

Parameter recommendation 3Shape



LASERMELTING



MILLING



3D-PRINTING



SERVICE

Table of contents

	LaserMelting	3 - 6
	Cobalt-chrome (CoCr) / Titanium	3
	Cobalt-chrome (CoCr) / Titanium secondary telescopic crown	4
	Gold	5
	Partial framework (RPD)	6
	Milling	7 - 14
	Cobalt-chrome (CoCr) / Titanium	7
	Cobalt-chrome (CoCr) / Titanium secondary telescopic crown	8
	Zirconia	9
	Glass / hybrid ceramics	10
	Plastics / PEEK / Wax	11
	PEEK secondary telescopic crown	12
	3D-Printing	13
	Printed model	13
	Service	14 - 17
	Parameter help	14 - 17



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

Overlay

Coping ?

Advanced settings ? ∨

Wall thickness mm

Wall height mm

Margin line offset mm

Offset angle #1 °

Extension offset mm

Lingual band

Apply

Start angle °

End angle °

Offset mm

Fitting parameters

Settings ? ∨

Name

Remove undercuts

Drill compensation

Difference map >

Advanced settings ∨

Cement gap mm

Extra cement gap mm

Dist. to margin line mm

Smooth dist. mm

Drill radius mm

Drill Comp. Offset mm

New drill compensation

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 its application.



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

Overlay

Coping ?

Advanced settings ? ∨

Wall thickness mm

Wall height mm

Margin line offset mm

Offset angle #1 °

Extension offset mm

Lingual band

Apply

Start angle °

End angle °

Offset mm

Fitting parameters

Settings ? ∨

Name

Remove undercuts

Drill compensation

Difference map >

Advanced settings ∨

Cement gap mm

Extra cement gap mm

Dist. to margin line mm

Smooth dist. mm

Drill radius mm

Drill Comp. Offset mm

New drill compensation

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 its application.



Parameter recommendation 3Shape Gold

Overlay

Coping ?

Advanced settings ? ∨

Wall thickness mm

Wall height mm

Margin line offset mm

Offset angle #1 °

Extension offset mm

Lingual band

Apply

Start angle °

End angle °

Offset mm

Do not change this value

Fitting parameters

Settings ? ∨

Name

Remove undercuts

Drill compensation

Difference map >

Advanced settings ∨

Cement gap mm

Extra cement gap mm

Dist. to margin line mm

Smooth dist. mm

Drill radius mm

Drill Comp. Offset mm

New drill compensation

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 its 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

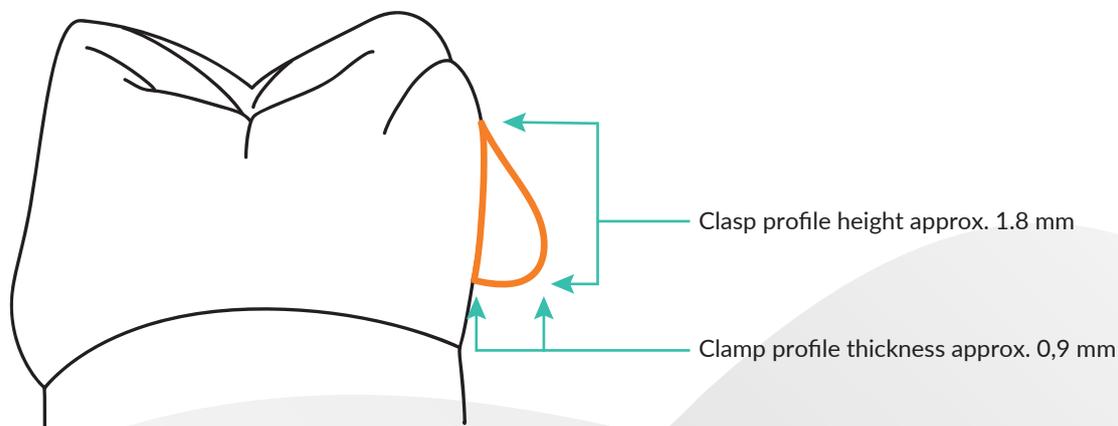
PEEK

Indications CoCr / Ti
+ 50 % enlargement

Indications

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



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

Overlay

Coping ?

Advanced settings ? ∨

Wall thickness mm

Wall height mm

Margin line offset mm

Offset angle #1 °

Extension offset mm

Lingual band

Apply

Start angle °

End angle °

Offset mm

Fitting parameters

Settings ? ∨

Name

Remove undercuts

Drill compensation

Difference map >

Advanced settings ∨

Cement gap mm

Extra cement gap mm

Dist. to margin line mm

Smooth dist. mm

Drill radius mm

Drill Comp. Offset 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 its application.



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

Overlay

Coping ?

