

Parameter recommendation 3Shape



LASERMELTING



MILLING



3D-PRINTING



SERVICE

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Parameter recommendation 3Shape Cobalt-chrome (CoCr) / Titanium

Overlay

Coping ?

Advanced settings ?

Wall thickness	0.40 <input type="button" value="▲"/> mm
Wall height	1.00 <input type="button" value="▲"/> mm
Margin line offset	0.10 <input type="button" value="▲"/> mm
Offset angle #1°	60.0 <input type="button" value="▲"/> °
Extension offset	0.10 <input type="button" value="▲"/> mm
Lingual band	
Apply	<input type="checkbox"/>
Start angle	120 <input type="button" value="▲"/> °
End angle	240 <input type="button" value="▲"/> °
Offset	1.00 <input type="button" value="▲"/> mm

Fitting parameters

Settings ?

Name: CADdent Lasered ▼

Remove undercuts
 Drill compensation

Difference map >

Advanced settings ▼

Cement gap	0.025 <input type="button" value="▲"/> mm
Extra cement gap	0.070 <input type="button" value="▲"/> mm
Dist. to margin line	1.50 <input type="button" value="▲"/> mm
Smooth dist.	0.20 <input type="button" value="▲"/> mm
Drill radius	0.200 <input type="button" value="▲"/> mm
Drill Comp. Offset	1.50 <input type="button" value="▲"/> mm
<input type="checkbox"/> New drill compensation	
<input type="checkbox"/> Smooth surface noise	

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape Cobalt-chrome (CoCr) / Titanium secondary telescopic crown

Overlay

Coping ?

Advanced settings ?

Wall thickness	0.40 <input type="button" value="▲"/> mm
Wall height	1.00 <input type="button" value="▲"/> mm
Margin line offset	0.10 <input type="button" value="▲"/> mm
Offset angle #1°	60.0 <input type="button" value="▲"/> °
Extension offset	0.10 <input type="button" value="▲"/> mm
Lingual band	
Apply	<input type="checkbox"/>
Start angle	120 <input type="button" value="▲"/> °
End angle	240 <input type="button" value="▲"/> °
Offset	1.00 <input type="button" value="▲"/> mm

Fitting parameters

Settings ?

Name CADdent Lasered ▼

Remove undercuts
 Drill compensation

Difference map >

Advanced settings ▼

Cement gap	0.01 <input type="button" value="▲"/> mm
Extra cement gap	0.01 <input type="button" value="▲"/> mm
Dist. to margin line	1.50 <input type="button" value="▲"/> mm
Smooth dist.	0.20 <input type="button" value="▲"/> mm
Drill radius	0.100 <input type="button" value="▲"/> mm
Drill Comp. Offset	1.50 <input type="button" value="▲"/> mm
<input type="checkbox"/> New drill compensation	
<input type="checkbox"/> Smooth surface noise	

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape Partial framework (RPD)

Cobalt-chrome (CoCr) / Titanium LaserMelting

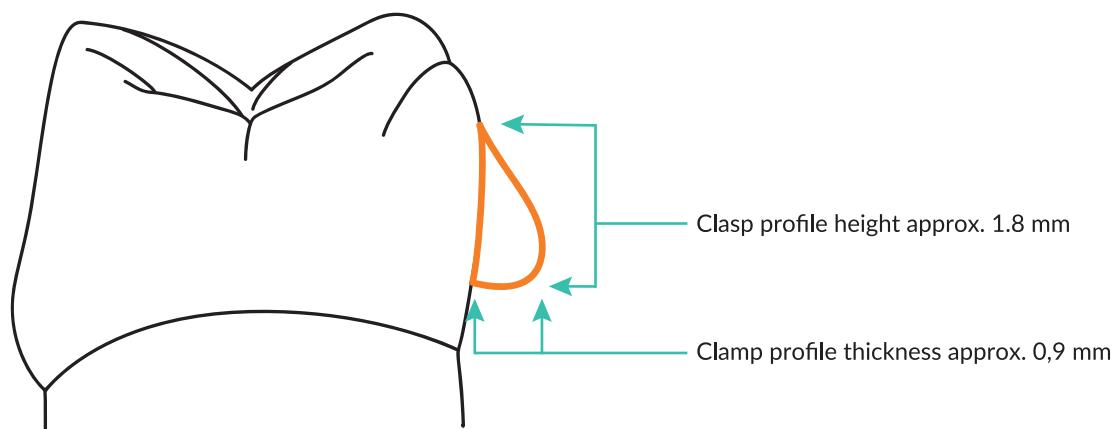
	Section area	Width	Thickness
Lingual bar	6,0 mm ²	4,0 mm	2,0 mm
Clasp connector	3,5 mm ²	3,0 mm	1,5 mm
Clasp shoulder	1,6 mm ²	1,8 mm	1,2 mm
Clasp tip	1,2 mm ²	1,2 mm	1,0 mm
Double rests	2,5 mm ²	-	1,4 mm
Single rests	-	-	0,6 mm
Anterior-posterior palatal strap	-	8,0 mm	1,0 - 1,2 mm
Full palatal plate	-	10,0 mm	0,8 mm

