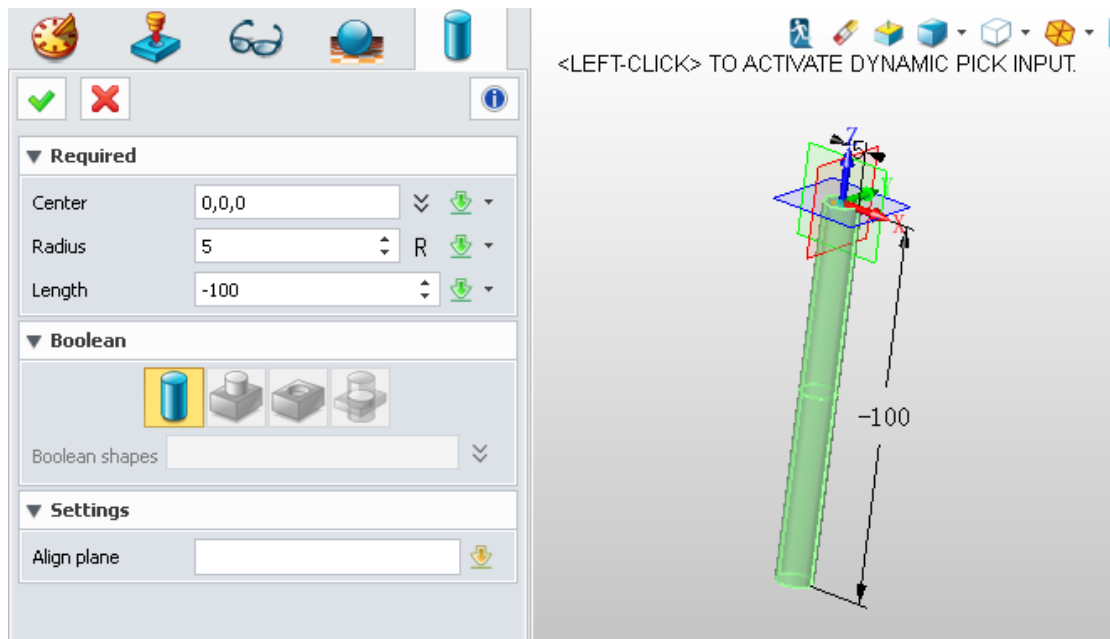


## Wide Applicability of Newly-developed Flex Tools in ZW3D 2014

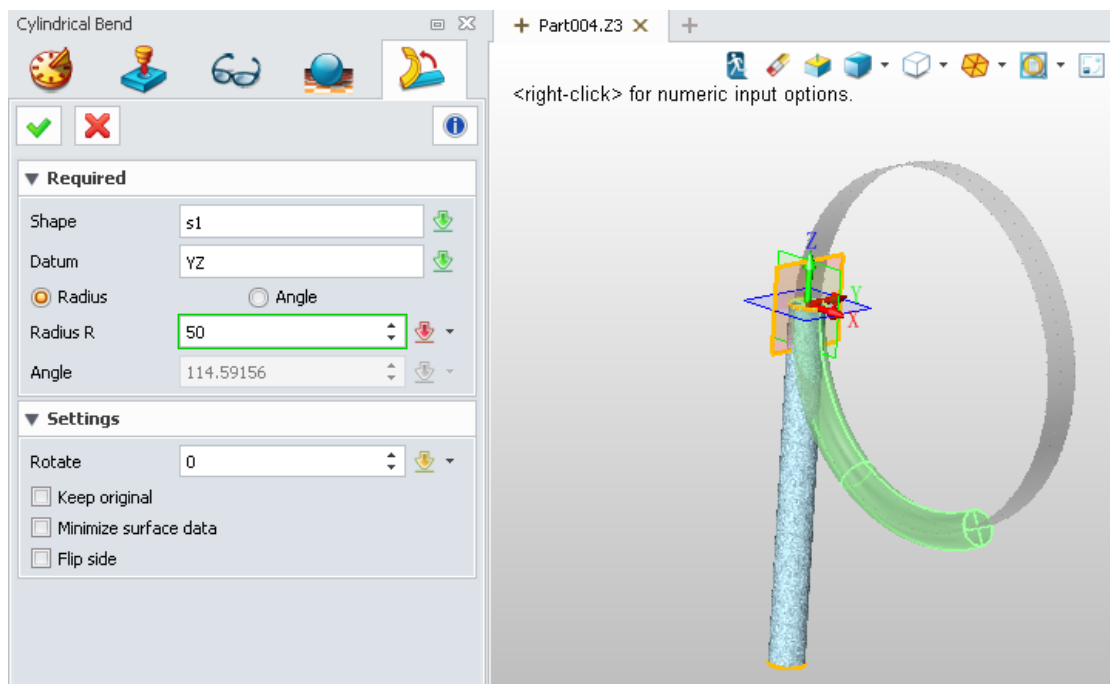
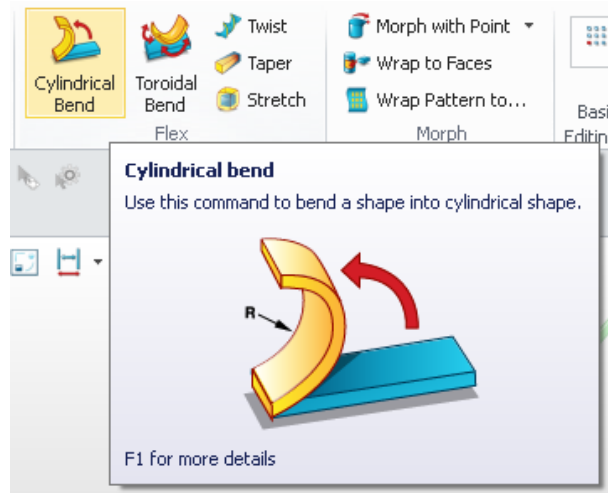
ZW3D, a powerful and integrated CAD/CAM platform from ZWSOFT, possesses great functionality in 3D modeling. The newly released edition, ZW3D 2014 Beta, is accompanied by lots of practical and handy improvements, and new features, like built-in translator, multiple insert component features, New Flex Tool and enhanced 2D drafting. In this article, the application of Flex Tools in industries like hardware, sheet metal, artwork and toys, will be introduced. Let's see how this function can be applied to your daily design.

Section 1 Introduce the 'Cylindrical Bend' feature by modeling the doorknob in the hardware industry.

