1. Introduction

Welcome to the **GT2 Timing Pulley Generator** user guide! This add-in is designed to help you easily create customizable GT2 timing pulleys directly in Fusion 360. Whether you're designing components for 3D printers, CNC machines, or other mechanical systems, this tool will save you time and effort.

This App is very useful for 3D printed projects and can also be used to create GT2 timing pulleys for laser cutters.

2. Installation

Installing via Fusion 360 Marketplace:

1. Visit the Fusion 360 Marketplace and search for "GT2 Timing Pulley Generator."
2. Click on "Install" and follow the on-screen instructions.
3. Once installed, restart Fusion 360 to activate the add-in.

Manual Installation (if Applicable):

1. Download the add-in files from the provided GitHub link.
2. In Fusion 360, go to Tools > Scripts and Add-Ins > Add-Ins tab.
3. Click on + to add the new add-in.
4. Select the downloaded add-in folder and click Open.
5. Enable the add-in and click Run to start using it.

Uninstallation:

- To uninstall this plug-in, exit the Autodesk product if you are currently running it, click Control Panel > Programs > Programs and Features (Windows 10/11) and uninstall as you would any other application from your system.

3. Getting Started

Once the add-in is installed, you can access it directly from the Create menu within Fusion 360.

Step-by-Step Guide:

1. Open Fusion 360 and load your project.
2. Navigate to the Create dropdown menu.
3. Select Create GT2 Pulley to open the generator dialog box.

4. Using the Pulley Generator

Creating a Pulley:

1. In the generator dialog box, you'll find various customization options:
    - **Teeth Count:** Set the number of teeth for the pulley.
    - **Bore Diameter:** Define the diameter of the central bore.

    - **Belt Width:** Choose the appropriate belt width (e.g., 6mm, 10mm).
    - **Guide Height:** Adjust the flange height to prevent the belt from slipping.
2. Once your parameters are set, click OK to generate the pulley in your design workspace.

Customization Options:

- **Teeth Count:** Controls the circumference and pitch of the pulley.
- **Bore Diameter:** Determines the shaft size that the pulley will fit onto.
- **Belt Width:** Matches the width of the timing belt you're using.
- **Guide Height:** Helps in keeping the belt aligned during operation.

5. Saving and Importing Settings

Saving Settings:

1. After configuring your pulley, you can save the settings for future use.
2. Click on the Export Settings button, name your configuration, and save it.

Importing Settings:

1. To use previously saved settings, click Import Settings.
2. Browse for the saved file and click Open to load the parameters.

6. Troubleshooting

Common Issues:

- **Error during creation:** Ensure no existing bodies interfere with the pulley creation. Hide or move them to avoid conflicts.
- **Pulley not appearing:** Double-check your parameters; ensure they are within the design limits.

Fixes:

- Reinstall the add-in if persistent errors occur.

7. Contact and Support

For any issues, questions, or suggestions, please contact us via email at aerostar382@gmail.com.

Regular updates will be provided to ensure compatibility and improve functionality. Check the Fusion 360 Marketplace or the GitHub page for the latest version.