PEEK

Indications CoCr / Ti
+ 50 % enlargement

Indikationen

- The specification is a rough guide
- Removable partial denture must be designed from a dental and anatomical point of view
- general minimum thickness 0,6 mm
- Attachment of fitting bars / connectors is to be avoided



The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape

General information HYBRID manufacturing

Component height

Ensure that the total height of the component in the straight insertion direction remains below 15 mm.

Divergent insertions

Divergences between insertions must be taken particularly into account. The machine range allows a swivelling of approx. 30 degrees. If the divergence is too great, residual material or milling shadows may remain.

Overlapping edges

Avoid overlapping edges. The fit may have to be reworked in these areas, as residual material or milling shadows may remain.

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape

Cobalt-chrome (CoCr) / Titanium

HYBRID manufacturing secondary telescopic

Overlay

Coping

Advanced settings

Wall thickness	0.45 mm
Wall height	1.00 mm
Margin line offset	0.15 mm
Offset angle #1°	60.0 °
Extension offset	0.10 mm
Lingual band	
Apply	<input type="checkbox"/>
Start angle	120 °
End angle	240 °
Offset	1.00 mm

Fitting parameters

Settings

Name CADdent Milled

Remove undercuts
 Drill compensation

Difference map

Advanced settings

Cement gap	0.007 mm
Extra cement gap	0.007 mm
Dist. to margin line	1.50 mm
Smooth dist.	0.20 mm
Drill radius	0.600 mm
Drill Comp. Offset	1.50 mm
<input type="checkbox"/> New drill compensation	
<input type="checkbox"/> Smooth surface noise	

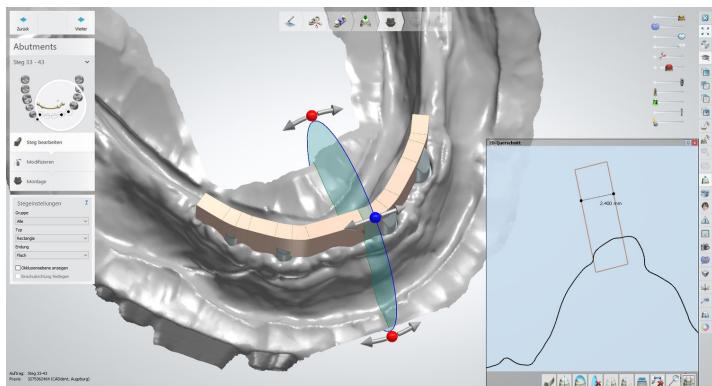
Do not change these values

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



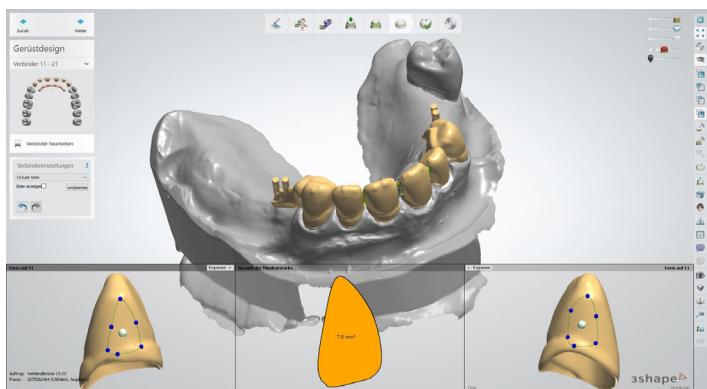
Parameter recommendation 3Shape

Cobalt-chrome (CoCr) / Titanium HYBRID manufacturing



Areas to be milled

Ensure that all areas to be milled have a diameter of more than 2.4 mm, especially for abutments and sovrastructure areas.



