

ANGULATED SCREW CHANNEL (ASC) WORKFLOW

Key Design Features

1 Screw channel can be set to any angle between 0 - 20°.

Recommended Screw Channel Diameter

External Hex		Deep Conical		Internal Hex (PROVATA)		Tri-Nex	
ASC-EX30	Ø2.8	ASC-DC3	Ø2.2	ASC-3M	Ø2.5	ASC-EL-35	Ø2.6
ASC-EX34	Ø3	ASC-DC4	Ø2.4	ASC-M	Ø2.4	ASC-EL-43	Ø2.7
ASC-EX40	Ø3	ASC-DC5	Ø2.9	Compact Conical			
Single Platform (SP1)		IT		ASC-TMC1	Ø2.6		
ASC-SP	Ø2.3	ASC-ITS	Ø2.5	ASC-TMCW1	Ø2.6		

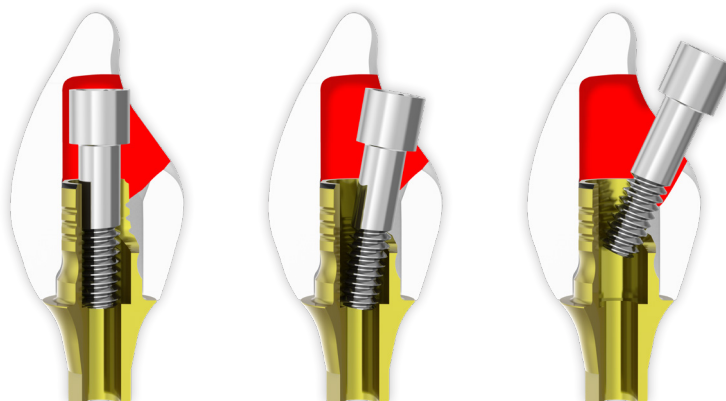
2 Screw channel bend point set ± 1 mm above fully seated screw head.

This ensures the prosthetic screw can be fully loosened without lifting the abutment.

3 Abutments are designed to have the prosthetic screw placed in the abutment **before** cementing on the restoration.

To make the screw retrievable the restoration may require modifications as shown below such that the screw can stand within the chimney and tilt into the screw channel.

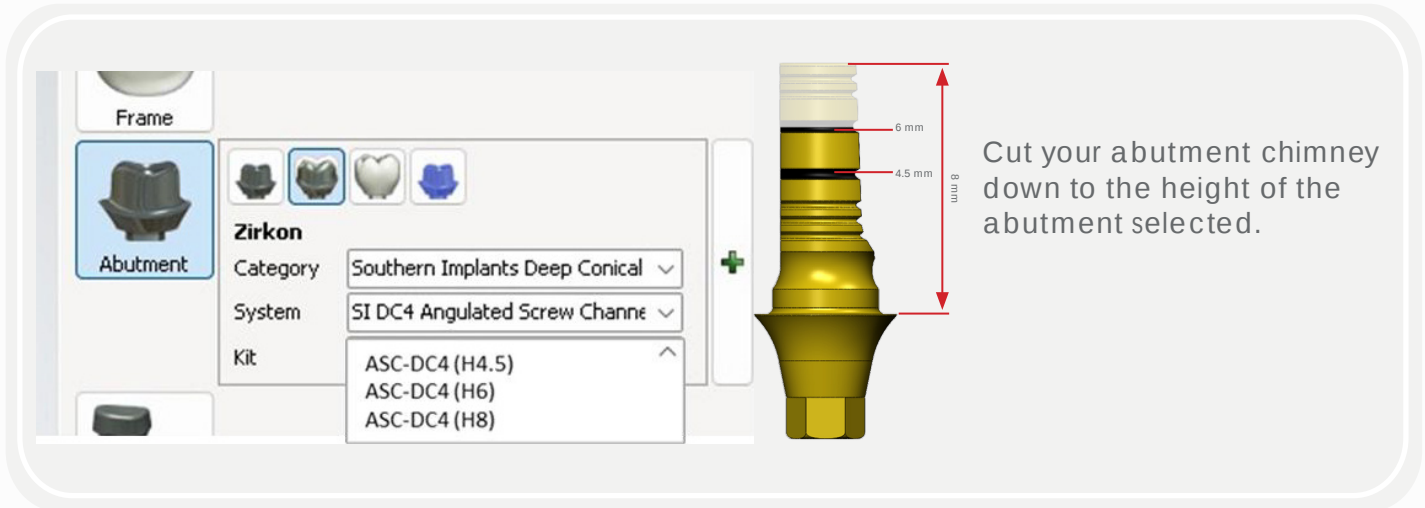
Remove material in the red shaded region to make screw retrievable.