Step1: Create a cylinder

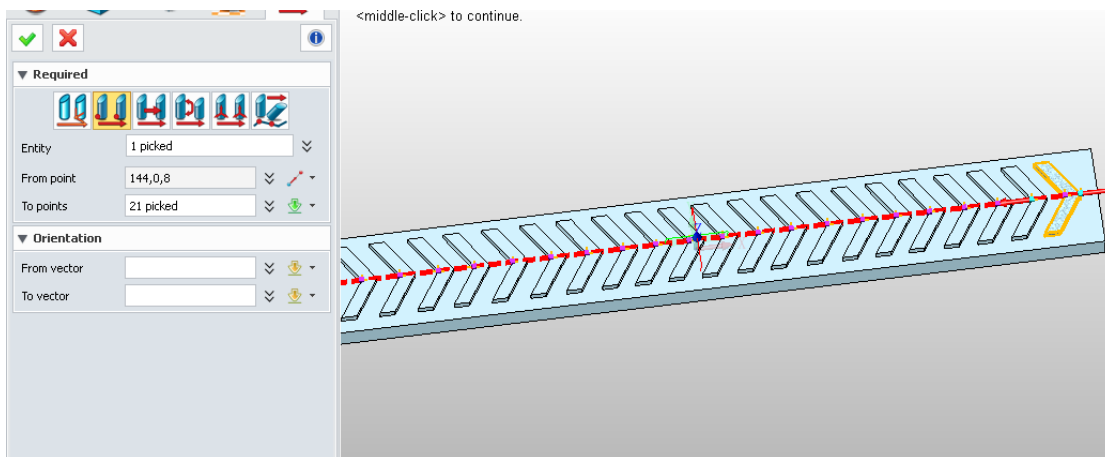
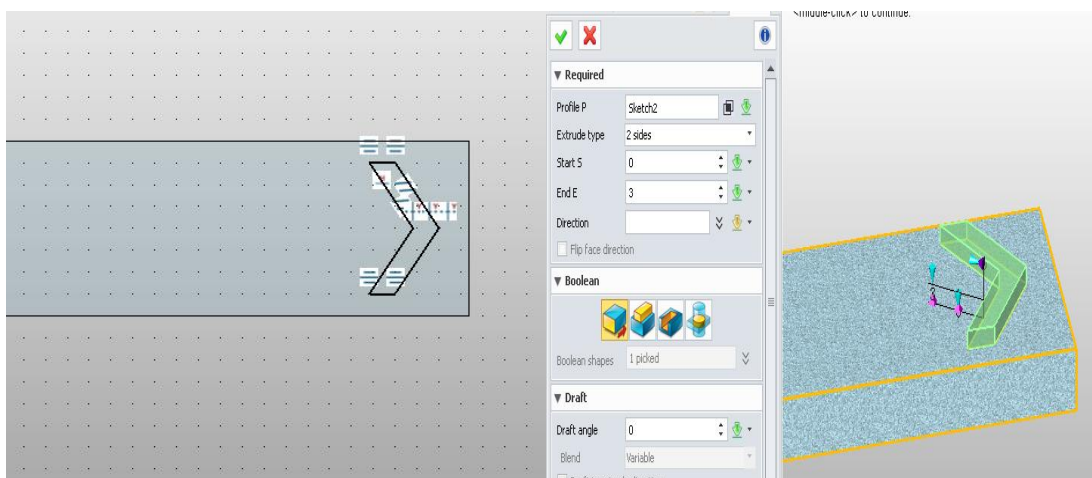
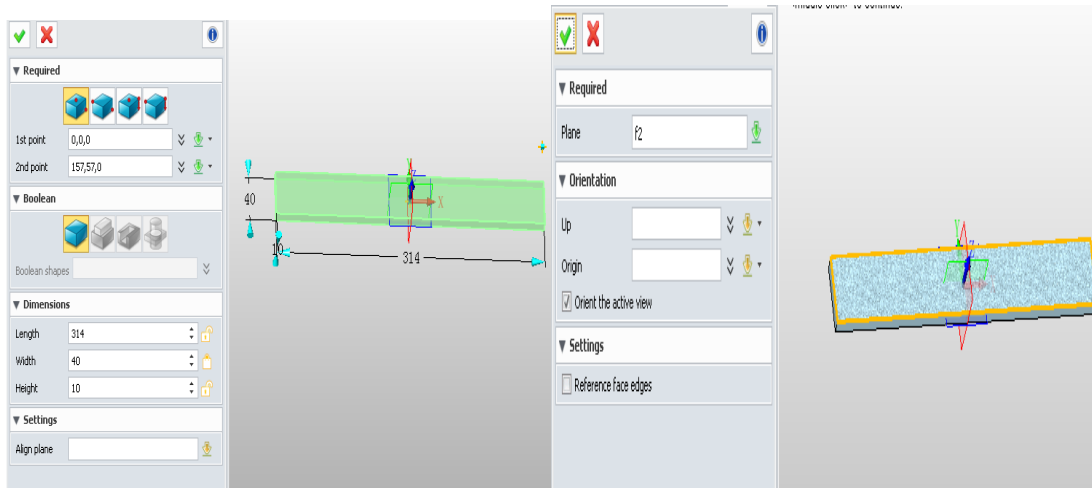


Step 2: Bend the cylinder using the new "Cylindrical Bend" feature, then you can make modifications on details by changing its parameters, including radius, angle, and rotate angle, significantly simplifying the bending process.

