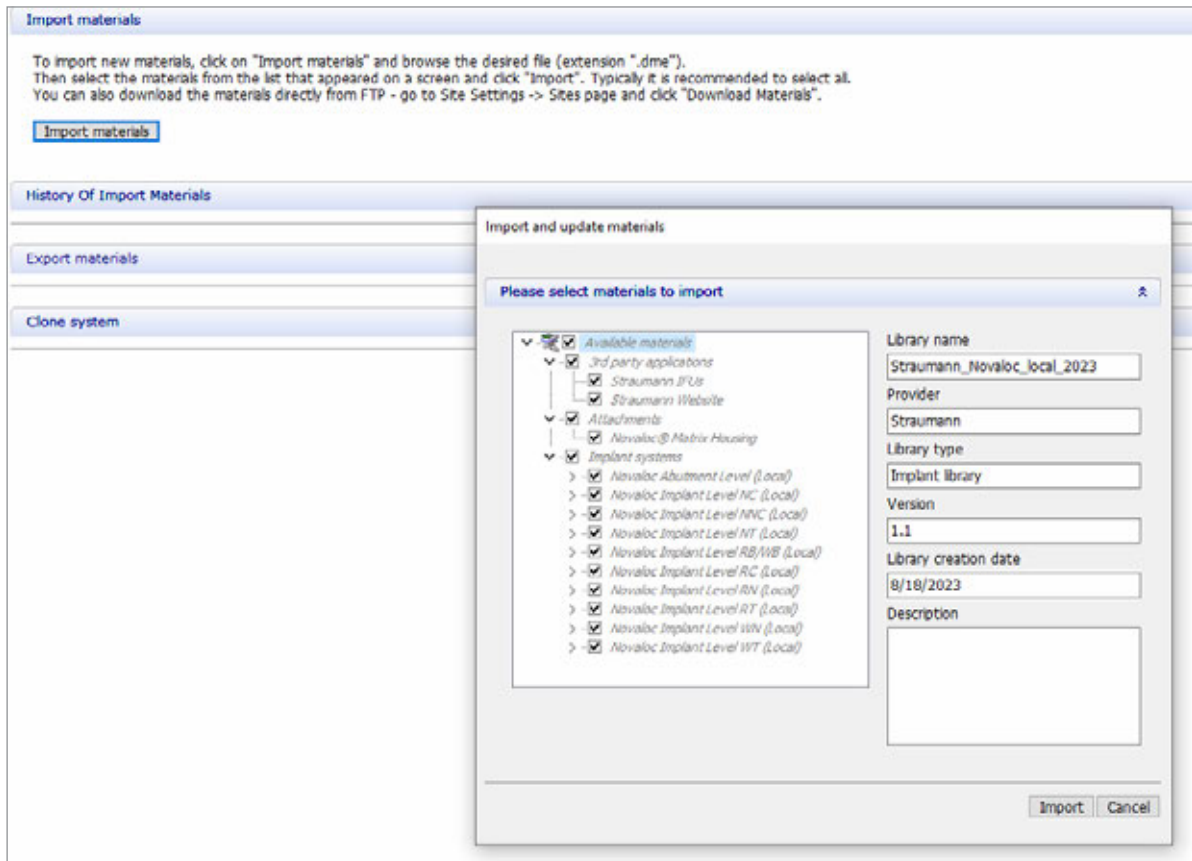# BASIC INFORMATION

Novaloc® Digital (for Labs)

INTRODUCTION

If you are using 3Shape Design Studio, please download the "Straumann_Novaloc_local_2023".dme file for Novaloc® Digital before you start and update your software to version DS23.1 or later. This might have to be done by your software distributor.

Download center: *www.straumann.com/connectivity*

Note on scope:

	3Shape	Exocad	Cares®
Abutment-level workflow without model	Yes, by loading the scanbody file in the attachment workflow	Yes, however the scanbody has not been integrated, it can only be used as a placeholder and cannot be matched	Yes, however the scanbody has not been integrated, it can only be used as a placeholder that can be subtracted from the denture and cannot be matched
Abutment-level workflow with model	Yes	No (no abutment library)	No (no abutment library)
Implant-level workflow with model (straight abutments only)	Yes	No (no abutment library)	No (no abutment library)

The workflows can also be carried out with a plaster model or with an intraoral scan.

