

Parameter recommendation Exocad



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



Fräsen 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
Splint	13



3D-Printing 14

Printed model	14
---------------	----



Service 15

Scan / design service	15
-----------------------	----

Parameter recommendation Exocad

Cobalt-chrome (CoCr) / Titanium

Crown Bottoms

GAPBORDERUNDERCUTS

CEMENT GAP

No cement gap

Gap

<0,04mm>

Add another zone ...

SELECT ZONES BY DISTANCE

From margin

<1,5mm>

▼ ADDITIONAL SPACING

Axial

<0,025mm>

Radial

<0,025mm>

Crown Bottoms

GAP

BORDER

UNDERCUTS

CROWN BORDER PARAMETERS

1. Horizontal

<

0,1

mm

>

2. Angled

<

0,1

mm

>

3. Angle

<

60

°

>

4. Vertical

<

0

mm

>

5. Below margin

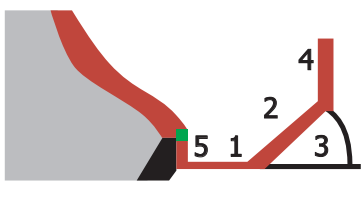
<

0

mm

>

PARAMETER EXPLANATION



OK

Cancel

Crown Bottoms

?

×

GAP

BORDER

UNDERCUTS

UNDERCUTS

☐

Don't block out undercuts

Angle

<

0

°

>

Protected zone near margin line:

Size

<

0

mm

>

MILLING

☒

Anticipate milling

Diameter

<

0,2

mm

>

☐

Bullnose/flat tool

Tool tip flat percentage

<

80

%

>

Show undercuts

Apply

OK

Cancel



Cobalt-chrome (CoCr) / Titanium secondary telescopic crown

Crown Bottoms

?

×

GAP

BORDER

UNDERCUTS

CEMENT GAP

No cement gap

Gap

< 0,02 mm >

Add another zone ...

SELECT ZONES BY DISTANCE

From margin

< 0 mm >

▼ ADDITIONAL SPACING

Axial

< -0,005 mm >

Radial

< -0,005 mm >

OK

Cancel

Crown Bottoms

GAP

BORDER

UNDERCUTS

CROWN BORDER PARAMETERS

1. Horizontal

<

0,1

mm

>

2. Angled

<

0,1

mm

>

3. Angle

<

60

°

>

4. Vertical

<

0

mm

>

5. Below margin

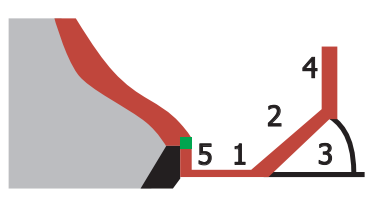
<

0

mm

>

PARAMETER EXPLANATION



OK

Cancel

Crown Bottoms

GAP

BORDER

UNDERCUTS

UNDERCUTS

☐

Don't block out undercuts

Angle

< 0 ° >

Protected zone near margin line:

Size

< 0 mm >

MILLING

☒

Anticipate milling

Diameter

< 0.2 mm >

☐

Bullnose/flat tool

Tool tip flat percentage

< 80 % >

Show undercuts

Apply

OK

Cancel

Do not change this value

Parameter recommendation Exocad Gold

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CEMENT GAP

☐ No cement gap

☐ Gap < 0,04 mm >

Add another zone ...

SELECT ZONES BY DISTANCE

☐ From margin < 2 mm >

✓ ADDITIONAL SPACING

Axial < 0,025 mm >

Radial < 0,025 mm >

OK Cancel

Do not change this value

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CROWN BORDER PARAMETERS

1. Horizontal < 0,15 mm >

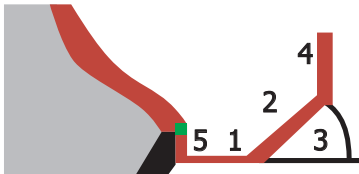
2. Angled < 0,1 mm >

3. Angle < 60 ° >

4. Vertical < 0 mm >

5. Below margin < 0 mm >

PARAMETER EXPLANATION



OK Cancel

Crown Bottoms ? x

GAP BORDER UNDERCUTS

UNDERCUTS

☐ Don't block out undercuts

Angle < 0 ° >

Protected zone near margin line:

Size < 0 mm >

MILLING

☒ Anticipate milling

Diameter < 0,2 mm >

☐ Bullnose/flat tool

Tool tip flat percentage < 80 % >

Show undercuts Apply

OK Cancel

Parameter recommendation Exocad 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