Connector thickness

For multi-unit work, the connector thicknesses should be at least 7 mm^2 .

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape Cobalt-chrome (CoCr) / Titanium

Overlay

Coping ?

Advanced settings ?

Wall thickness	0.40 mm
Wall height	1.00 mm
Margin line offset	0.10 mm
Offset angle #1°	60.0 °
Extension offset	0.10 mm
Lingual band	
Apply	<input type="checkbox"/>
Start angle	120 °
End angle	240 °
Offset	1.00 mm

Fitting parameters

Settings ?

Name: CADdent Milled ▼

Remove undercuts
 Drill compensation

Difference map >

Advanced settings ▼

Cement gap	0.025 mm
Extra cement gap	0.080 mm
Dist. to margin line	1.50 mm
Smooth dist.	0.20 mm
Drill radius	0.600 mm
Drill Comp. Offset	1.50 mm

New drill compensation
 Smooth surface noise

Do not change these values

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape Cobalt-chrome (CoCr) / Titanium secondary telescopic crown

Overlay

Coping ?

Advanced settings ?

Wall thickness	0.40 mm
Wall height	1.00 mm
Margin line offset	0.10 mm
Offset angle #1°	60.0 °
Extension offset	0.10 mm
Lingual band	
Apply	<input type="checkbox"/>
Start angle	120 °
End angle	240 °
Offset	1.00 mm

Fitting parameters

Settings ?

Name: CADdent Milled

Remove undercuts
 Drill compensation

Difference map >

Advanced settings ?

Cement gap	0.008 mm
Extra cement gap	0.008 mm
Dist. to margin line	1.50 mm
Smooth dist.	0.20 mm
Drill radius	0.600 mm
Drill Comp. Offset	1.50 mm
<input type="checkbox"/> New drill compensation	
<input type="checkbox"/> Smooth surface noise	

Do not change these values

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape Zirconia

Overlay

Coping

Advanced settings

Wall thickness	0.50	mm
Wall height	1.00	mm
Margin line offset	0.25	mm
Offset angle #1°	60.0	
Extension offset	0.10	mm
Lingual band		
Apply	<input type="checkbox"/>	
Start angle	120	°
End angle	240	°
Offset	1.00	mm

Fitting parameters

Settings

Name CADdent Milled

Remove undercuts
 Drill compensation

Difference map

Advanced settings

Cement gap	0.020	mm
Extra cement gap	0.050	mm
Dist. to margin line	2.00	mm
Smooth dist.	0.20	mm
Drill radius	0.600	mm
Drill Comp. Offset	1.50	mm
<input type="checkbox"/> New drill compensation		
<input type="checkbox"/> Smooth surface noise		

Do not change these values

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape

Lithium disilicate / Feldspar ceramic / Composite

Overlay

Coping ?

▼

Advanced settings ? ▼

Wall thickness	0.60 mm
Wall height	1.00 mm
Margin line offset	0.40 mm
Offset angle #1°	60.0 °
Extension offset	0.20 mm
Lingual band	
Apply	<input type="checkbox"/>
Start angle	120 °
End angle	240 °
Offset	1.00 mm

Fitting parameters

Settings ? ▼

Name CADdent Milled ▼

Remove undercuts
 Drill compensation

Difference map >

Advanced settings ▼

Cement gap	0.020 mm
Extra cement gap	0.050 mm
Dist. to margin line	2.20 mm
Smooth dist.	0.20 mm
Drill radius	0.600 mm
Drill Comp. Offset	1.50 mm
<input type="checkbox"/> New drill compensation	
<input type="checkbox"/> Smooth surface noise	

Do not change these values

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape Plastics / PEEK / Wax

Overlay

Coping ?