For the detailed step by step workflow videos, please find us on YouTube:
Abutment Level Order Form: *https://www.youtube.com/watch?v=Q3JWIF3796g*
Abutment Level Design: *https://www.youtube.com/watch?v=LC9V-ZkROQ0*
Implant level Order Form: *https://www.youtube.com/watch?v=mtY6uUYVakA*
Implant Level Design: *https://www.youtube.com/watch?v=t5SF4wXj-GI*

CONTENTS

1. ABUTMENT-LEVEL WORKFLOW – NO PRINTED MODEL

Scan Abutment Level → **Design Denture** → **Manufacture Denture**
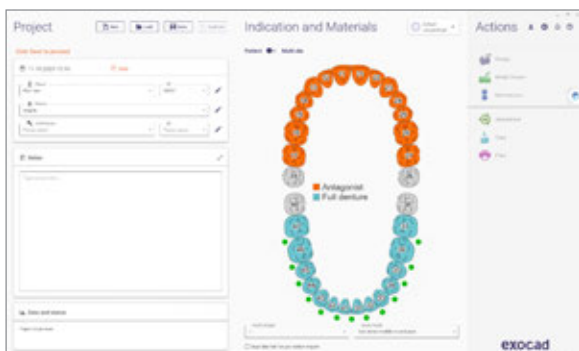
STEPS SPECIFIC TO NOVALOC® DIGITAL
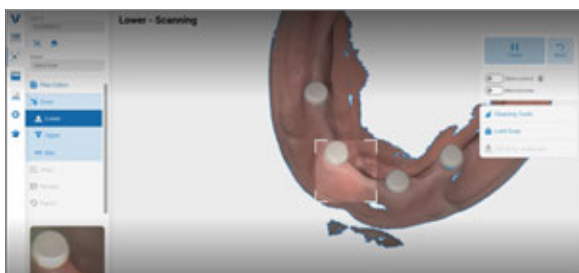
1

Take a digital impression (jaw or model) of the jaw with Novaloc® Scanbody, opposing jaw, bite registration. You can also use the prosthesis and scan it. This would need to be sent as another order and matched with 3-point matching.
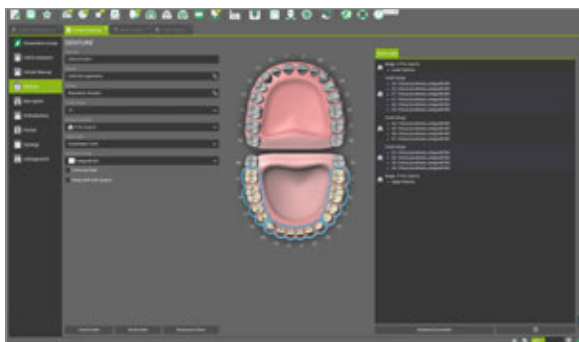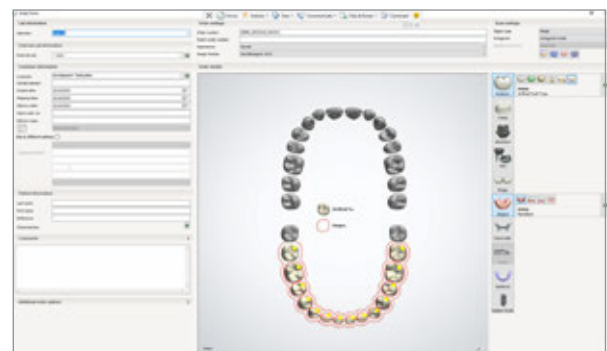

CARES® Visual

2

In the order form, select the Denture Workflow of the respective software.
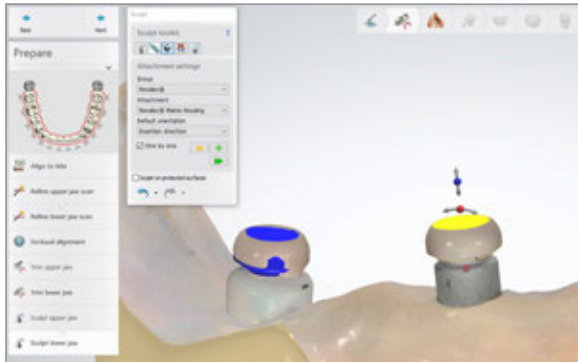

Exocad

3Shape

3

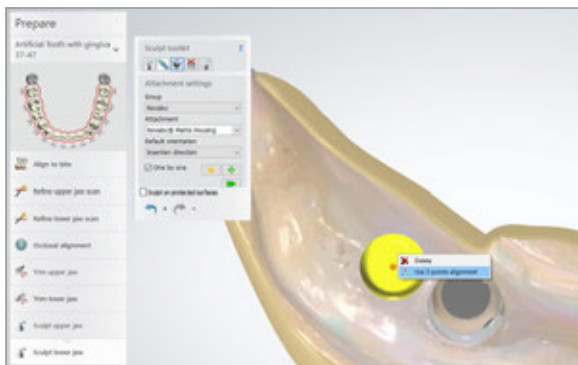Send the jaw-scan file (.ply or .stl) to your design software.