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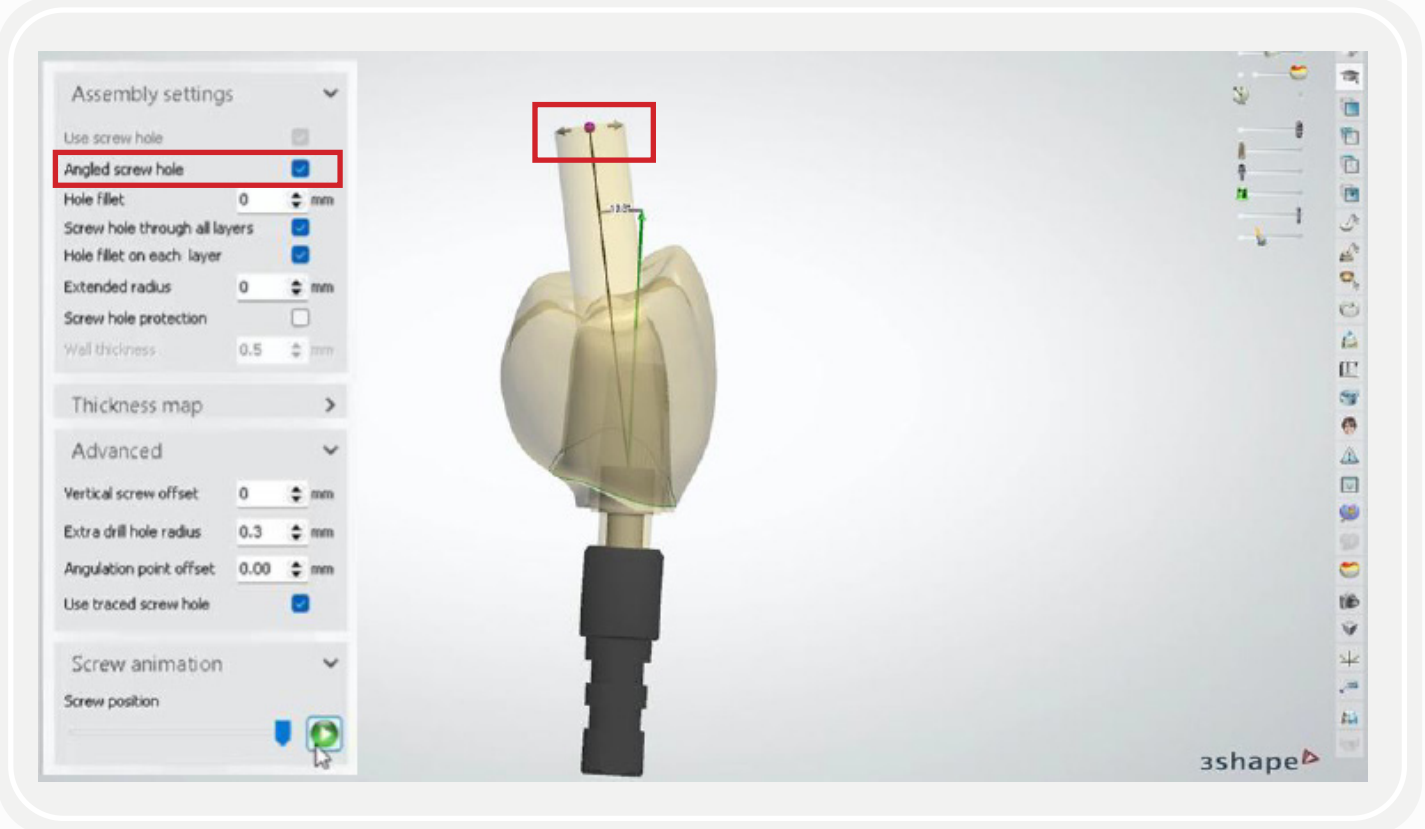
3Shape Workflow

- 1 Select the abutment corresponding to the implant connection being restored and choose one of the three chimney heights.



- 2 Import scans and design restoration as with any other abutment. When reaching the Abutment Assembly section ensure "Angle Screw Hole" is ticked.

Using the purple mark drag the screw channel to the desired angle.



- 3 Within the "Advanced" settings, modifications can be made to the diameter of the screw hole as well as the way in which it bends.

