

Create bulb-girder sections with rounded corners

Tutorial	
Name:	Create bulb-girder sections with rounded corners
Description:	Use the Section Designer to create a bulb-girder section with rounded corners.
Program:	SAP2000
Version:	14.2.0
Model ID:	na

Bulb-girder cross sections, such as that shown in Figure 1, may be created using the [Section Designer](#).

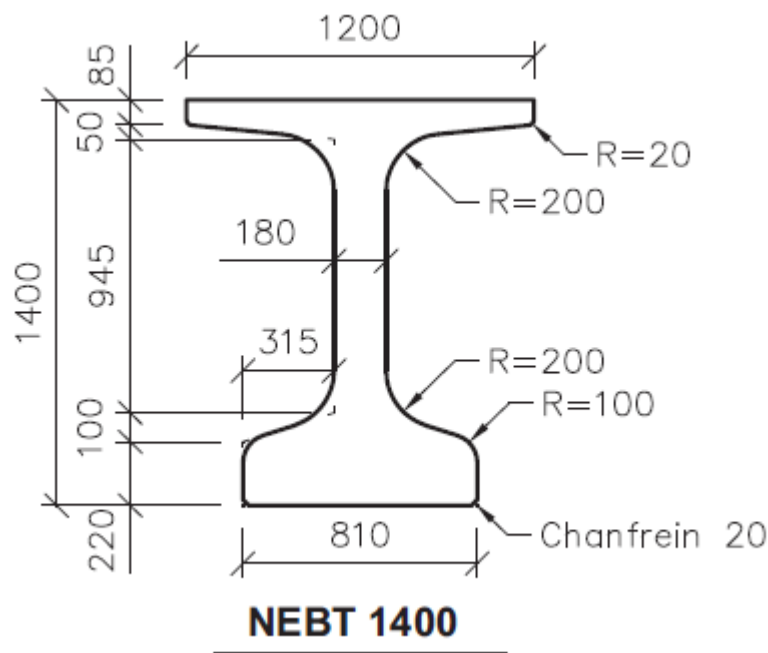


Figure 1 - Bulb-girder cross section

To model a bulb-girder section, first open the Section Designer, then [use polygons to draw](#) the outline of the section without the corner radius, as shown in Figure 2:

