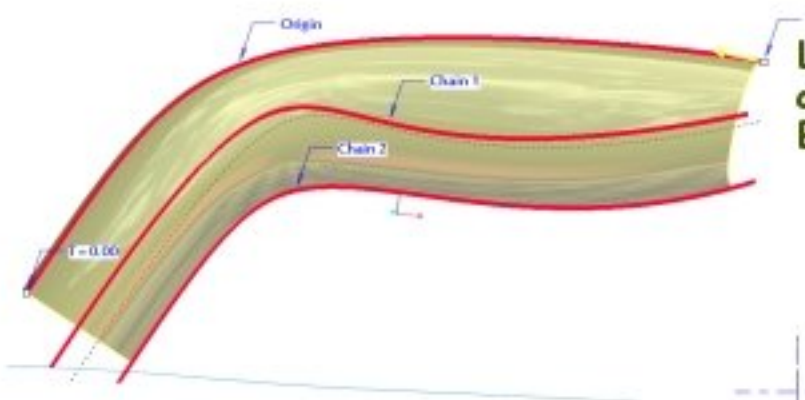


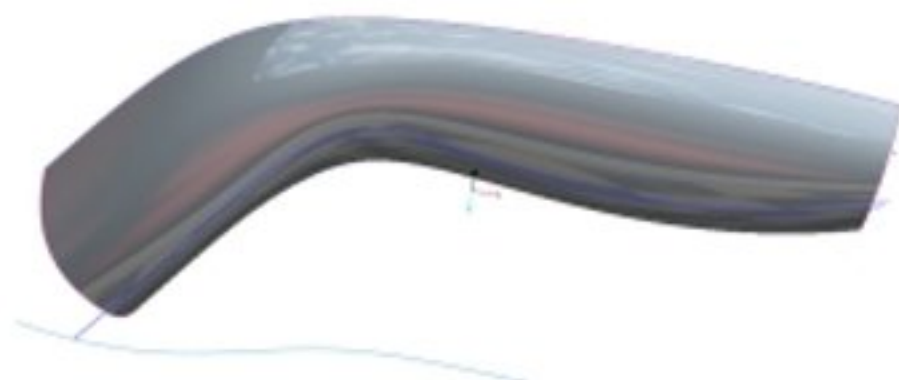
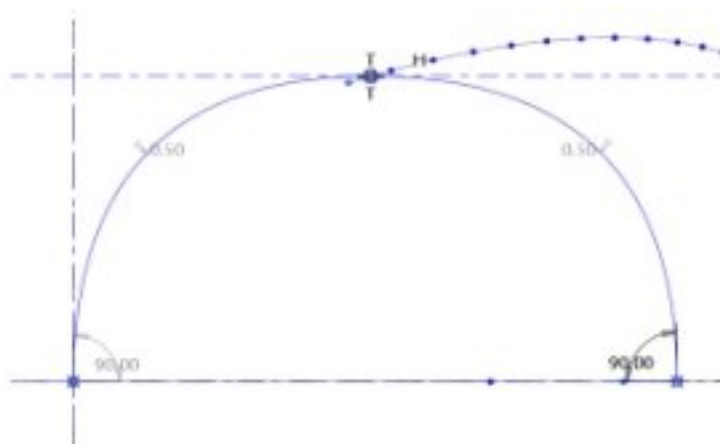
This chapter is focused extremely on Variable Section Sweep tool.

This time we are going to focus on creating VSS surfaces with an option Tangency. The laser reader is gonna serve here as an example.

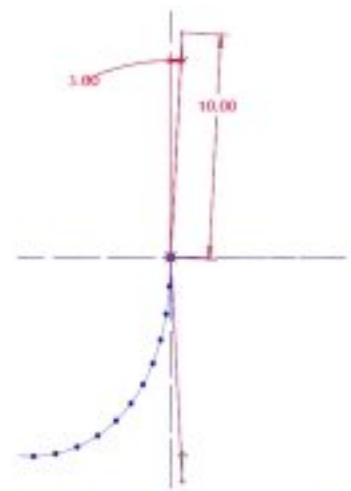
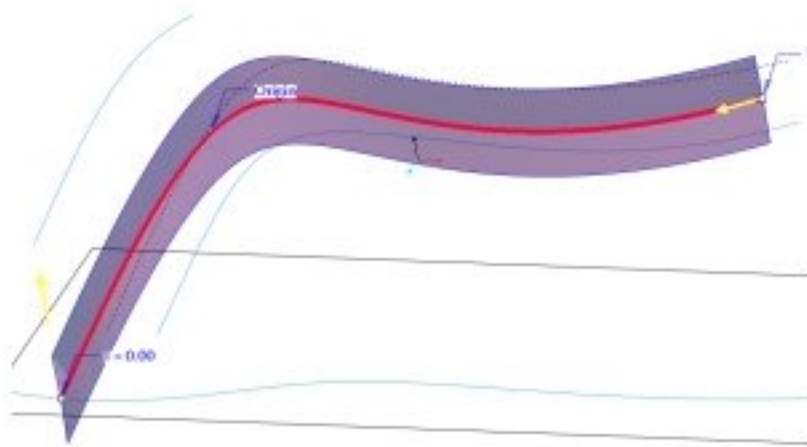