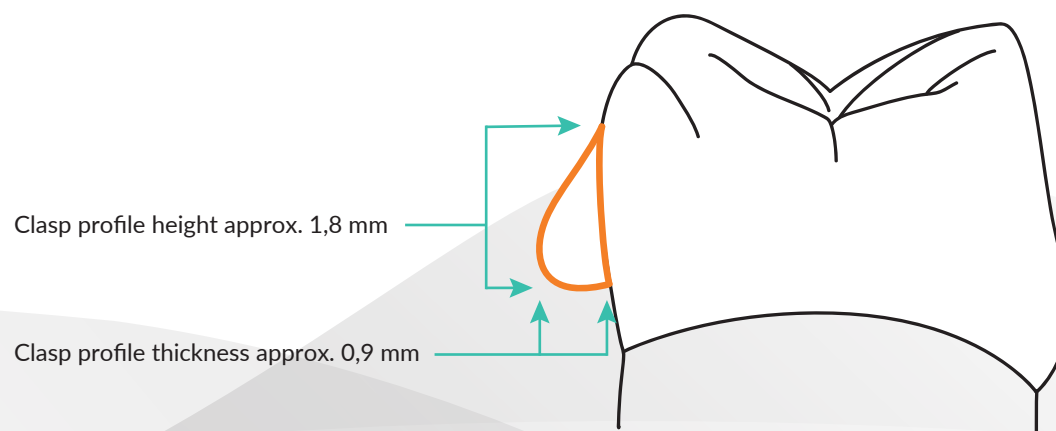
PEEK

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



Parameter recommendation Exocad Cobalt-chrome (CoCr) / Titanium

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CEMENT GAP

☒ No cement gap

☐ Gap mm

Add another zone ...

SELECT ZONES BY DISTANCE

☒ From margin mm

✓ ADDITIONAL SPACING

Axial mm

Radial mm

OK Cancel

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CROWN BORDER PARAMETERS

1. Horizontal mm

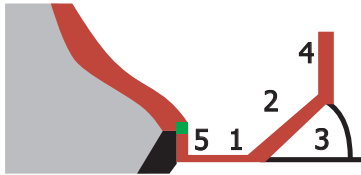
2. Angled mm

3. Angle °

4. Vertical mm

5. Below margin mm

PARAMETER EXPLANATION



OK Cancel

Do not change this value

Crown Bottoms ? x

GAP BORDER UNDERCUTS

UNDERCUTS

☐ Don't block out undercuts

Angle °

Protected zone near margin line:

Size mm

MILLING

☒ Anticipate milling

Diameter mm

☐ Bullnose/flat tool

Tool tip flat percentage %

Show undercuts Apply

OK Cancel

Do not change this value

Parameter recommendation Exocad

Cobalt-chrome (CoCr) / Titanium secondary telescopic crown

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CEMENT GAP

☒ No cement gap

☐ Gap mm

Add another zone ...

SELECT ZONES BY DISTANCE

☒ From margin mm

ADDITIONAL SPACING

Axial mm

Radial mm

OK Cancel

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CROWN BORDER PARAMETERS

1. Horizontal mm

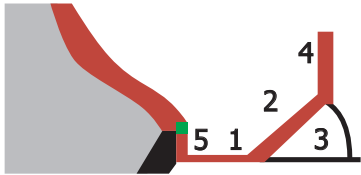
2. Angled mm

3. Angle °

4. Vertical mm

5. Below margin mm

PARAMETER EXPLANATION



OK Cancel

Do not change this value

Crown Bottoms ? x

GAP BORDER UNDERCUTS

UNDERCUTS

☐ Don't block out undercuts

Angle °

Protected zone near margin line:

Size mm

MILLING

☒ Anticipate milling

Diameter mm

☐ Bullnose/flat tool

Tool tip flat percentage %

Show undercuts Apply

OK Cancel



Parameter recommendation Exocad Zirconia

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CEMENT GAP

☒ No cement gap

☐ Gap mm

[Add another zone ...](#)

SELECT ZONES BY DISTANCE

☒ From margin mm

✓ ADDITIONAL SPACING

Axial mm

Radial mm

OK Cancel

Crown Bottoms ? x

GAP **BORDER** UNDERCUTS

CROWN BORDER PARAMETERS

1. Horizontal mm

2. Angled mm

3. Angle °

4. Vertical mm

5. Below margin mm

PARAMETER EXPLANATION

OK Cancel

Crown Bottoms ? x

GAP BORDER **UNDERCUTS**

UNDERCUTS

☐ Don't block out undercuts

Angle °

Protected zone near margin line:

Size mm

MILLING

☒ Anticipate milling

Diameter mm

☐ Bullnose/flat tool

Tool tip flat percentage %

Show undercuts Apply

OK Cancel

Do not change this value
Do not change this value

Parameter recommendation Exocad Glass / hybrid ceramics

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CEMENT GAP

☒ No cement gap

☐ Gap mm

Add another zone ...