▼

Advanced settings ? ▼

Wall thickness	0.50 mm
Wall height	1.00 mm
Margin line offset	0.15 mm
Offset angle #1°	60.0 °
Extension offset	0.10 mm
Lingual band	
Apply	<input type="checkbox"/>
Start angle	120 °
End angle	240 °
Offset	1.00 mm

Fitting parameters

Settings ? ▼

Name CADdent Milled ▼

Remove undercuts
 Drill compensation

Difference map >

Advanced settings ▼

Cement gap	0.030 mm
Extra cement gap	0.070 mm
Dist. to margin line	1.00 mm
Smooth dist.	0.20 mm
Drill radius	0.600 mm
Drill Comp. Offset	1.50 mm
<input type="checkbox"/> New drill compensation	
<input type="checkbox"/> Smooth surface noise	

Do not change these values

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape PEEK secondary telescopic crown

Overlay

Coping

Advanced settings

Wall thickness	0.50	mm
Wall height	1.00	mm
Margin line offset	0.15	mm
Offset angle #1°	60.0	
Extension offset	0.10	mm
Lingual band		
Apply	<input type="checkbox"/>	
Start angle	120	°
End angle	240	°
Offset	1.00	mm

Fitting parameters

Settings

Name CADdent Milled

Remove undercuts
 Drill compensation

Difference map

Advanced settings

Cement gap	0.008	mm
Extra cement gap	0.008	mm
Dist. to margin line	1.50	mm
Smooth dist.	0.20	mm
Drill radius	0.600	mm
Drill Comp. Offset	1.50	mm
<input type="checkbox"/> New drill compensation		
<input type="checkbox"/> Smooth surface noise		

Do not change these values

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape Gold cast

Overlay

Coping

Advanced settings

Wall thickness	0.50	mm
Wall height	1.00	mm
Margin line offset	0.15	mm
Offset angle #1°	60.0	
Extension offset	0.10	mm
Lingual band		
Apply	<input type="checkbox"/>	
Start angle	120	°
End angle	240	°
Offset	1.00	mm

Fitting parameters

Settings

Name CADdent Milled

Remove undercuts
 Drill compensation

Difference map

Advanced settings

Cement gap	0.030	mm
Extra cement gap	0.070	mm
Dist. to margin line	1.00	mm
Smooth dist.	0.20	mm
Drill radius	0.600	mm
Drill Comp. Offset	1.50	mm
<input type="checkbox"/> New drill compensation		
<input type="checkbox"/> Smooth surface noise		

Do not change these values

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape Printed model

The image shows two dialog boxes side-by-side: 'Virtual Trimming Preferences' on the left and 'Interfaces' on the right.

Virtual Trimming Preferences (Left Dialog):

- Model types:**
 - Pin type: Die shaped pin (selected), Snap off pin
 - Pinless hole type: CADcylindricalBottomHole
 - Side ejection hole type: None
 - Pushing indent type: Pin indentation
- Dies:**
 - Die shape: Standard (selected)
 - Vertical insert direction
 - Ditch and trim model
 - Ditch height: 0.80 mm
 - Ditch depth: 0.15 mm
 - Ditch margin thickness: 0.00 mm
 - Base wall angle: 2 deg
 - Base height: 5.0 mm
 - Base stop surface width: 0.65 mm
 - Base stop surface angle: 0 deg
 - Pin height: 2.0 mm
 - Abutment als Modellteil drucken
- Interfaces:**

Interfaces (Right Dialog):

- Die interface:**
 - Die to model spacing: 0.100 mm
 - Post to model spacing: 0.100 mm
 - Friction Bar Overlap: 0.010 mm
 - Friction Bar Width: 0.700 mm
 - Adjustment for die angle: 0.100 mm
 - Adjustment for die size: 0.000 mm
 - Number of friction bars: 8
- Analog interface:**
 - Level adjustment: 0.000 mm
 - Analog to model spacing: 0.100 mm
 - Friction Bar Overlap: 0.020 mm
 - Friction Bar Width: 0.800 mm
 - Number of friction bars: 8
- Model manufacture:**
 - Hollowing
 - Hollow model:
 - Surface thickness: 1.50 mm
 - Use variable thickness:
 - Bottom drain hole size: 0.00 mm
 - Side drain holes
 - Type: None (selected)
 - Center height: 3.0 mm
 - Distance: 10.0 mm
 - Hollow dies
- Drill Compensation:**
 - Use drill compensation:
 - Drill radius: 0.50 mm
 - Minimum model base height: 4.00 mm
 - General Clearance: 0.10 mm
 - Model Manufacturing Process: 0.10 mm

At the bottom of the right dialog are buttons for 'CADdent' dropdown, 'Load', 'OK' (highlighted in blue), and 'Cancel'.