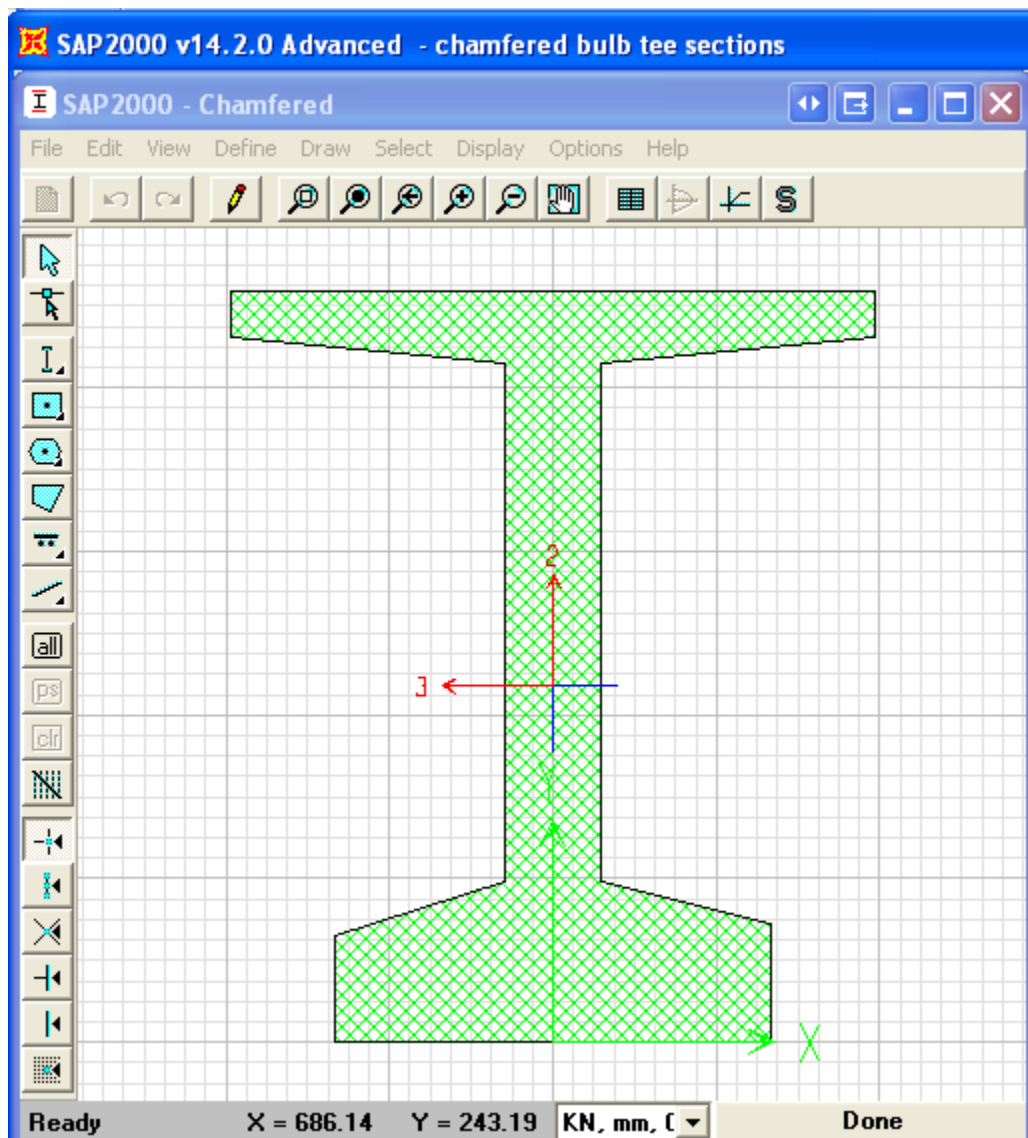


Figure 2 - Outline without the corner radius

Next, switch to reshape mode by selecting Draw > Reshape Mode. Click on the section, then right-click on each corner [joint](#) to specify a radius where needed, as shown in Figure 3:

