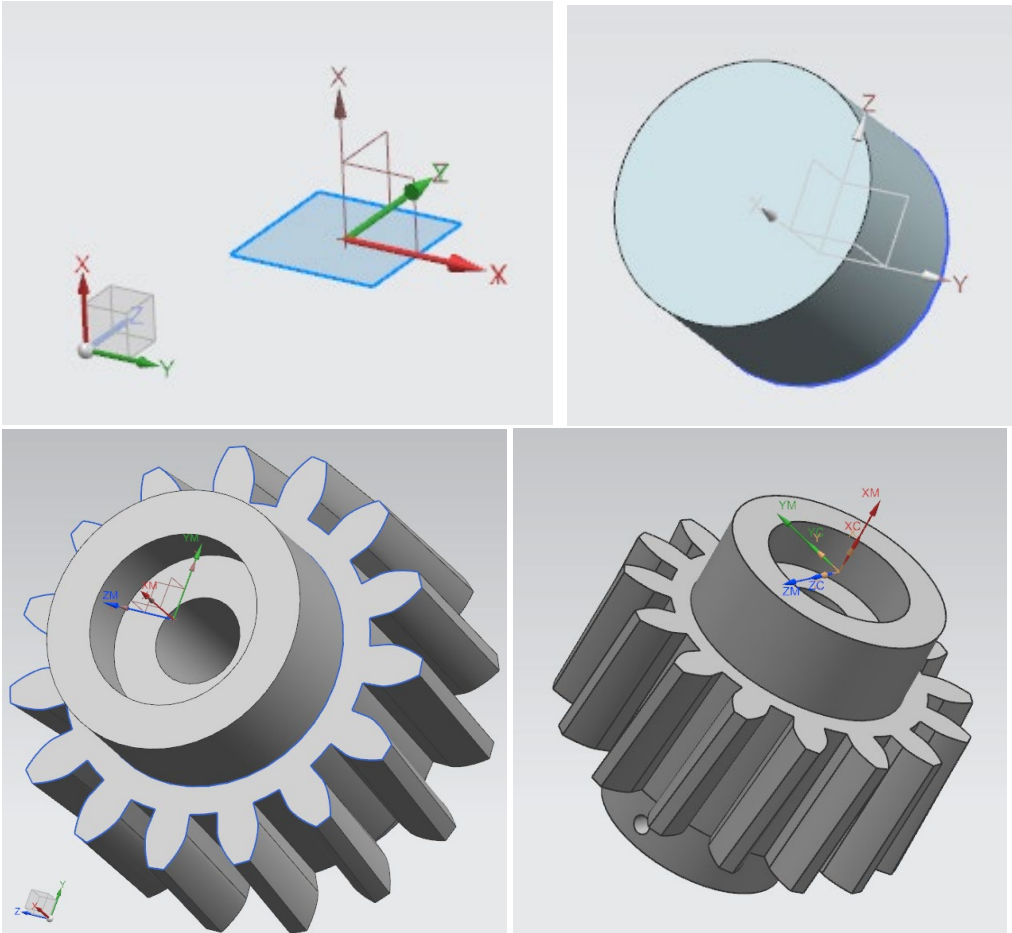


# File Preparation for the Okuma Multus U3000

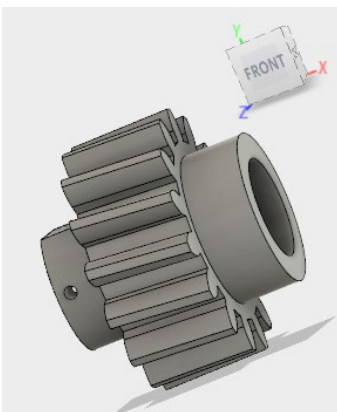
Files provided need to be provided as Part, Solid Part, STEP, IGES or IGS format. Dimensions need to be in millimetres (mm).

Please see following images for file export from Fusion 360, Solid Works and Inventor Programs. The image is a generic Image from NX 10, the main Camming Software used in the Digital Manufacturing Lab.

The Okuma Multus U3000 requires design orientation to take place in the ZY orientation.

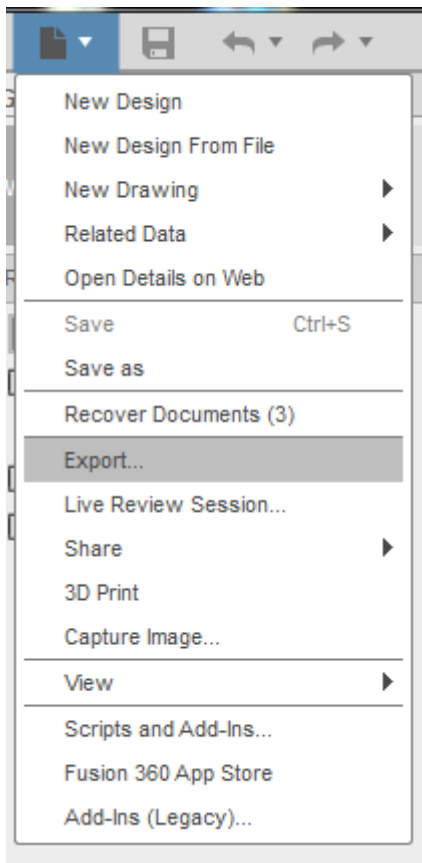


## Fusion 360:



With Fusion 360 part needs to be assigned to home position on coordinates, this is start from 0 point of axis's. The Part still requires to be orientated in the ZY plane. This can either be from beginning of modelling or on completion through the Move Function.

Once part is ready for export, select File (Displayed as ear-tagged page in image). Then select '**Export...**' using left key on mouse.



