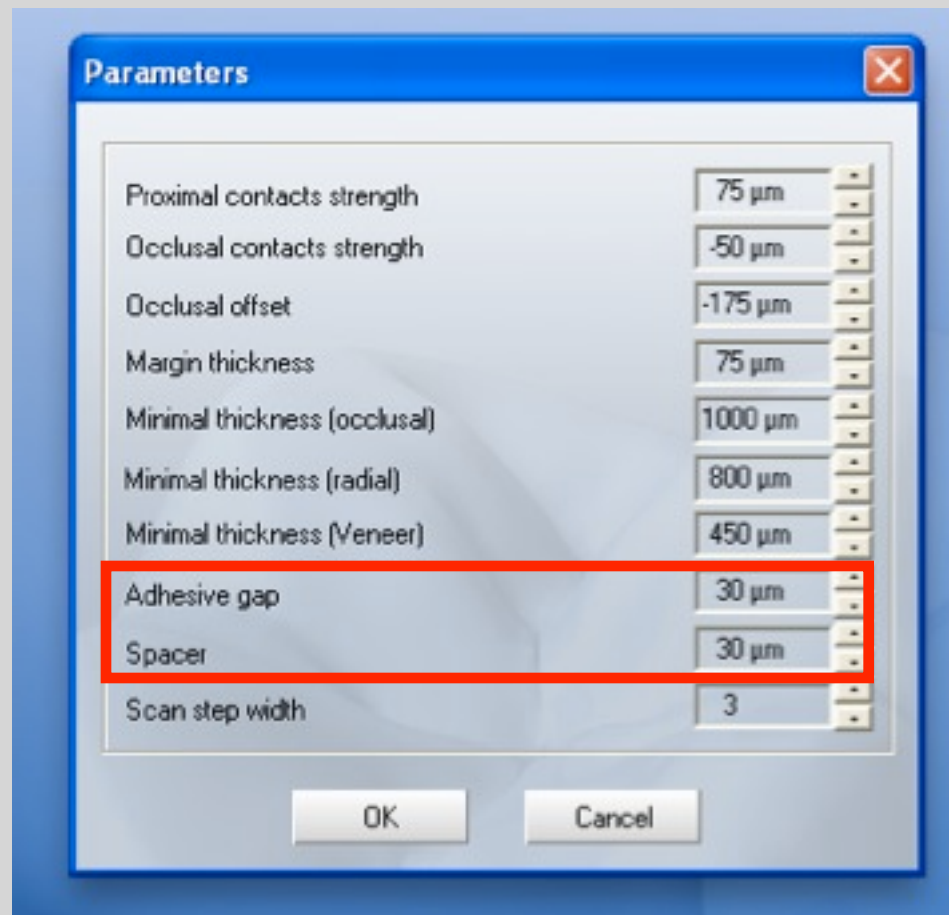# Parameters

Cary M. Austin, DDS, FAGD
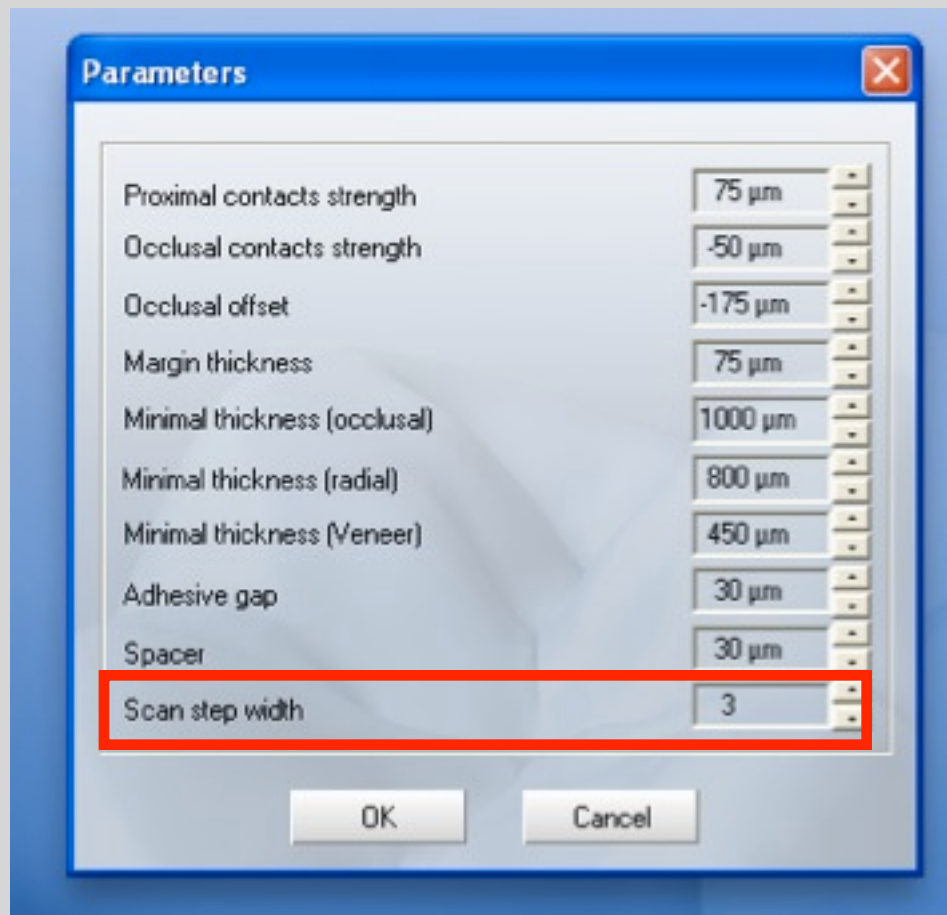
What do they mean?????

PARAMETERS WHICH AFFECT THE
OUTSIDE
OF THE RESTORATION

Parameters which affect the Inside
Of the Restoration

Parameters

Proximal contacts strength	75 µm
Occlusal contacts strength	-50 µm
Occlusal offset	-175 µm
Margin thickness	75 µm
Minimal thickness (occlusal)	1000 µm
Minimal thickness (radial)	800 µm
Minimal thickness (Veneer)	450 µm
Adhesive gap	30 µm
Spacer	30 µm
Scan step width	3

OK   Cancel

INLAB ONLY

Proximal Contact Strength

Biogeneric restorations only

Range +200 to -200

Contact strength indicated by color

- blue=no contact

- green= 0-50 microns (open or light)

- yellow= 50-100 microns(floss snaps)

- red = 100+microns (shreds floss)

Parameters	
Proximal contacts strength	75 µm
Occlusal contacts strength	-50 µm
Occlusal offset	-175 µm
Margin thickness	75 µm
Minimal thickness (occlusal)	1000 µm
Minimal thickness (radial)	800 µm
Minimal thickness (Veneer)	450 µm
Adhesive gap	30 µm
Spacer	30 µm
Scan step width	3

Start ~ 75 microns

-if contacts are tight, go to 50

-if contacts are light, go to 100

Occlusal Contact

-Biogeneric restorations only

-Range +200 to -200

-Works with **Virtual Grinding Feature**

-Start ~ **-50** until you get occlusion "dialed in", then SET IT AND FORGET IT!

If restorations are high, go to -75, etc.

| Parameters	
Proximal contacts strength	75 µm
Occlusal contacts strength ←	-50 µm
Occlusal offset	-175 µm
Margin thickness	75 µm
Minimal thickness (occlusal)	1000 µm
Minimal thickness (radial)	800 µm
Minimal thickness (Veneer)	450 µm
Adhesive gap	30 µm
Spacer	30 µm
Scan step width	3