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape Parameter help

Effects of changing the most important parameters

The screenshot shows the 'Settings' dialog box with the following parameters and their descriptions:

- Name:** A dropdown menu.
- Remove undercuts:** A checked checkbox.
- Drill compensation:** A checked checkbox.
- Difference map:** A button with a right arrow.
- Advanced settings:** A button with a down arrow.
- Cement gap:** A value of 0.025 mm.
- Extra cement gap:** A value of 0.070 mm.
- Dist. to margin line:** A value of 1.50 mm.
- Smooth dist.:** A value of 0.20 mm.
- Drill radius:** A value of 0.600 mm.
- Drill Comp. Offset:** A value of 1.50 mm.
- New drill compensation:** An unchecked checkbox.
- Smooth surface noise:** An unchecked checkbox.

Annotations with arrows point to specific parameters:

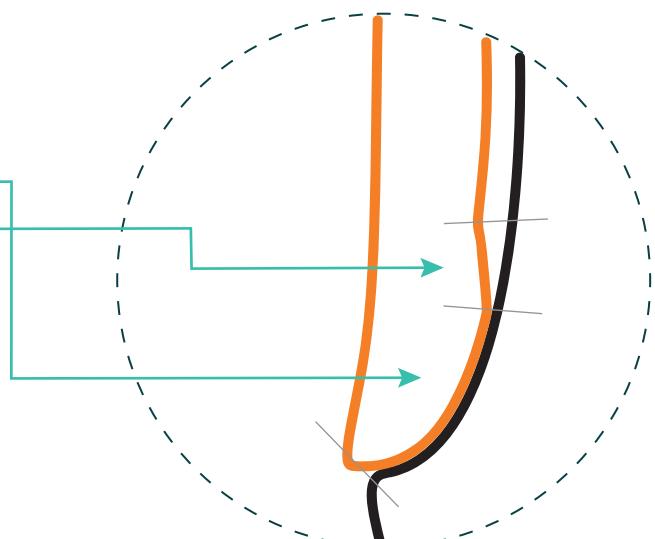
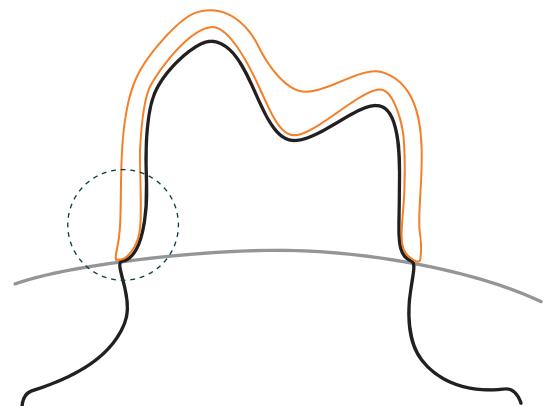
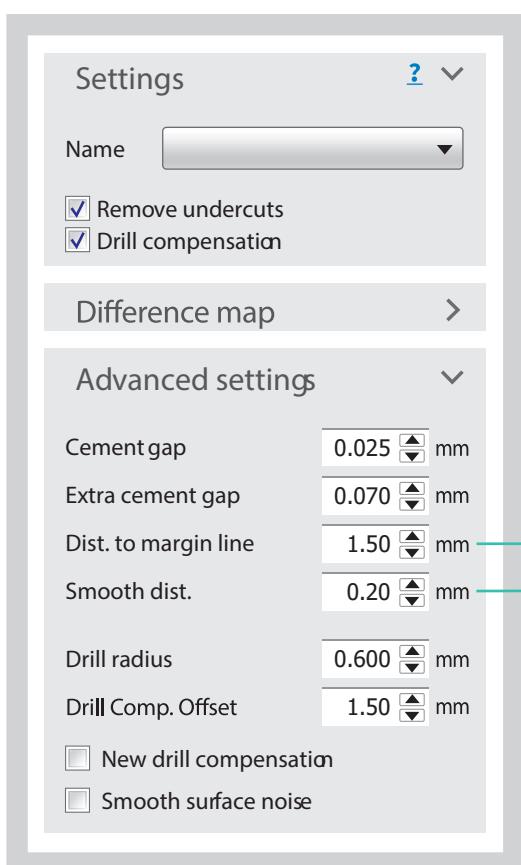
- An arrow points to the 'Cement gap' field with the text: "An important value for the hold of the crown. The greater the width, the lower the friction."
- An arrow points to the 'Extra cement gap' field with the text: "Known from analog technology (die varnish / spacer) as a placeholder for the fastening cement. Changing the value increases or decreases the gap."
- An arrow points to the 'Dist. to margin line' field with the text: "The height from the area of the preparation margin to the transition width. This should ideally extend 1 mm beyond the chamfer."
- An arrow points to the 'Smooth dist.' field with the text: "Width of the transition from the fit parameter to the cement gap."
- An arrow points to the 'Drill radius' field with the text: "This value must be set to the drill radius for the clean milling of inside corners. This value may only be reduced with LaserMelting."
- An arrow points to the 'Drill Comp. Offset' field with the text: "Do not change this value, otherwise large inaccuracies in the fitting will occur."