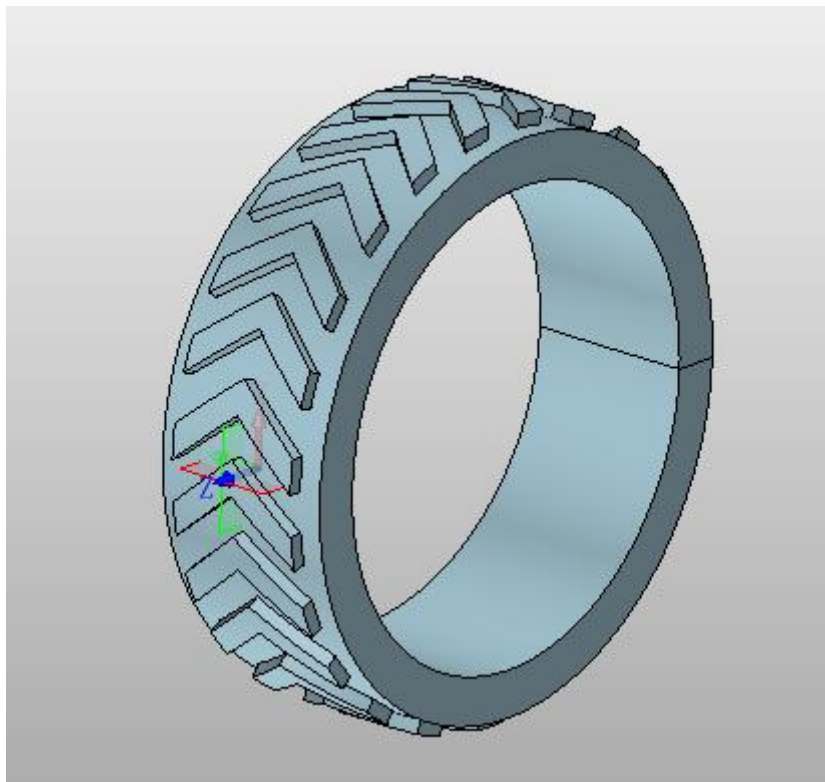
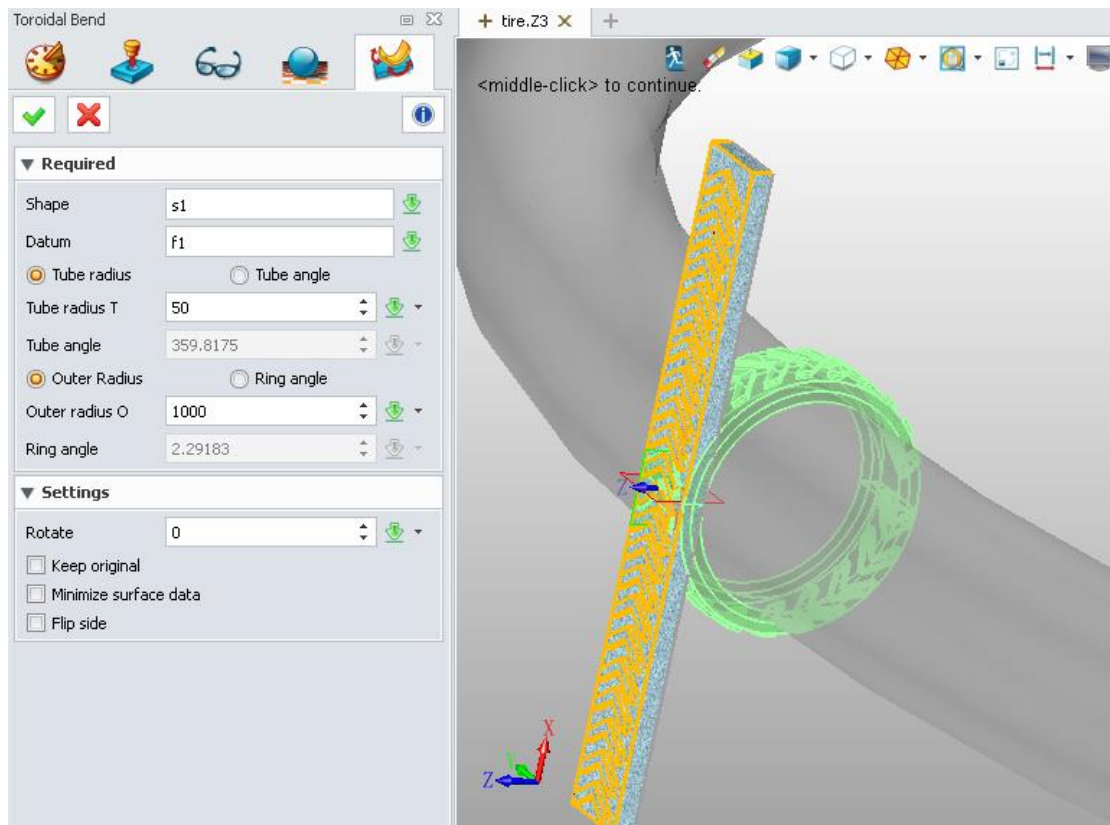