SELECT ZONES BY DISTANCE

☒ From margin mm

✓ ADDITIONAL SPACING

Axial mm

Radial mm

OK Cancel

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CROWN BORDER PARAMETERS

1. Horizontal mm

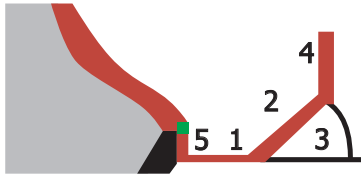
2. Angled mm

3. Angle °

4. Vertical mm

5. Below margin mm

PARAMETER EXPLANATION



OK Cancel

Do not change this value

Crown Bottoms ? x

GAP BORDER UNDERCUTS

UNDERCUTS

☐ Don't block out undercuts

Angle °

Protected zone near margin line:

Size mm

MILLING

☒ Anticipate milling

Diameter mm

☐ Bullnose/flat tool

Tool tip flat percentage %

Show undercuts Apply

OK Cancel

Do not change this value

Parameter recommendation Exocad Plastics / PEEK / Wax

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CEMENT GAP

☒ No cement gap

☐ Gap mm

Add another zone ...

SELECT ZONES BY DISTANCE

☒ From margin mm

✓ ADDITIONAL SPACING

Axial mm

Radial mm

OK Cancel

Crown Bottoms ? x

GAP BORDER UNDERCUTS

CROWN BORDER PARAMETERS

1. Horizontal mm

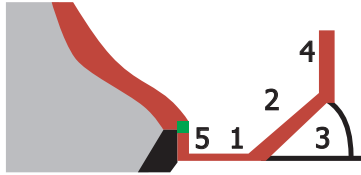
2. Angled mm

3. Angle °

4. Vertical mm

5. Below margin mm

PARAMETER EXPLANATION



OK Cancel

Do not change this value

Crown Bottoms ? x

GAP BORDER UNDERCUTS

UNDERCUTS

☐ Don't block out undercuts

Angle °

Protected zone near margin line:

Size mm

MILLING

☒ Anticipate milling

Diameter mm

☐ Bullnose/flat tool

Tool tip flat percentage %

Show undercuts Apply

OK Cancel


Do not change this value


Parameter recommendation Exocad PEEK secondary telescopic crown

Crown Bottoms ? x

GAP BORDER UNDERCUTS


CEMENT GAP

☒ No cement gap 


☐ Gap mm 


Add another zone ...

SELECT ZONES BY DISTANCE

☒ From margin mm 

✓ ADDITIONAL SPACING

Axial mm 


Radial mm 


OK Cancel


Crown Bottoms ? x


GAP BORDER UNDERCUTS


CROWN BORDER PARAMETERS

1. Horizontal mm 

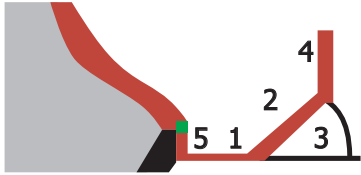
2. Angled mm 

3. Angle ° 

4. Vertical mm 

5. Below margin mm 

PARAMETER EXPLANATION




OK Cancel

Crown Bottoms ? x


GAP BORDER UNDERCUTS

UNDERCUTS

☐ Don't block out undercuts


Angle ° 

Protected zone near margin line:


Size mm 

MILLING

☒ Anticipate milling

Diameter mm 

☐ Bullnose/flat tool

Tool tip flat percentage % 

Show undercuts Apply

OK Cancel

Do not change this value



Parameter recommendation Exocad Splint

Do not change
this value

Design Bite Splint Bottom ? ×

PROPERTIES

FREE-FORMING

BLOCK OUT UNDERCUTS

Offset < 0,03 mm >

Angle < 0 ° >

Allow undercuts to < 0,1 mm >

BITE SPLINT BOTTOM PROPERTIES

Smoothing < 17 % >

Min. thickness < 0,8 mm >

Milling diameter < 1,2 mm >

Set insertion direction from view ✕

Apply

OK Cancel

Design Bite Splint Top ? ×

MARGIN

POSTERIOR AREA

Click gingiva and teeth to draw the bite splint margin line.

Clear

Undo Redo

SURFACE PROPERTIES

Occlusal Thickness < 2 mm >

Peripheral Thickness < 1 mm >

Smoothing < 3 mm >

☐ Allow design on palate

Apply

OK Cancel



Parameter recommendation Exocad Printed model

Plateless Model Design

DIES

SETTINGS

Pin height

< 2 mm >

Preparation margin e...