OK   Cancel
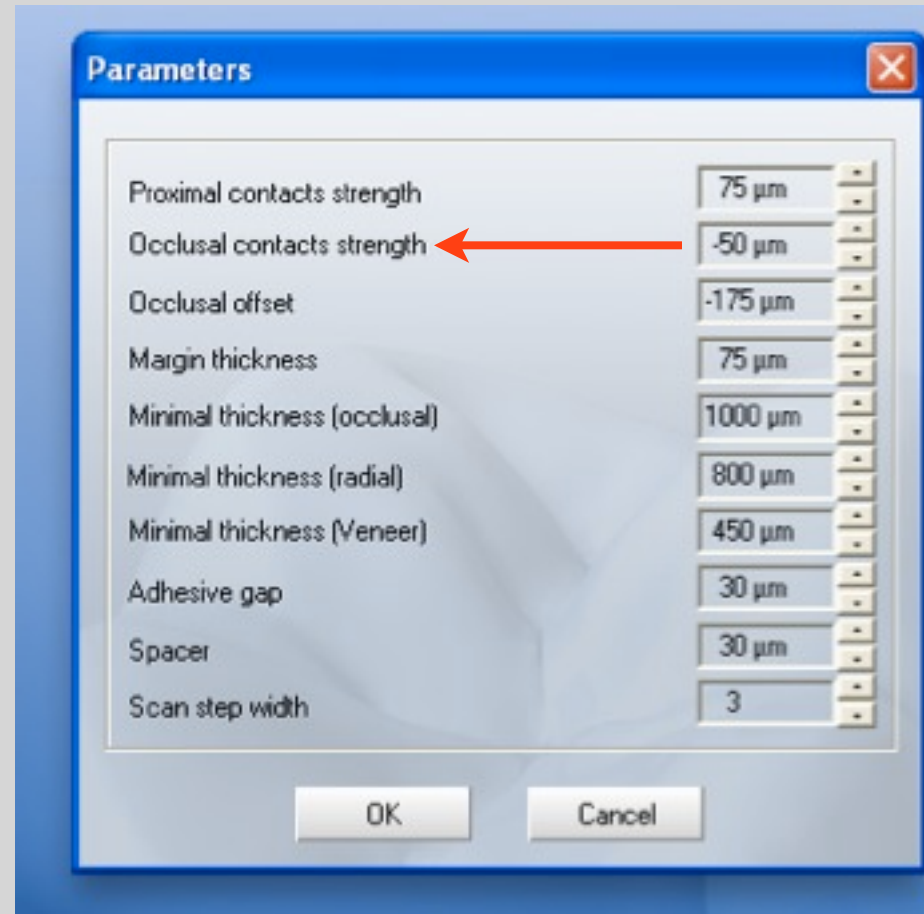
Occlusal offset

Determines amount of porcelain removed from the occlusal surface
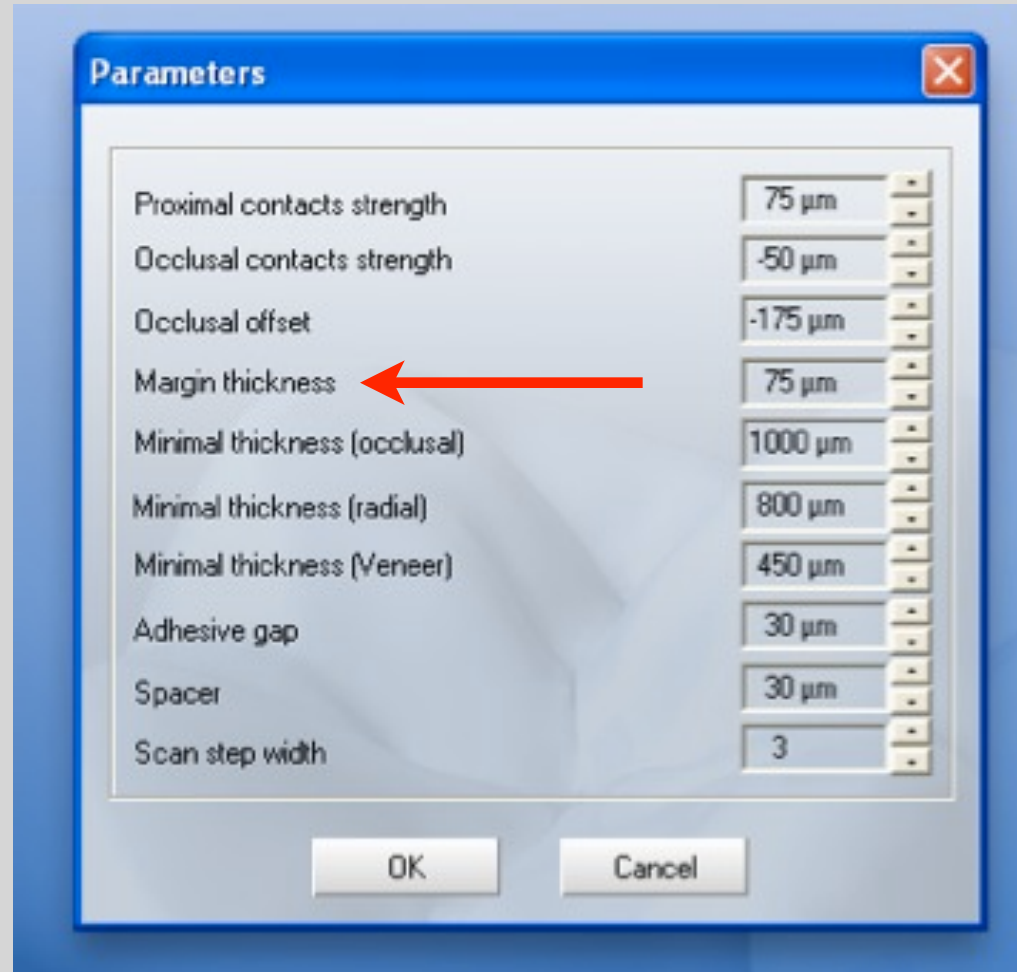
Change with inlays /onlays so you do not get a "step down" at the margin