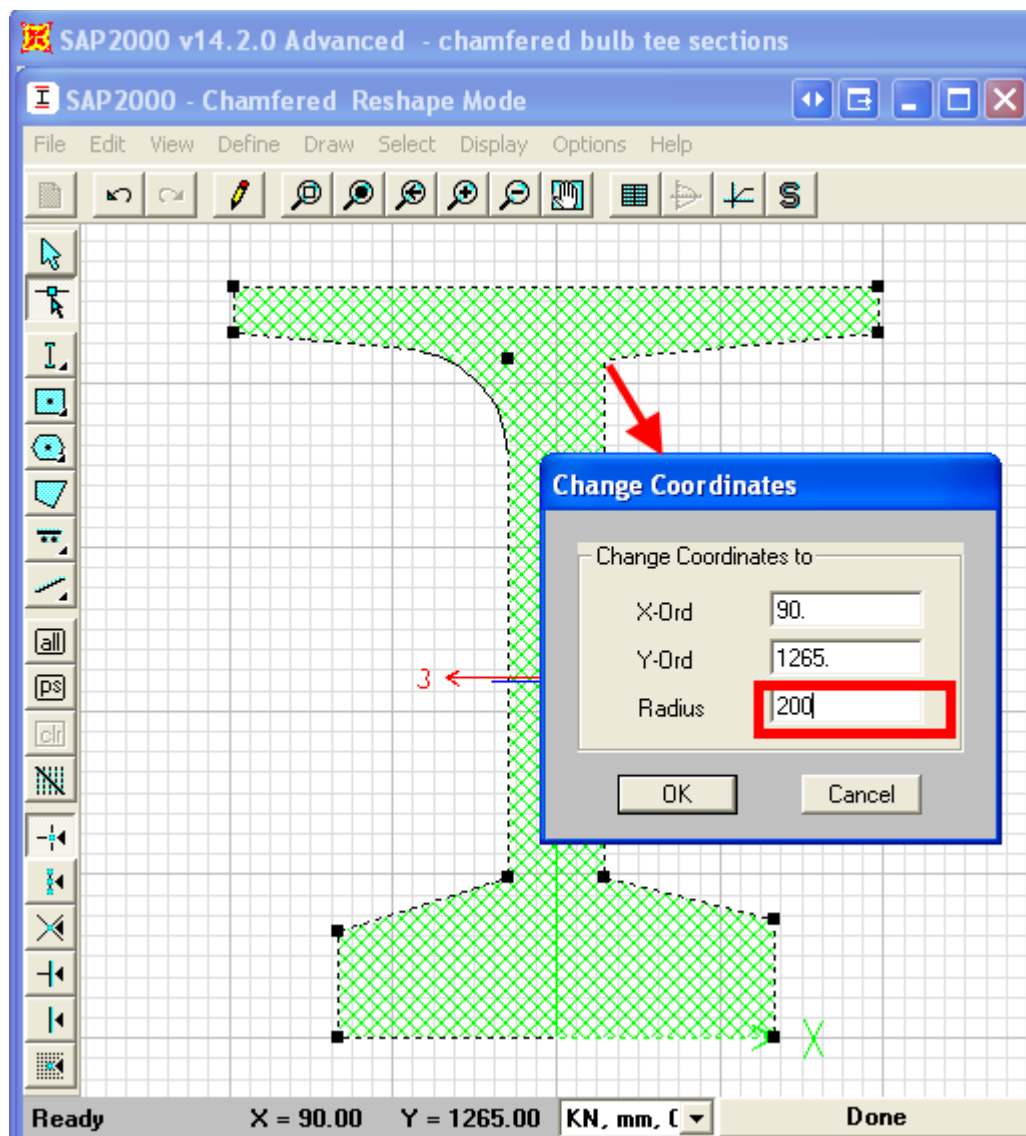


Figure 3 - Creating radial chamfers

Figure 4 presents the final bulb-girder cross section. All corners other than those at the extreme fibers are properly modeled with round corners.

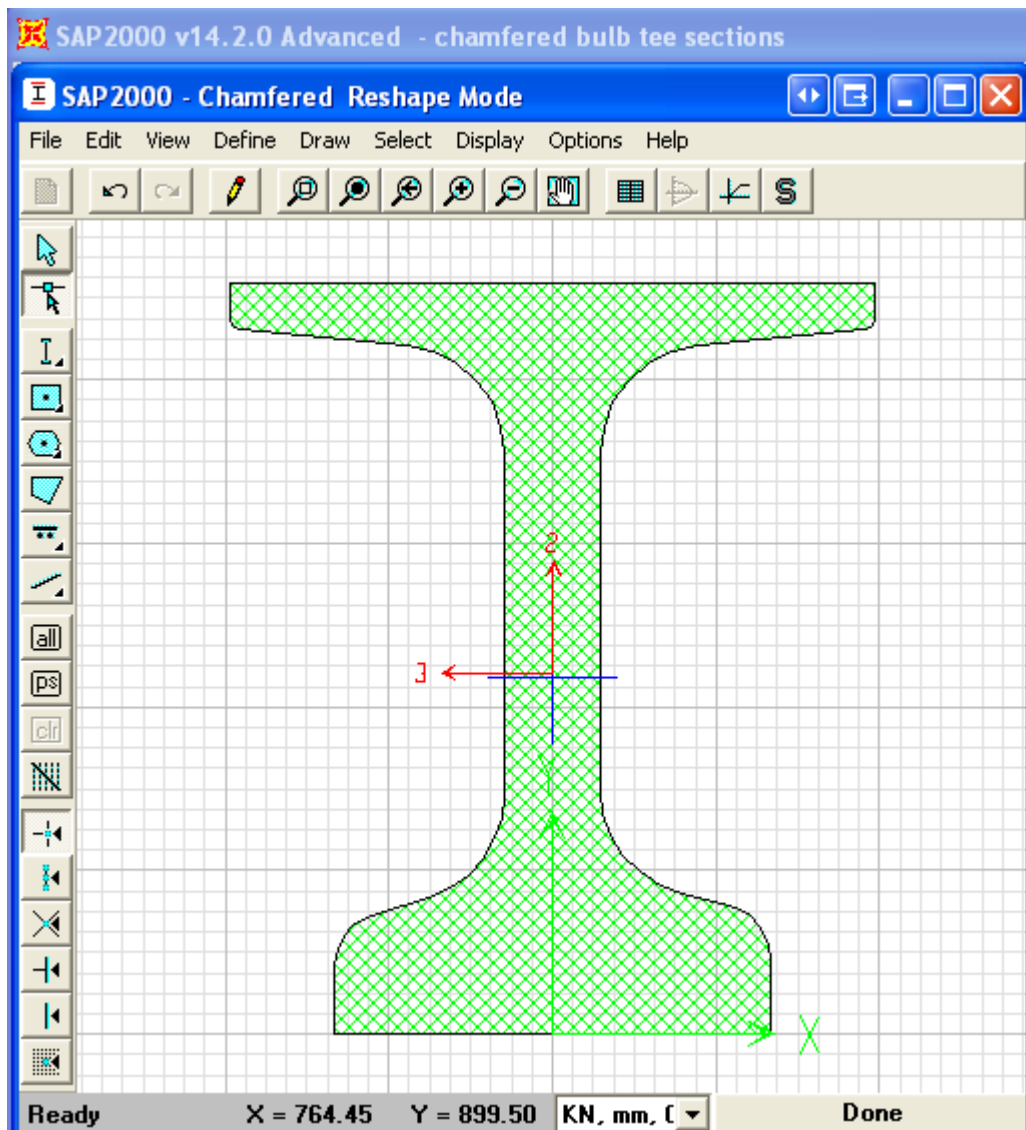


Figure 4 - Final cross-section

Attachments

- [SAP2000 V14.2.0 model](#) (zipped .SDB file)