< 0,2 mm >

Seating width

< 0,5 mm >

☐ Omit die pin

☒ Add concavity

Reset

Set from view

Undo

Redo

Run

Back

Next

Click 'Next' to add attachments

Plateless Model Design

SETTINGS

Base

Horizontal shaft g...

< 0,02 mm >

Vertical shaft gap

< 0 mm >

Pedestal height

< 0 mm >

☒ Ditch

Ditch width

< 0,3 mm >

Ditch depth avg.

< 0,3 mm >

Ditch height avg.

< 0 mm >

☒ Add pin grooves

Run

Back

Next

Click 'Next' to add attachments

Plateless Model Design

SETTINGS

☒ Add pin grooves

Groove width

< 1 mm >

Groove depth

< 1 mm >

☒ Hollow model

Wall thickness

< 3 mm >

Bottom sill

< 0 mm >

Cavity fill diameter

< 0 mm >

☐ Anticipate milling

Diameter

< 0,2 mm >

Run

Back

Next

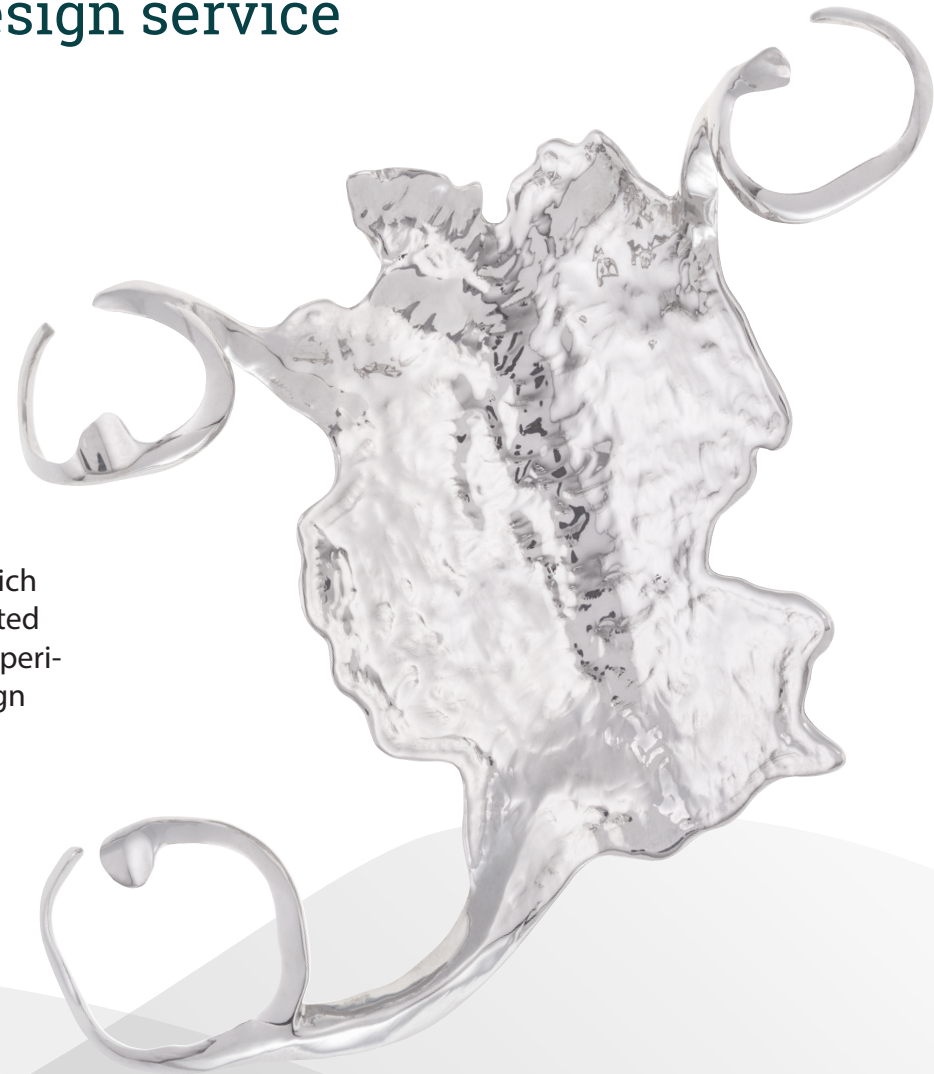
Click 'Next' to add attachments



SERVICE

Parameter recommendation Exocad Scan / design service

On the basis of the model you have sent in, which we scan for you, or on the basis of the transmitted scan data (intraoral scan or model scan), our experienced CAD specialists create your desired design and implement it in the appropriate material.



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

CADdent® GmbH
Max-Josef-Metzger-Str. 6 | 86157 Augsburg
Phone: +49 821 5999965-0
E-mail: uk@caddent.eu

from technician to technician

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