This open the dialogue page for exporting part file to another location such as a thumb drive. Using the drop-down arrow under '**Type:**' select IGES File. Selecting the '...' next to original file location will open '**File browser**' to choose location for part to be saved to, eg Thumb-drive. Then simply hit '**Save**' and IGES will be created in designated file.

## Export



Name:

Gear

Type:

IGES Files (\*.igs \*.iges)

☐ Save to a project in the cloud

Liam's First Project > master

☒ Save to my computer

G:/Liam CA...ine July16

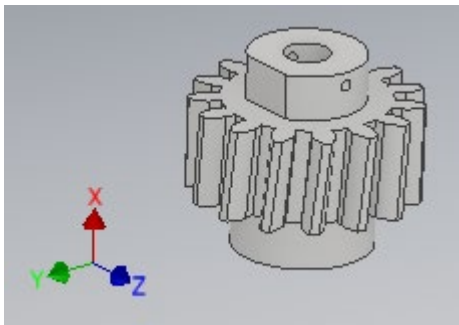


Cancel

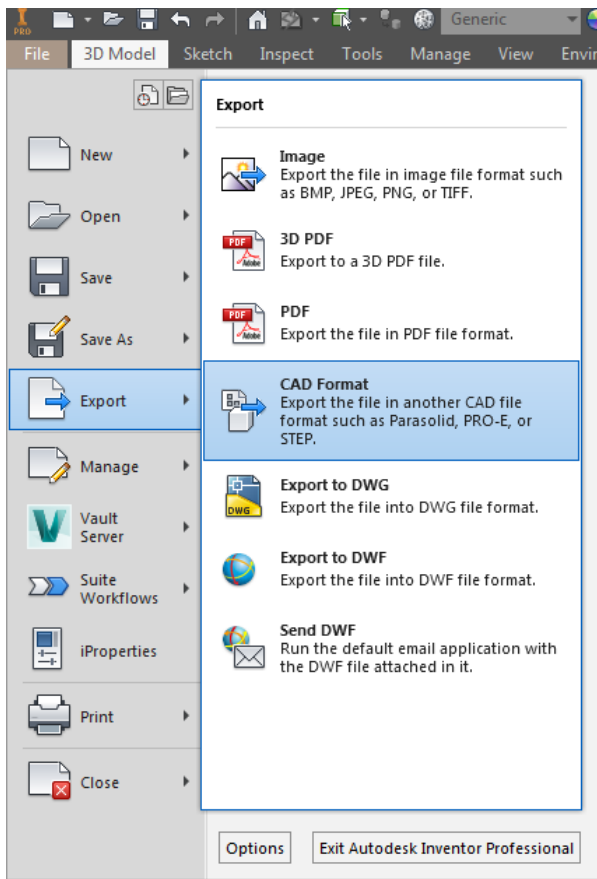
Save

## Autodesk Inventor:

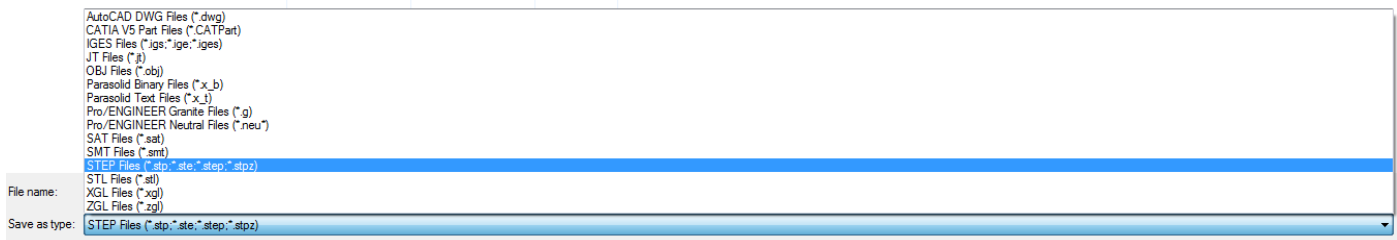
With Autodesk Inventor part needs to be assigned to home position on coordinates, this is start from 0 point of axis's. The Part still requires to be orientated in the YZ plane with X as Depth / Height. This can either be from beginning of modelling or on completion through the Move Function.



Once part is ready for export, select **'File'**. Then select **'Export'**, **'CAD Format'** using left key on mouse.



A new window will open, at bottom of page select '**Save as type**', and then select '**STEP**' using left key on mouse. Then select '**Save**'.

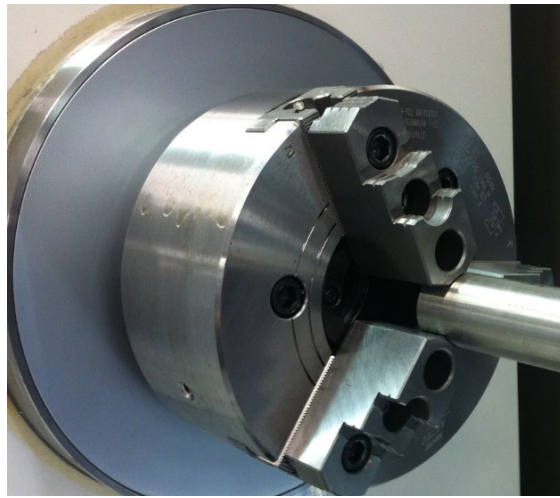


## Solid Works:

TBA

## Clamping / Holding:

With each machine there is varying methods in which work pieces are required to be held, for the Okuma Multus U3000 this predominately uses a Lathe Chucking fixture to hold work pieces. This is designed for holding round-bar and requires 25mm of extra material to allow for gripping:



Small work pieces may be hold through the use of jiggig fixtures, but this would require further machining and extra time and materials.