## Section 2 Introduce the 'Toroidal Bend' by modeling tire

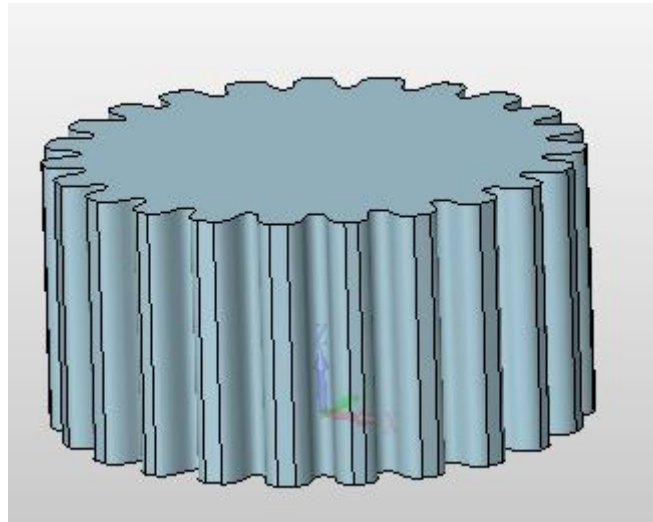
Step 1: Firstly, build a block; then, draw a sketch on one face of the block. Extrude it with 'ADD' boolean operation, then copy this part to finish the extended surface.



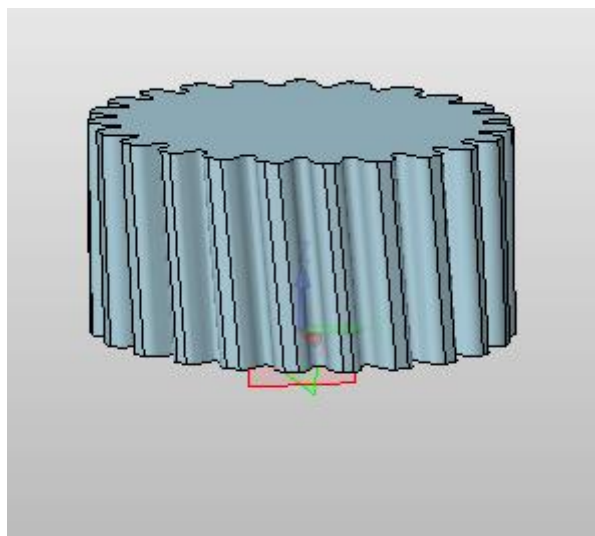
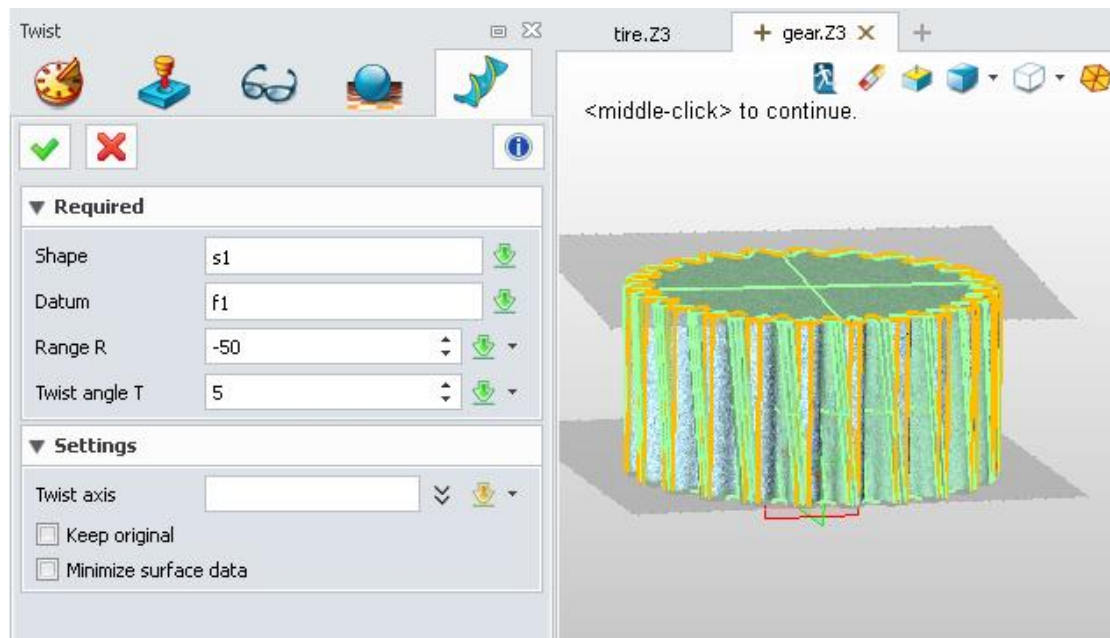
Step 2: Bend this part using the 'Cylindrical Bend ' feature.You can change its result by modify its parameters, including tube radius, outer radius, and rotate angle, greatly simplifying the bending process.