start around -50 for inlays; -175 for crowns

Parameters

|	
Proximal contacts strength	75 µm
Occlusal contacts strength	-50 µm
Occlusal offset	-175 µm
Margin thickness	75 µm
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Minimal thickness (radial)	800 µm
Minimal thickness (Veneer)	450 µm
Adhesive gap	30 µm
Spacer	30 µm
Scan step width	3

OK   Cancel
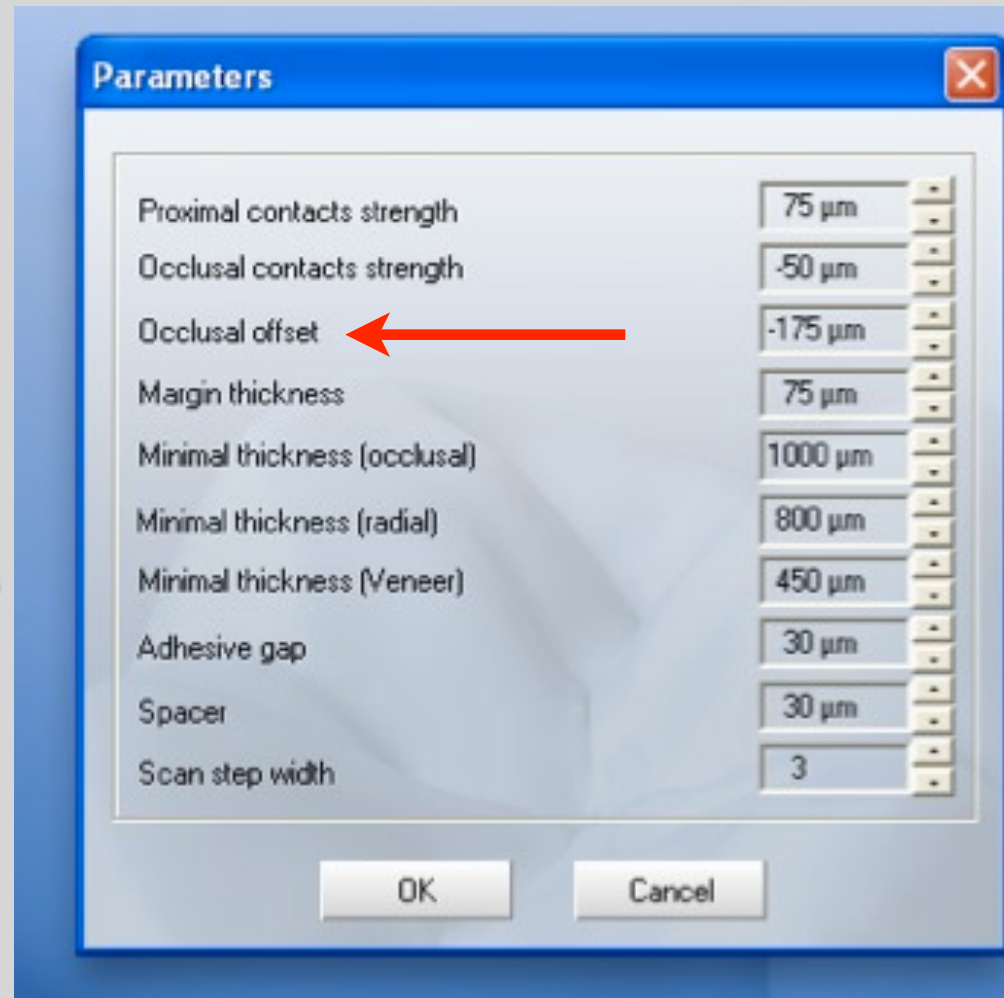
Margin thickness

- Used to increase the thickness of the margin to prevent chipping in thin areas during milling.

- Range 0 to +200

- Typically only changed when milling anterior restorations (increased)