Advanced settings ? ∨

Wall thickness mm

Wall height mm

Margin line offset mm

Offset angle #1 °

Extension offset mm

Lingual band

Apply

Start angle °

End angle °

Offset mm

Fitting parameters

Settings ? ∨

Name

Remove undercuts

Drill compensation

Difference map >

Advanced settings ∨

Cement gap mm

Extra cement gap mm

Dist. to margin line mm

Smooth dist. mm

Drill radius mm

Drill Comp. Offset 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 its application.



Parameter recommendation 3Shape Zirconia

Overlay

Coping ?

Advanced settings ? ∨

Wall thickness mm

Wall height mm

Margin line offset mm

Offset angle #1 °

Extension offset mm

Lingual band

Apply

Start angle °

End angle °

Offset mm

Fitting parameters

Settings ? ∨

Name

Remove undercuts

Drill compensation

Difference map >

Advanced settings ∨

Cement gap mm

Extra cement gap mm

Dist. to margin line mm

Smooth dist. mm

Drill radius mm

Drill Comp. Offset 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 its application.



Parameter recommendation 3Shape Glass / hybrid ceramics

Overlay

Coping ?

Advanced settings ? ∨

Wall thickness mm

Wall height mm

Margin line offset mm

Offset angle #1 °

Extension offset mm

Lingual band

Apply

Start angle °

End angle °

Offset mm

Fitting parameters

Settings ? ∨

Name

Remove undercuts

Drill compensation

Difference map >

Advanced settings ∨

Cement gap mm

Extra cement gap mm

Dist. to margin line mm

Smooth dist. mm

Drill radius mm

Drill Comp. Offset 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 its application.



Parameter recommendation 3Shape Plastics / PEEK / Wax

Overlay

Coping ?

Advanced settings ? ∨

Wall thickness mm

Wall height mm

Margin line offset mm

Offset angle #1 °

Extension offset mm

Lingual band

Apply

Start angle °

End angle °

Offset mm

Fitting parameters

Settings ? ∨

Name

Remove undercuts

Drill compensation

Difference map >

Advanced settings ∨

Cement gap mm

Extra cement gap mm

Dist. to margin line mm

Smooth dist. mm

Drill radius mm

Drill Comp. Offset 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 its application.



Parameter recommendation 3Shape PEEK secondary telescopic crown

Overlay

Coping ?

Advanced settings ? ∨

Wall thickness mm

Wall height mm

Margin line offset mm

Offset angle #1 °

Extension offset mm

Lingual band

Apply

Start angle °

End angle °

Offset mm

Fitting parameters

Settings ? ∨

Name

Remove undercuts

Drill compensation

Difference map >

Advanced settings ∨

Cement gap mm

Extra cement gap mm

Dist. to margin line mm

Smooth dist. mm

Drill radius mm

Drill Comp. Offset 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 its application.



Parameter recommendation 3Shape Printed model

Virtual Trimming Preferences

Model types

Pin type
Die shaped pin

Snap off pin

Pinless hole type
CADCylindricalBottomHole

Side ejection hole type
None

Pushing indent type
Pin indentation

Dies

Die shape Standard

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

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

Adjustment for die size 0.000

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

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

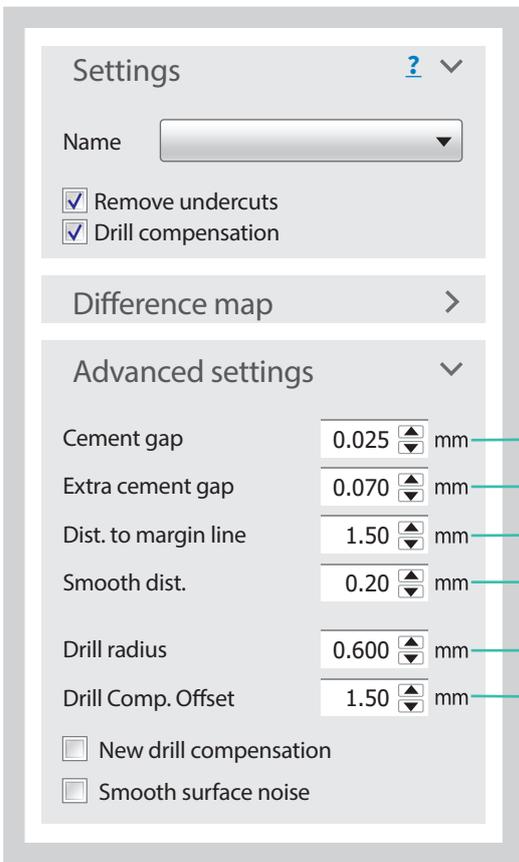
CADdent Load

OK 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' panel in the 3Shape software. The 'Advanced settings' section is expanded, showing several parameters with their current values and units. Arrows point from these parameters to descriptive text on the right.

