### Precision Motors & Automation

**Kollmorgen**  
[www.kollmorgen.com](http://www.kollmorgen.com)

### Miniature Motors

**Portescap**  
[www.portescap.com](http://www.portescap.com)

### Overrunning Clutches

**Formsprag Clutch**  
[www.formsprag.com](http://www.formsprag.com)

**Marland Clutch**  
[www.marland.com](http://www.marland.com)

**Stieber**  
[www.stieberclutch.com](http://www.stieberclutch.com)

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P-7202-BG 9/21