Parameters

|	
Proximal contacts strength	75 µm
Occlusal contacts strength	-50 µm
Occlusal offset	-175 µm
Margin thickness	75 µm
Minimal thickness (occlusal)	1000 µm
Minimal thickness (radial)	800 µm
Minimal thickness (Veneer)	450 µm
Adhesive gap	30 µm
Spacer	30 µm
Scan step width	3

OK   Cancel

Minimal Thickness

- Added with Version 3.60, expanded in 3.80

- Window > Display Options

- Will show all areas in blue where you are below the minimal thickness you set.
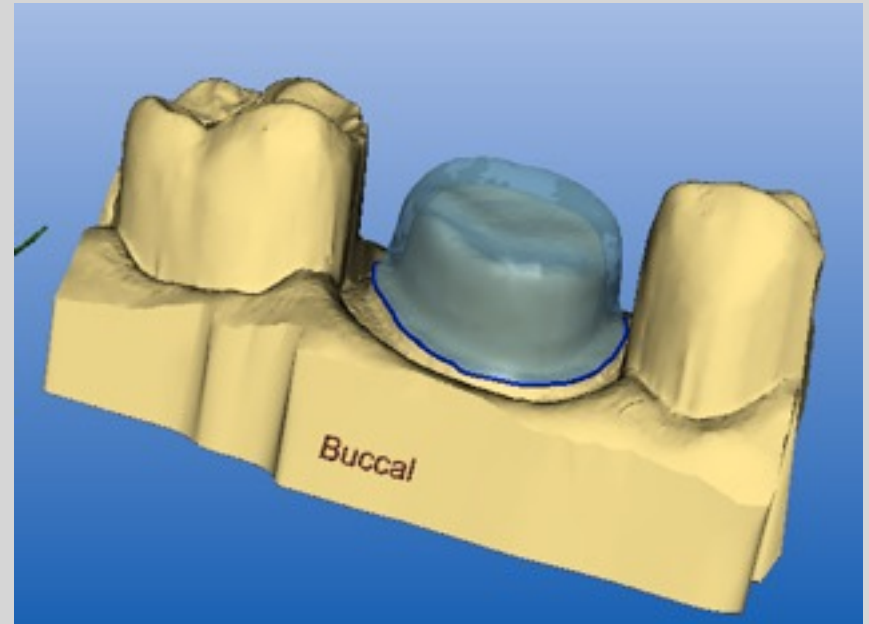
Minimal Thickness

In version 3.8, this Parameter was expanded:

1. Occlusal

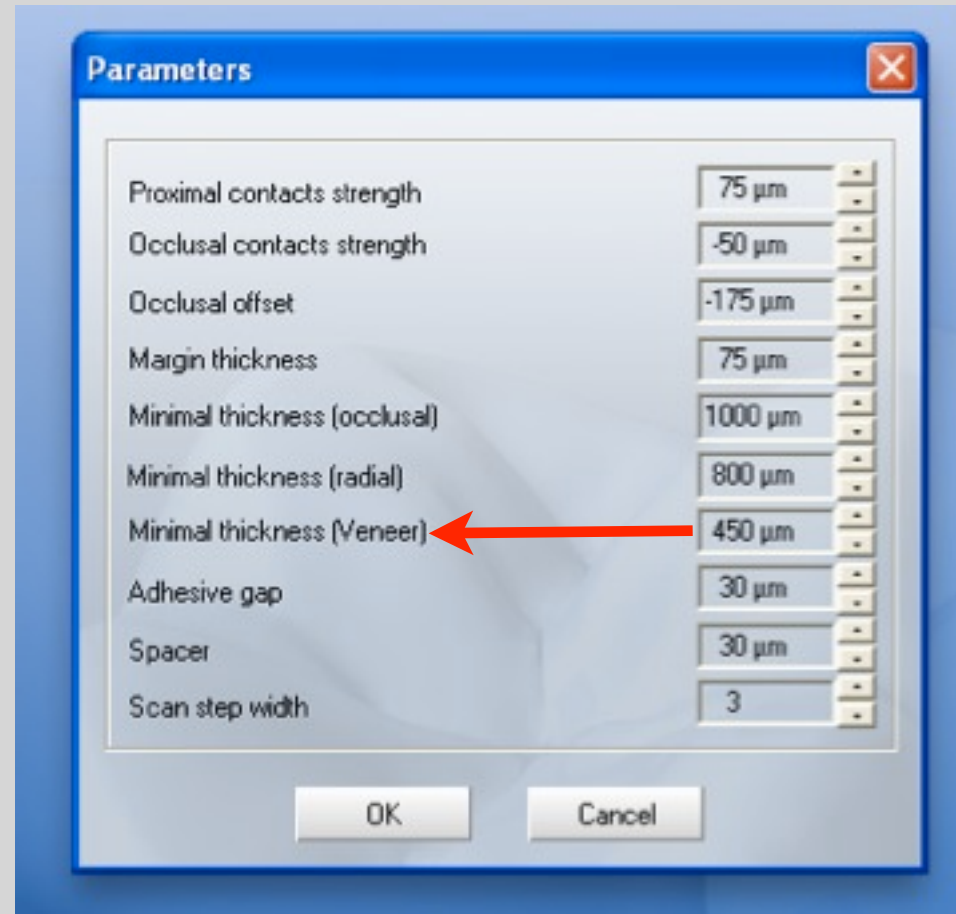2. Radial (buccal, lingual, mesial, distal)