Parameter	Value	Unit	Description
Cement gap	0.025	mm	An important value for the hold of the crown. The greater the width, the lower the friction.
Extra cement gap	0.070	mm	Known from analog technology (die varnish / spacer) as a placeholder for the fastening cement. Changing the value increases or decreases the gap.
Dist. to margin line	1.50	mm	The height from the area of the preparation margin to the transition width. This should ideally extend 1 mm beyond the chamfer.
Smooth dist.	0.20	mm	Width of the transition from the fit parameter to the cement gap.
Drill radius	0.600	mm	This value must be set to the drill radius for the clean milling of inside corners. This value may only be reduced with LaserMelting.
Drill Comp. Offset	1.50	mm	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 its application.

Parameter recommendation 3Shape Parameter help

Effects of changing the most important parameters

Settings ? ▾

Name

Remove undercuts

Drill compensation

Difference map >

Advanced settings ▾

Cement gap mm

Extra cement gap mm

Dist. to margin line mm

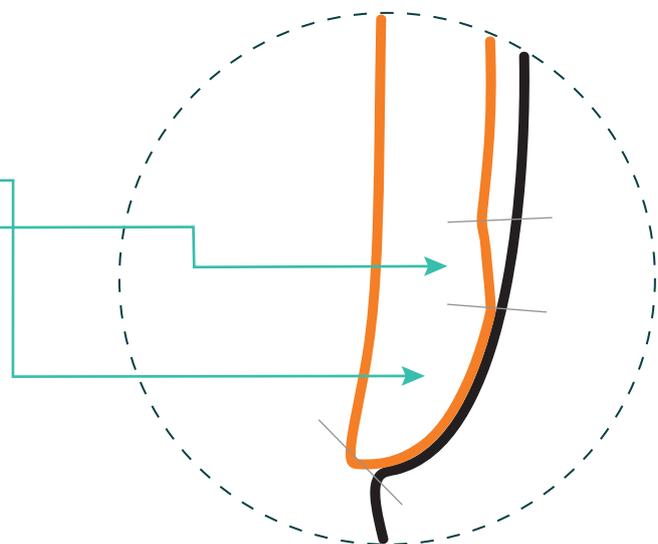
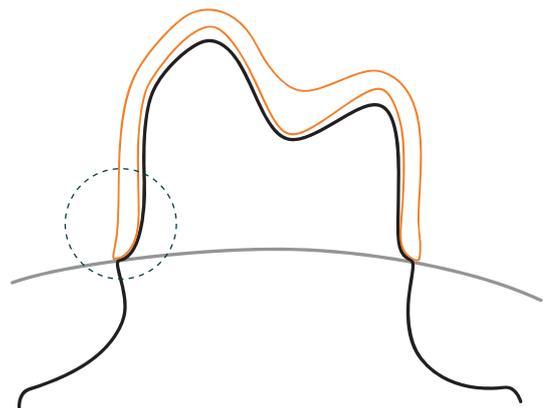
Smooth dist. mm

Drill radius mm

Drill Comp. Offset mm

New drill compensation

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 its application.



Parameter recommendation 3Shape Parameter help

The most important settings

Settings ? v

Name

Remove undercuts
 Drill compensation

Difference map >

Advanced settings v

Cement gap mm

Extra cement gap mm

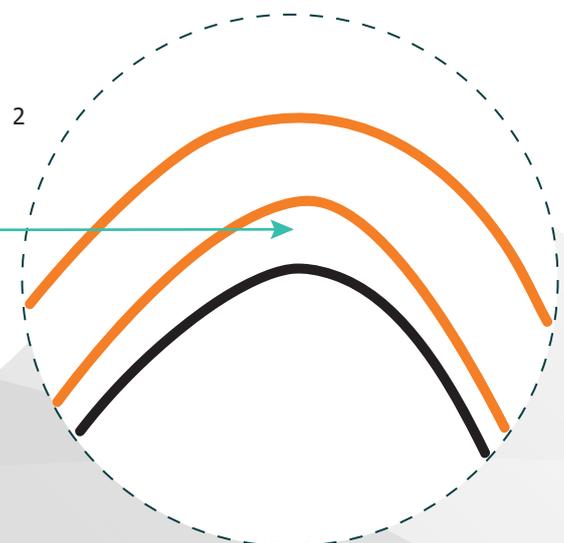
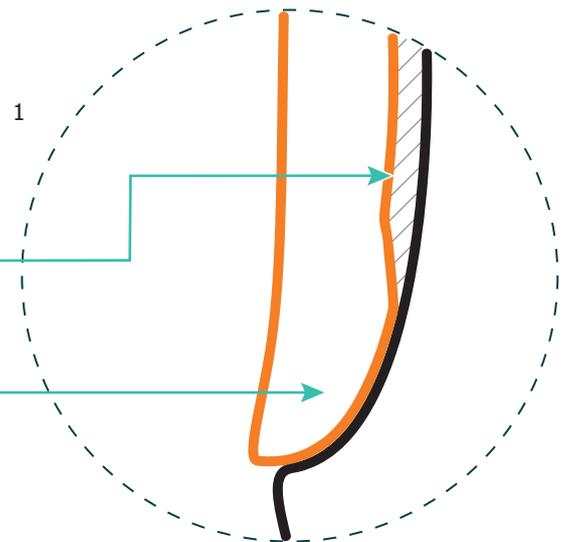
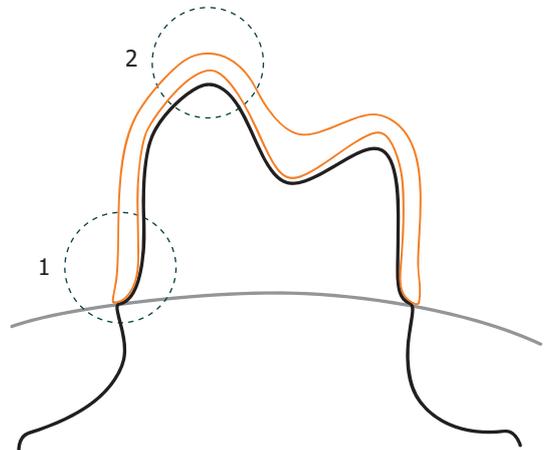
Dist. to margin line mm

