

Precision Motion Control Pulleys

onvio



EXPRESS SERVICE

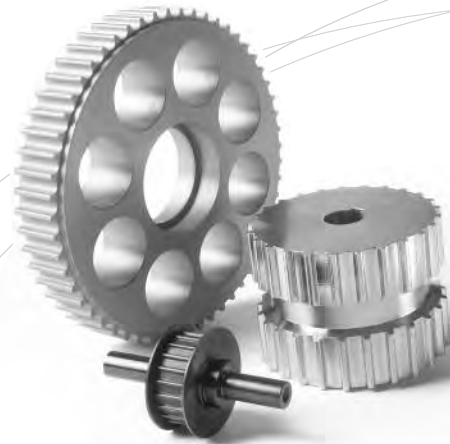
- Automated design tools
- Instant quoting
- Fastest delivery

QUALITY

- Belt and pulley know how
- Consistent design standards
- World class “LEAN” manufacturing
- Precise machining standards

CAPABILITY

- Focused on motion control
- Made to order is standard
- Multiple material choices
- All popular pitches



Applications for timing belts are becoming more and more demanding every day. As these demands evolve beyond every day power transmission applications, engineers are forced to optimize all system elements including pulleys.

At Onvio, we specialize in producing customized pulleys, produced precisely to the engineer's design. Issues such as minimizing inertia, close fitting spaces, light weight, special coatings, tight tolerances as well as total package responsibility are exactly what we are good at.

Our pulleys are produced in virtually all pitch types — inch and metric, AT and curvilinear. Our strengths lie in our quality, our speed of quoting, as well as fast and efficient delivery.

With years of experience in not only timing belts and pulleys; but vast knowledge in high precision motion control components, Onvio can deliver virtually any custom timing belt pulley and insure that it will be the right one.

Onvio is a manufacturing company with locations in the United States, Mexico, and Germany. By employing World Class manufacturing standards we are able to control all aspects of the manufacturing process which means we will deliver the right product — on time. You can count on it.

onvio

Onvio Precision Pulleys

Made To Your Specifications

Custom Timing Belt Pulleys



Pulleys

Custom for you, standard for us. At Onvio, the only pulleys we produce are made specifically to our customer's requirements. That means that our entire business process is set up to deliver exactly what you want — fast and at an economical price.

We can produce pulleys from steel, aluminum, stainless steel, special materials or plastics, with special coatings — all to your exact requirements. Available in wide widths, with or without flanges, and self tracking v-grooves.



Pulley Bar Stock

For customers who wish to final machine their own pulleys, especially for quick delivery of prototype custom pulleys, we produce a range of bar stock which allows you to produce your own pulleys.



Clamp Plates

Onvio produces a line of precision belt clamp plates as well as belt tension clamps. All clamp plates are designed to precisely match the belt they are clamping.



Power Pulley

We have combined the transmission strength of a speed reducer and the compact size of a pulley in our revolutionary gearbox in a pulley.

ISO9001:2000

Specs

Onvio Capabilities

Flange Types

- Zinc plated steel, aluminum, stainless steel.
- Rolled on or bolted on.
- Stamped and machined.
- Standard and custom.

Mounting Methods

- Keyways, set screws
- Machined to accept Taper-Lock and QD bushings, keyless locking devices.

Tolerances

- Standard tolerances per Onvio specifications, or to customer requirement.

Custom Solutions

- Bearings, clutches, and shafts applied to customer specifications.

| Tooth Profile | Number of Teeth | Tooth Clearance |
|---------------|------------------------|---------------------------|
| XL (.200") | 10 to 114 | Standard |
| L (.375") | 10 to 84 | Standard |
| H (.500") | 14 to 63 | Standard |
| XH (.875") | 20 to 36 | Standard |
| T2.5 (2.5mm) | 21 to 114 | Standard |
| T5 (5mm) | 10 to 114 10 to 55 | Standard Zero backlash |
| T10 (10mm) | 12 to 80 21 to 50 | Standard Zero backlash |
| T20 (20mm) | 15 to 45 | Standard |
| AT5 (5mm) | 15 to 119 10 to 114 | Standard Zero backlash |
| AT10 (10mm) | 12 to 79 12 to 79 | Standard Zero backlash |
| AT20 (20mm) | 15 to 40 | Standard |
| HTD 3 (3mm) | 10 to 160 | Standard |
| HTD 5 (5mm) | 13 to 160 | Standard |
| HTD 8 (8mm) | 19 to 100 | Standard |
| STS 3 (3mm) | 16 to 80 | Standard |
| STS 5 (5mm) | 22 to 44 | Standard |
| STS 8 (8mm) | 25 to 48 | Standard |
| GT 5 (5mm) | | |
| GT 8 (8mm) | | |
| GT 14 (14mm) | | |