Laser reader introduced above can be simply done by Boundary Blend or VSS in one feature.

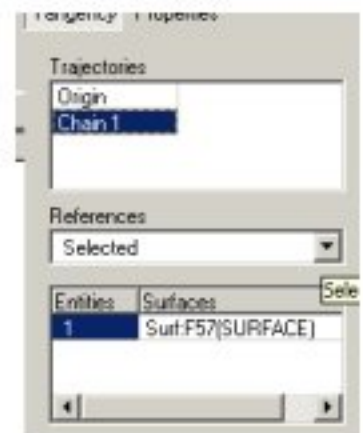
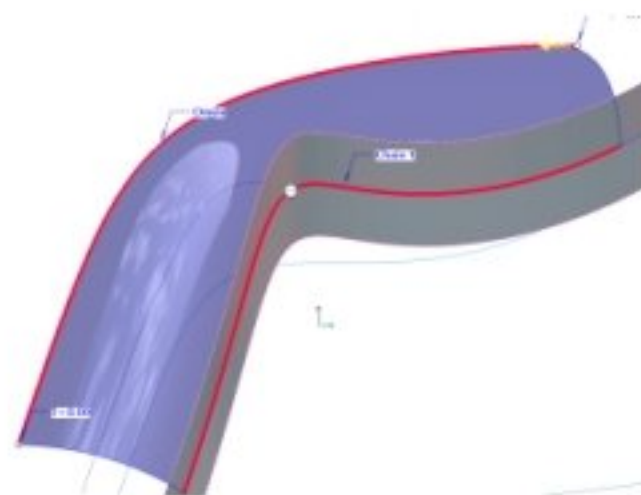
In such case there section will be "extruded" along tree major trajectories. This time the section consists of two conic arc tangent of each other.



However, creating the part in this manner, we are going to "push" ourselves into troubles. In reality the laser reader is assembled with two housings, which in addition has to be created regarding to easily withdrawal from mould, what requires draft not introduced in approach above. This is wrong!

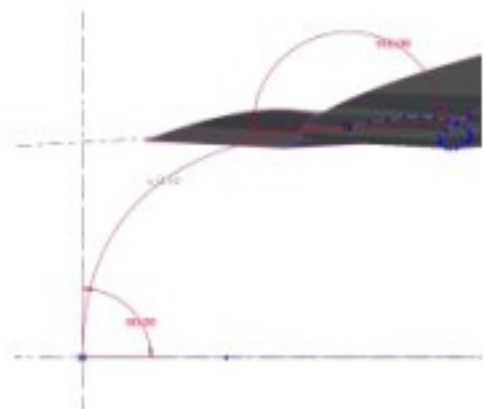
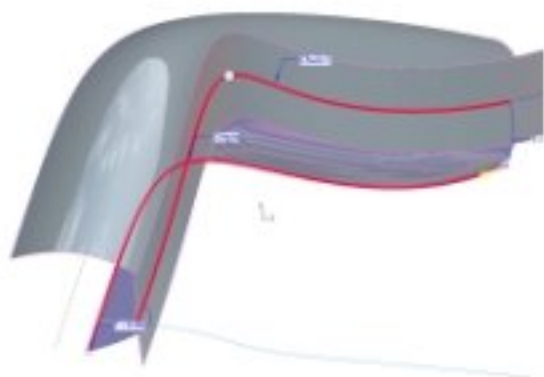


So we need a draft. To maintain proper draft in both housings, make first special VSS surfaces to control draft. Use to this side trajectory done by Intersection. However, such trajectory will bring undesired orientation for section so use option Normal to Projection in addition.



Create surface of top housing using 3 trajectories. The section will be again conic arc, this time tangent to draft surface.

To set tangency got to the lap Tangency, choose side trajectory and select proper draft surface!



Proceed same for bottom housing. Similar results can be obtained with Boundary Blend. However BB does not give any possibility to control section, and finally the surface in regards to relations. This is only true for VSS!