Section 3 Introduce 'Twist' feature by modeling helical gear,  
 Step 1: Draw a straight gear.



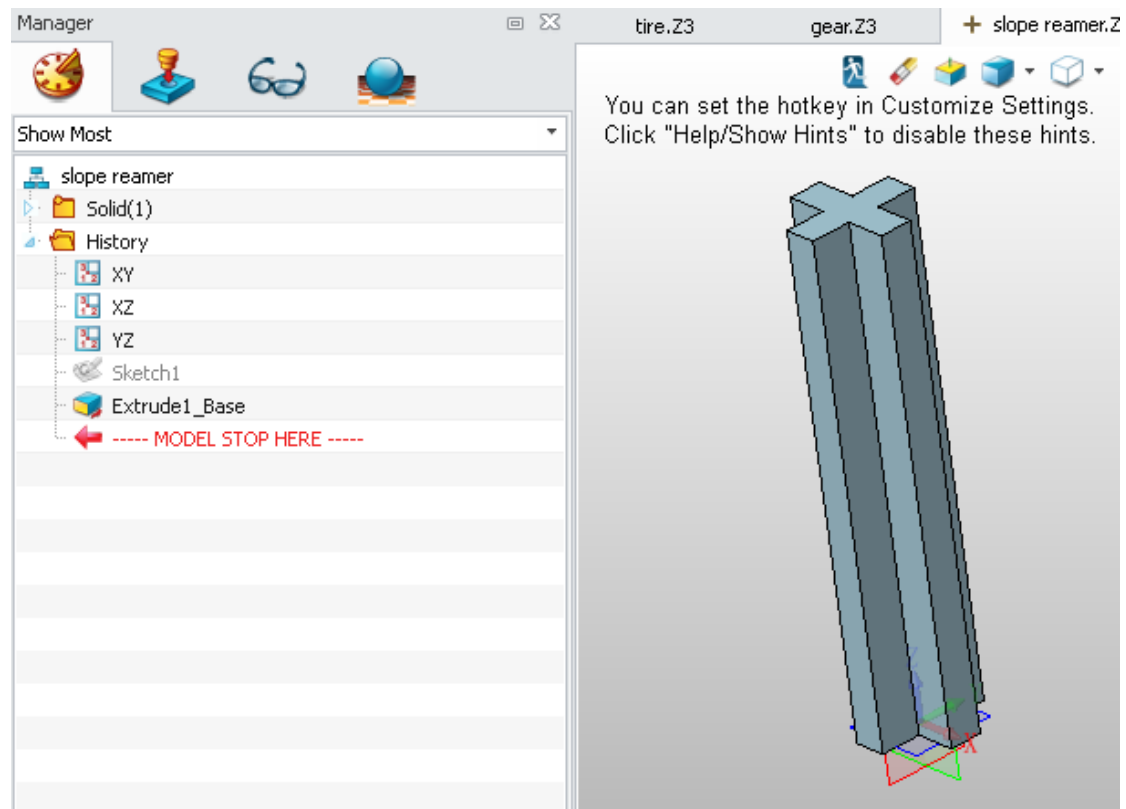
Step 2: Change it into a helical gear, adjust its twist angle in the twist manager.