Smooth dist. mm

Drill radius mm

Drill Comp. Offset mm

New drill compensation
 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 its application.



Parameter recommendation 3Shape Parameter help

Effects of changing the most important parameters

Coping [?](#)

Advanced settings [?](#) ▼

Wall thickness mm

Wall height mm

Margin line offset mm

Offset angle #1 °

Extension offset mm

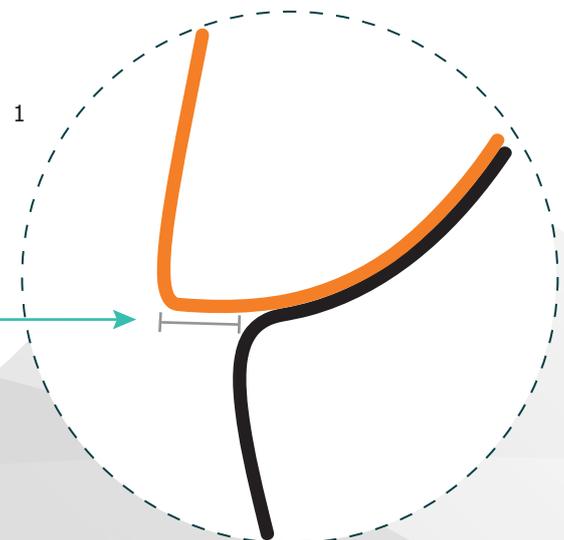
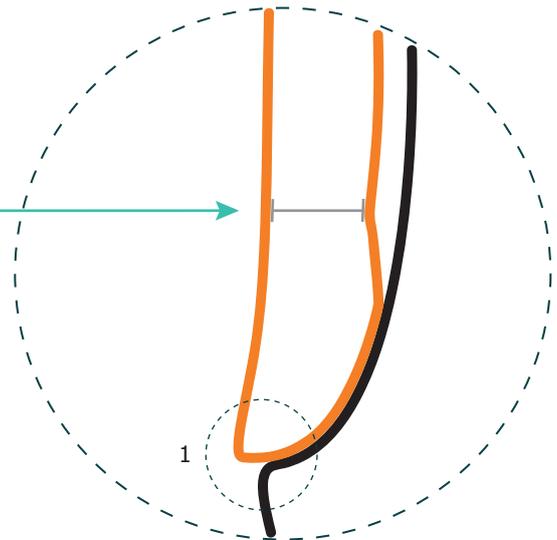
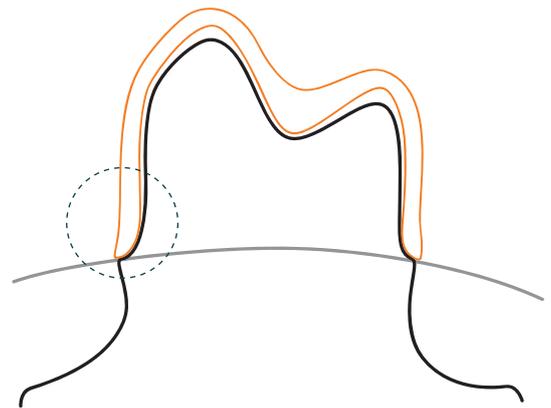
Lingual band

Apply

Start angle °

End angle °

Offset mm



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

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from technician to technician

W W W . C A D D E N T . E U