Call 1 866 685-0404

Materials

| Type of Material | Available Finishes |
|------------------|--|
| Aluminum | Clear Anodize Black Anodize Hardcoat Anodize Electroless Nickel |
| Steel | Clear Zinc Black Oxide Electroless Nickel Black Zinc |
| Stainless Steel | None |
| Plastic | None |

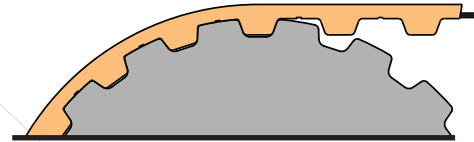
Pulleys

Ultimate Performance

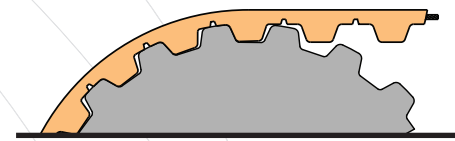
Proper meshing between belt and pulley is critical, especially in high precision motion control applications. The production methods used for making pulleys results in slight differences in the tooth profile as the tooth count varies. When a belt bends around a pulley, its tooth profile also changes and is dependent on the specific radius of that bend. Furthermore, the tooth profile of a belt can change from manufacturer to manufacturer.

To insure proper meshing of belt and pulley, it is crucial to understand these relationships. Onvio has a long history and deep knowledge of both belts and pulleys, and therefore can help to make sure that the belt and pulley function properly together. The following diagrams show each tooth profile in an ideal mesh with its corresponding pulley.

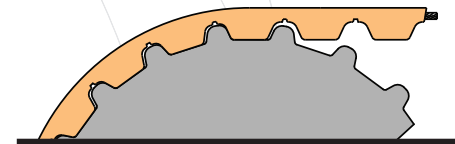
**Onvio's years of experience
guarantee the right mesh
between belt and pulley**



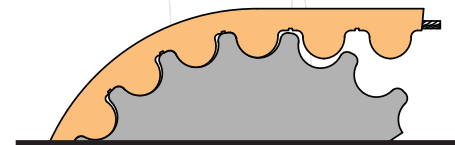
Imperial Section



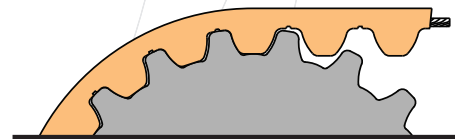
T Section



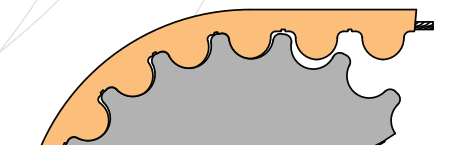
AT Section



HTD Section



STS Section



GT Section

Pulleys

Types and Options

The only pulleys we produce are made specifically to our customer's requirements.



Lightening Holes and Pockets



Keyway with Set Screws



Bearing Counter Bores



With OD Bushings



With Keyless Bushings



With Taper Bushings



Single Flange



Bolt on Flanges



Custom Bolt on Flanges



V-Guide



Hub with Counter Bores



Idler Roller

Pulleys

Onvio Worksheet

Complete this form and fax to 603 685-0405
or visit us online at www.onviollc.com.

Name: _____

Title: _____

Company: _____

Address: _____

Telephone: _____

Fax: _____

email: _____

Describe Application: _____

Tooth Form: _____

Belt Width: _____

Number of Teeth: _____

Tooth Clearance:

- Standard
- Zero Backlash

Material:

- Aluminum
- Steel
- Plastic
- Stainless Steel

Finish/Plating: _____

Flanges:

- 1 Flange Hub Side
- 1 Flange Opposite Hub
- 2 Flanges

Flange Material:

- Steel (standard)
- Aluminum
- Stainless Steel

Pulley Type:

- With Hub
- Without Hub
- Other: _____

V-Guide

- A-Section
- K 6 Section
- K 13 Section
- O Section

Standard Pilot Bore: _____

English Bore: _____

Metric Bore: _____

Standard Keyway: _____

Custom Keyway: _____

Quantity of Set Screws:

- 1
- 2
- Other

Location of Set Screws:

- 90 Degrees Apart
- 120 Degrees Apart

Counterbores:

- None (standard)
- 1 C'bore Hub Side
- 1 C'bore Opposite Hub
- 2 C'bores

Other Features: _____

To speak with an Onvio representative please call 603 685-0404
or toll free 866 685-0404, or, e-mail to: engineering@onviollc.com.



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Version: 2010-10-28 Digital - RotoPrecision Inc.