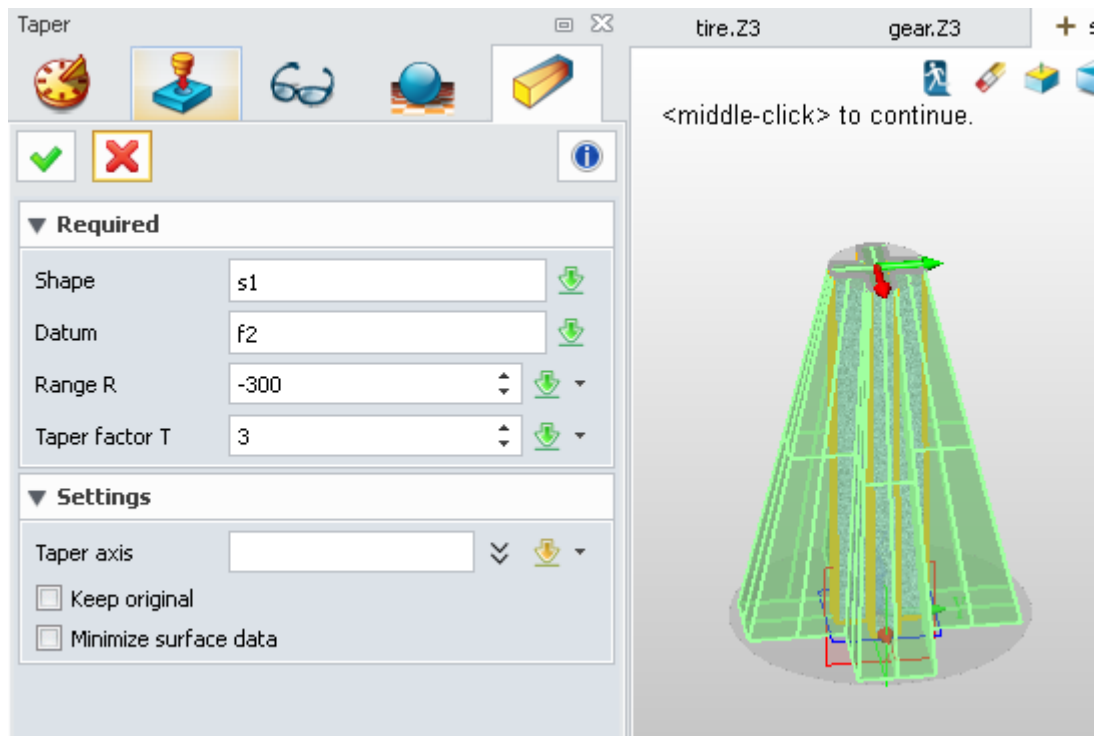
As shown above, in just a few steps, we can model a helical gear easily.

## Section 4 Introduce 'Taper' feature by modeling slope reamer

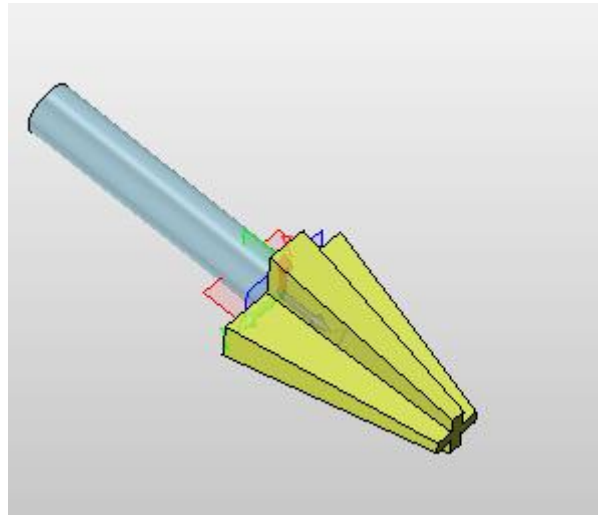
Step 1: Model the outline of the slope reamer by using the 'Extrude' feature.