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



Parameter recommendation 3Shape Parameter help

Effects of changing the most important parameters

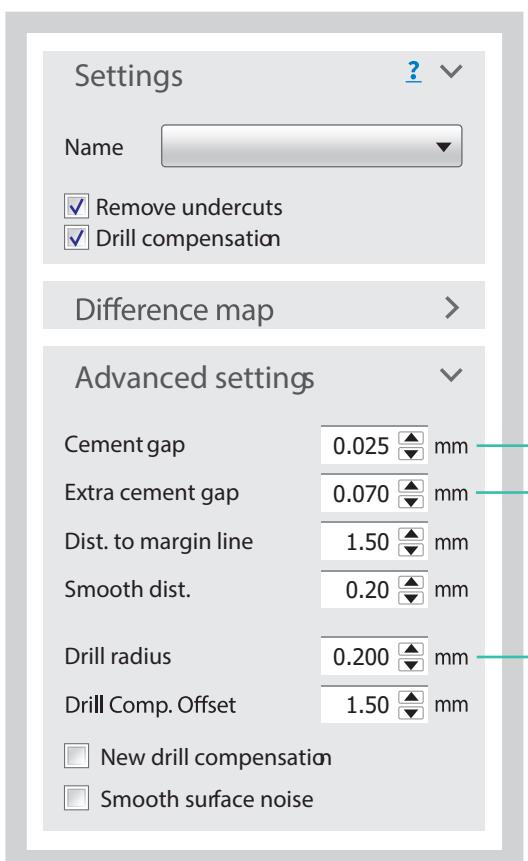


The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.

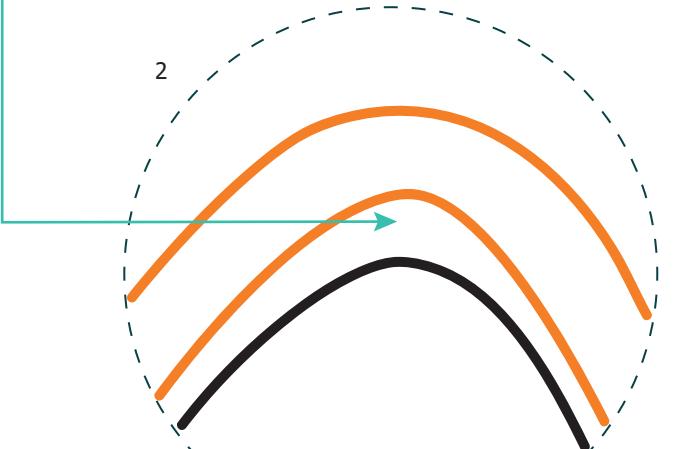
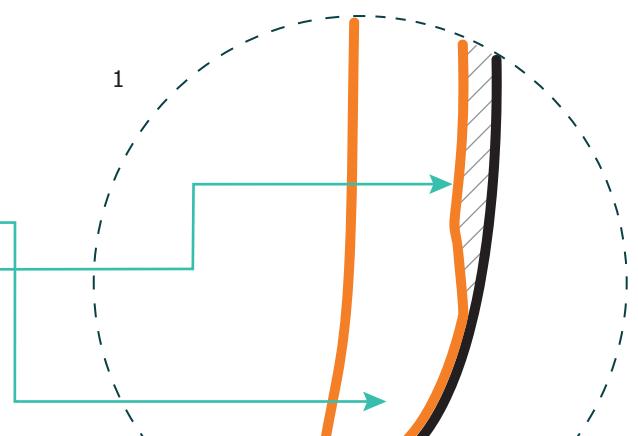
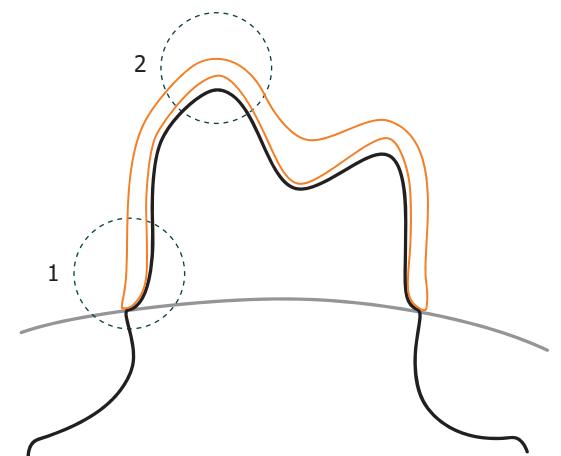