4

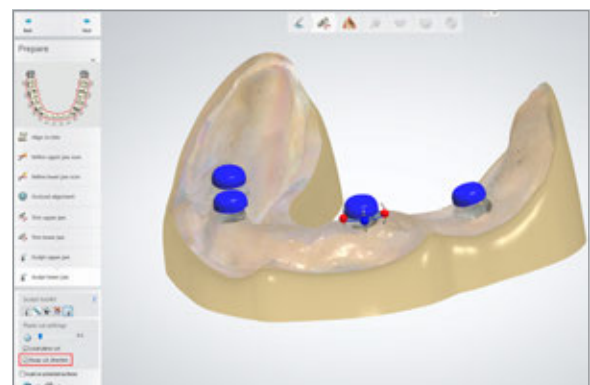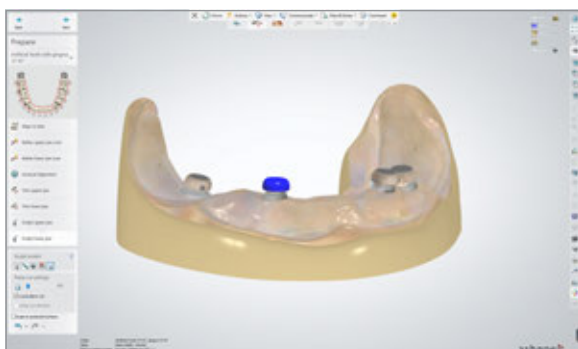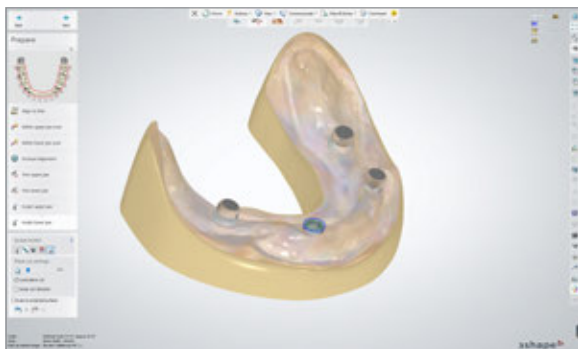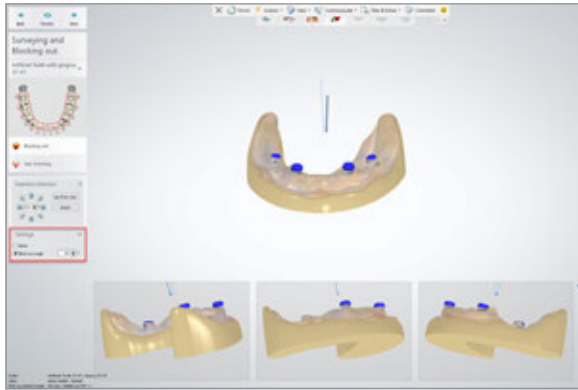Use the denture workflow to design the denture and go through the standard steps.

5

Replace the scanned surface with Novaloc® Attachment .stl files using 3-point alignment (3Shape only). For the 3-point alignment, right mouse click on the attachment.
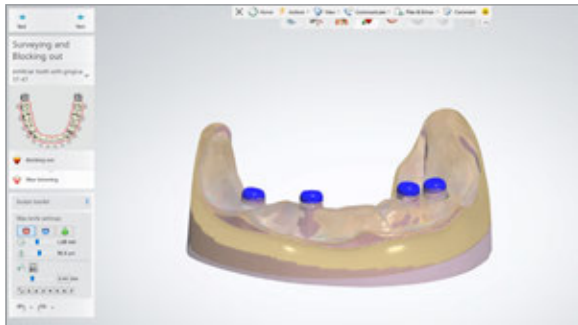

6

Cut the scanned scanbody surface away (to only have the attachment file).

7

In the Surveying and Blocking out section, the block-out angle needs to be set to 3.0 degrees (for undercuts). This avoids undercuts around Novaloc® Scanbody and abutment, that would prevent easy insertion and extraction of the denture.
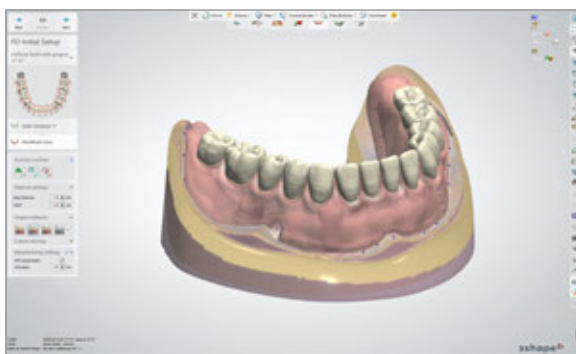