Step 2: Draw its slope using 'Taper' feature.

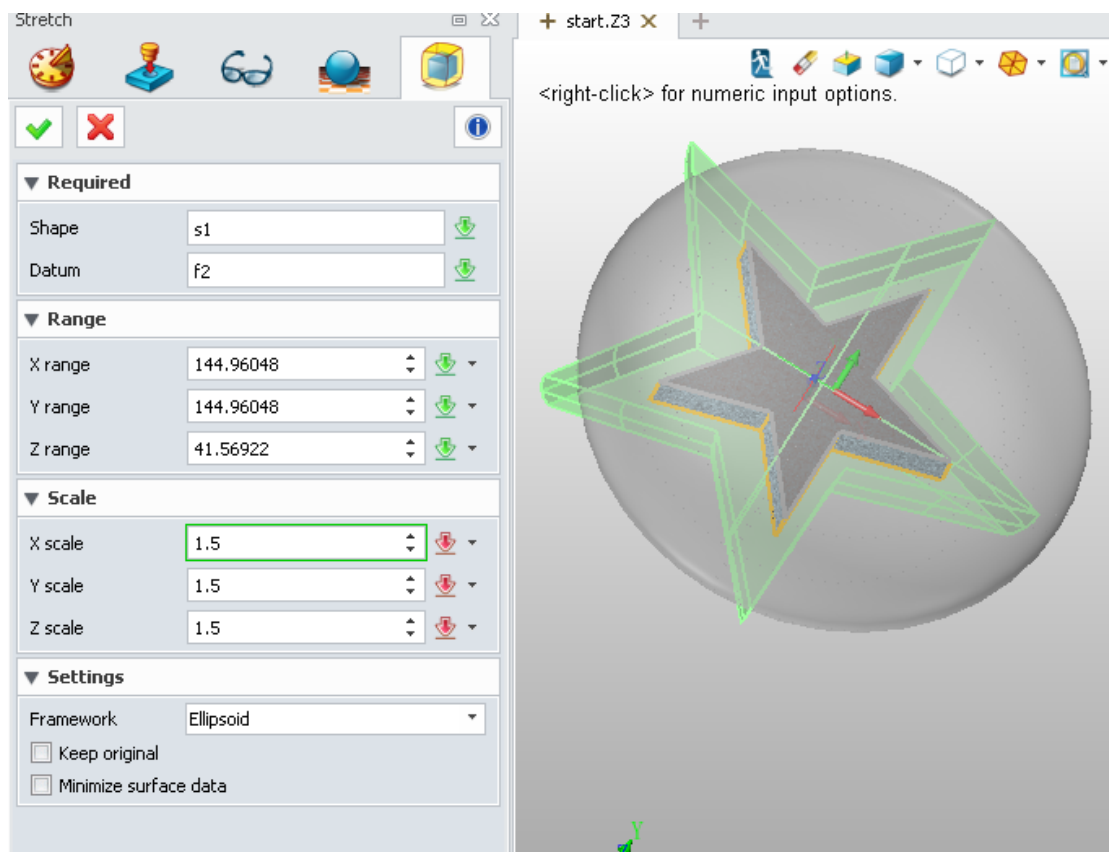


Step 3: Draw its hand shank, then we can finish the slope reamer with only 3 steps.



### Section 5 Now let's learn about the 'Stretch' feature

The shape can stretch in X, Y or Z directions as is shown in the picture. If we select the shape and datum, and set the required parameters, it is very easy for us to stretch.



It's easy to see how useful the intelligent Flex Tools in ZW3D 2014 can be in industrial design from the above cases. ZW3D 2014 can meet the designer's industrial design requirements, speed up the product design process and quickly realize designers' ideas easily and effectively. [Click here to get a free trial.](#)