Parameter recommendation 3Shape Parameter-Hilfe

The most important settings



The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.





Parameter recommendation 3Shape Parameter help

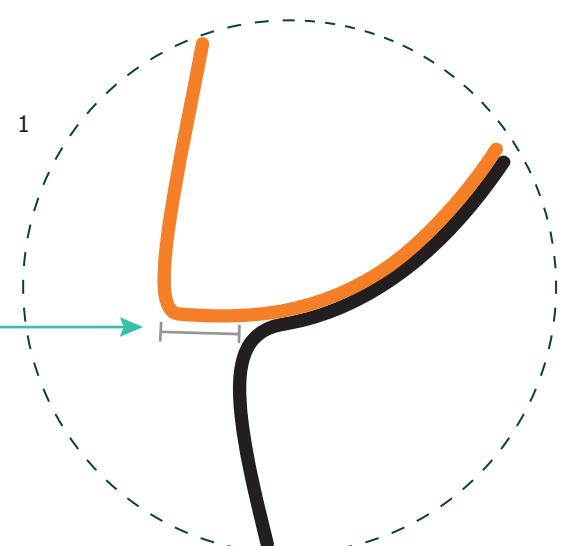
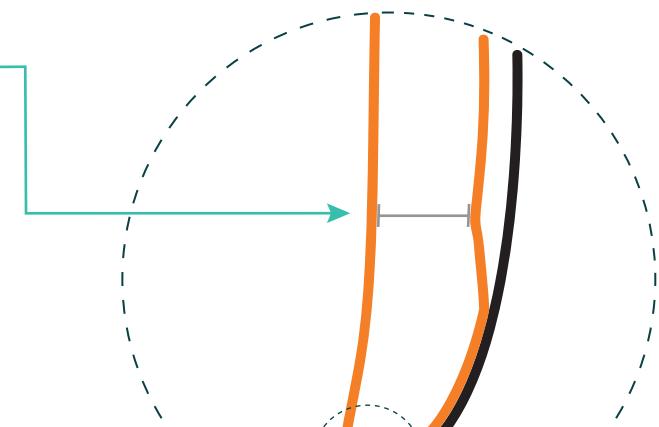
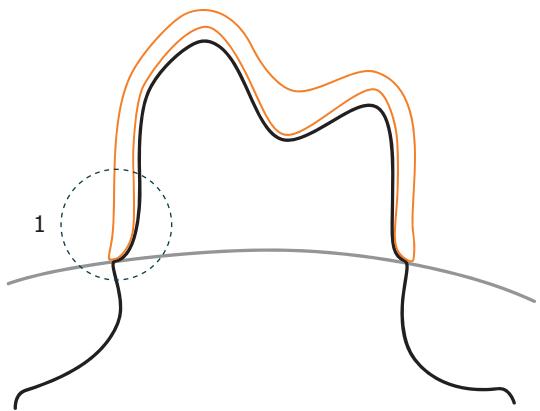
Effects of changing the most important parameters

Coping ?

Advanced settings ?

Wall thickness	0.60 <input type="button" value="▲"/> mm
Wall height	1.00 <input type="button" value="▲"/> mm
Margin line offset	0.40 <input type="button" value="▲"/> mm
Offset angle #1°	60.0 <input type="button" value="▲"/> °
Extension offset	0.20 <input type="button" value="▲"/> mm
Lingual band	
Apply	<input type="checkbox"/>
Start angle	120 <input type="button" value="▲"/> °
End angle	240 <input type="button" value="▲"/> °
Offset	1.00 <input type="button" value="▲"/> mm

The parameters serve as a guide value, which must be varied individually depending on the geometry of the stumps, the scanner and it's application.



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von Techniker zu Techniker