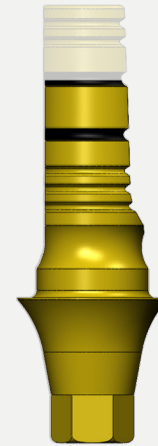
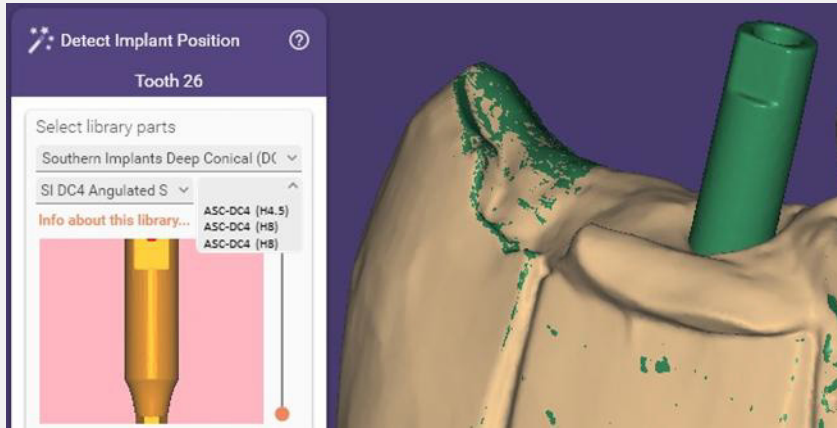
The "Screw animation" feature can be used to ensure sufficient space is made in the restoration to have a retrievable screw.

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Exocad Workflow

1

Select the abutment corresponding to the implant connection being restored and choose one of the three chimney heights.

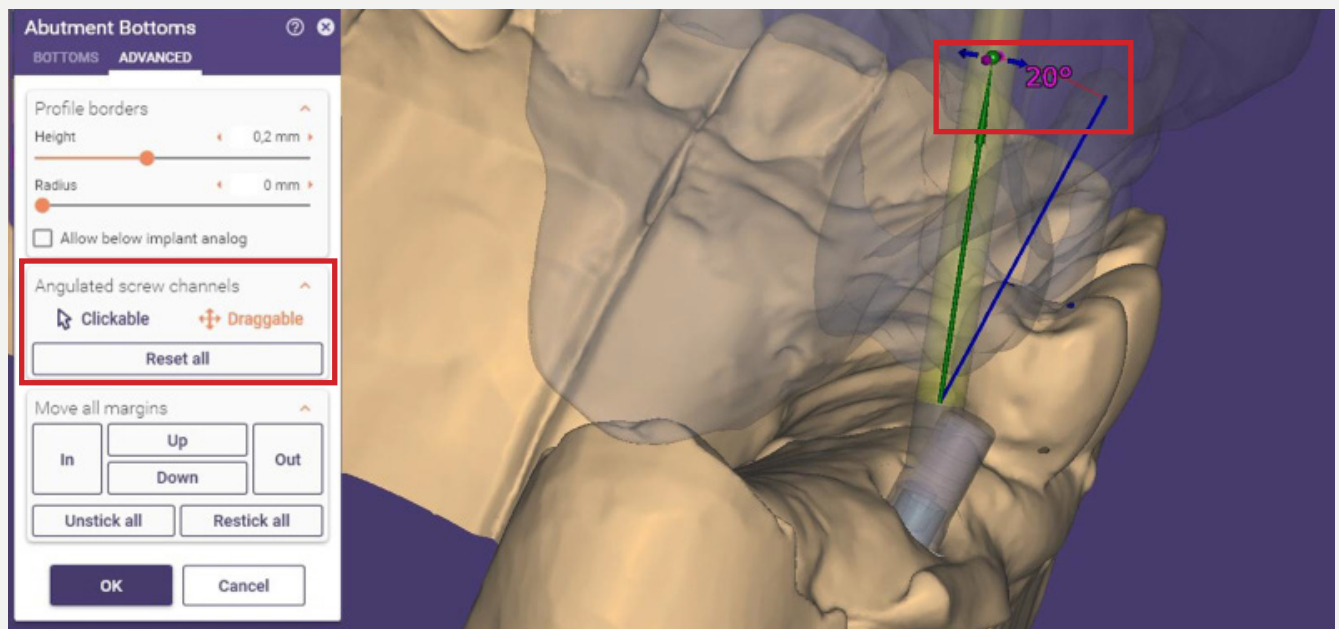


Cut your abutment chimney down to the height of the abutment selected.

2

Align the scans and design restoration as with any other abutment. When the restoration is designed use the "Expert" mode to open the "Abutment Bottoms" menu.

Under "Angulated screw channels" select either Clickable or draggable and position the channel in your desired location.



3

Once the abutment restoration is manufactured and ready to be cemented to the abutment, we recommend that the screw is placed in the abutment **before** cementing.

Should you desire a fully retrievable screw additional material may need to be removed as shown in step 6 on the analogue workflow page. The amount of material removal increases with the greater screw channel angulation and shorter chimney selection.