3. Veneer
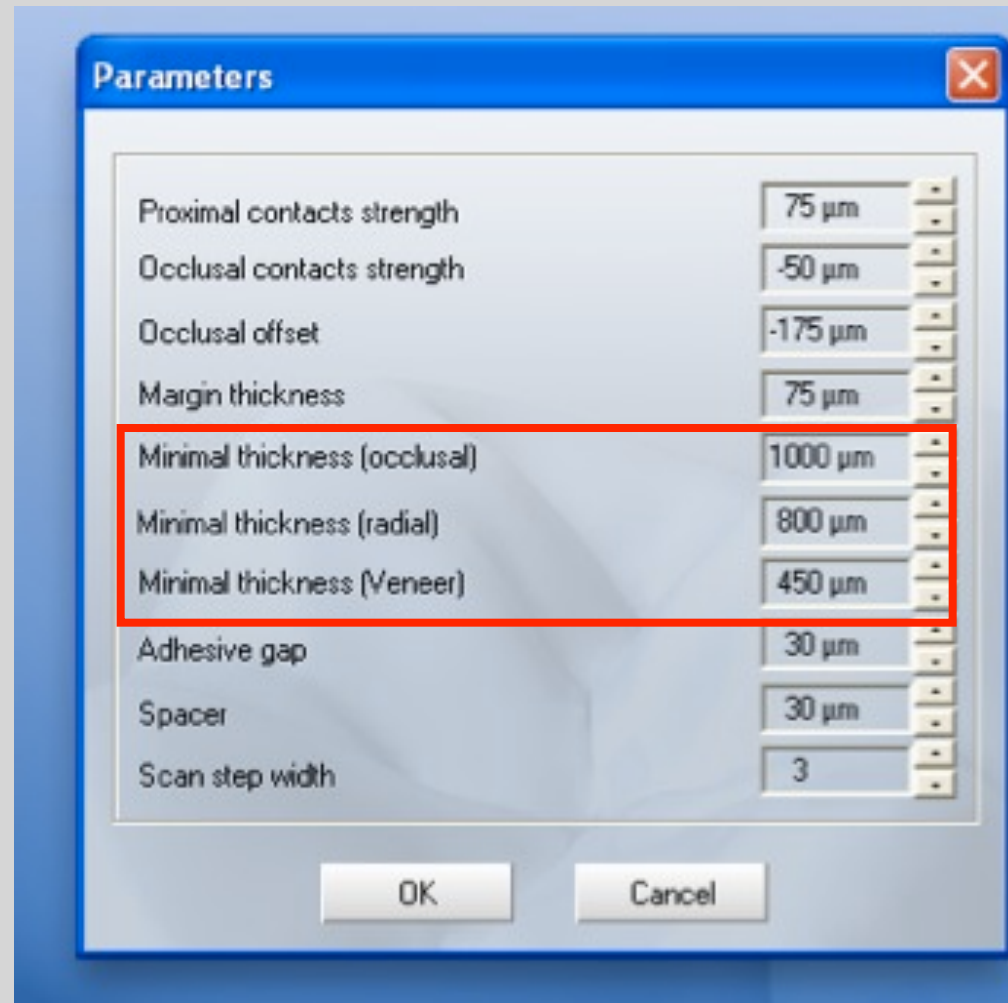
Minimal Thickness Veneer

If Veneer thickness is set to 450 microns or less, the software will mill in thin veneer mode.

Thin Veneer Mode will mill as thin as 300 microns.

Limited to emax blocks

Parameters

Proximal contacts strength	75 µm
Occlusal contacts strength	-50 µm
Occlusal offset	-175 µm
Margin thickness	75 µm
Minimal thickness (occlusal)	1000 µm
Minimal thickness (radial)	800 µm
Minimal thickness (Veneer)	450 µm
Adhesive gap	30 µm
Spacer	30 µm
Scan step width	3

OK   Cancel

Parameters which affect the **Inside**
Of the Restoration

Adhesive Gap

- Affects Inlays and Onlays only

- The narrowing of the SPACER at the preparation margin, specifically the last 400 microns before the margin.

- Range is 0 to 150

- Begin with a setting of 30 or 40

Spacer

- Second Parameter that affects internal of restoration

- Creates room for cement like Die Spacer

- Range -100 to +100 with 100 microns built in

- Begin with setting of 40, then use <u>virtual fit checker</u> at the mill preview to adjust.

  (Trim-Trim-CTRL B at Mill Preview)

Parameters & Correlation

Which Parameters affect Correlation Restorations?

- Occlusal Offset

- Margin Thickness

- Adhesive Gap

- Spacer

	Posterior Crowns Onlays	Inlays	Anterior Crowns	Veneers	Implant Crowns
Proximal Contacts	75	75	75	75	75
Occlusal Contacts	-50	-50	-50	-50	-50
Occlusal Offset	-175	-100	-175	0	-175
Margin Thickness	75	75	75-125	125	75
Minimal Thickness Occlusal	1000-1200	1000-1200	1000-1200	1000-1200	1000-1200
Minimal Thickness Radial	800-1000	800-1000	800-1000	800-1000	800-1000
Minimal Thickness Veneer	450	450	450	450	450
Adhesive Gap	30	30	30	0	10
Spacer	30	30	30	40	10