8

In Full Denture Initial Setup, choose denture library and adjust teeth for best occlusion (standard in single-arch workflow). Check you have enough space for the matrix housings and selected gingiva aesthetics.
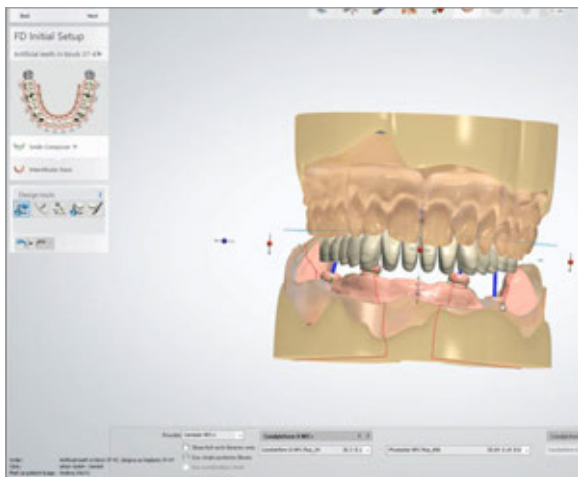
9

Go through anatomy design.

10

→ Close design module and export manufacturing output files.

11
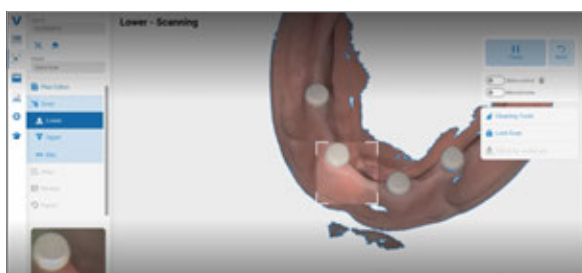
→ Print or mill a denture and finalize.

12

→ Cement Novaloc® housing in the patient's mouth.

2. ABUTMENT-LEVEL WORKFLOW – WITH PRINTED MODEL (3SHAPE ONLY)

| Scan Abutment Level | Design Denture | Design Model | Manufacture Model | Manufacture Denture |

STEPS SPECIFIC TO NOVALOC® DIGITAL

1

Take digital impressions (jaw or model) of the jaw with Novaloc® Scanbody, opposing jaw, bite registration. Please also scan the previously used full-arch prostheses, when they are available, in order to assist in the denture design.
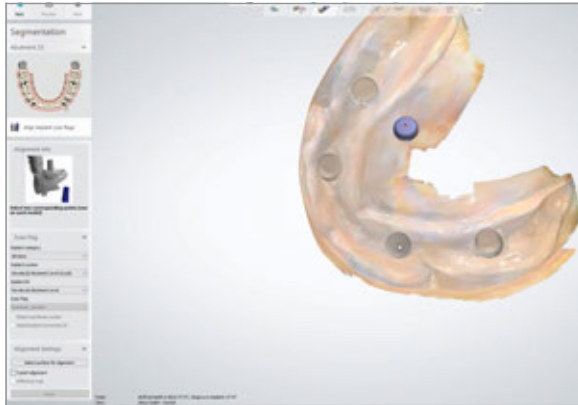

2

In the order form, select the Novaloc® Abutment Level and choose Analog flexed (manually shortened Analog → "click" only) or Analog screwed (long Analog → "click" and screwed).

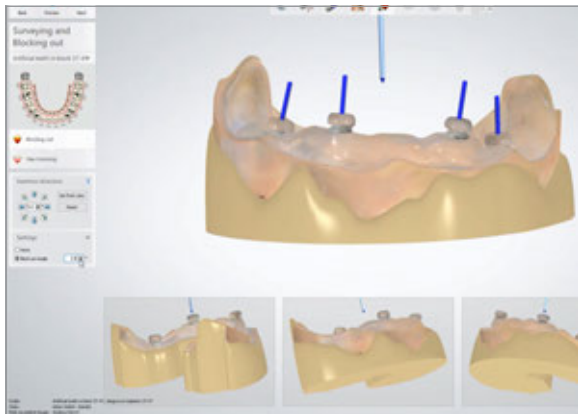Analog flexed   Analog screwed
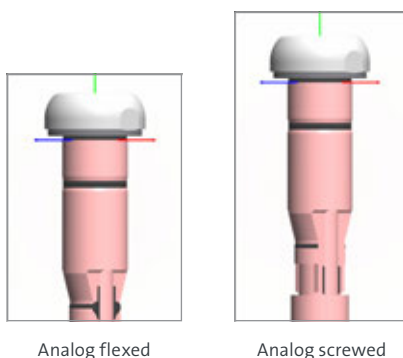
3

Use the denture workflow to design the denture and go through the standard steps.
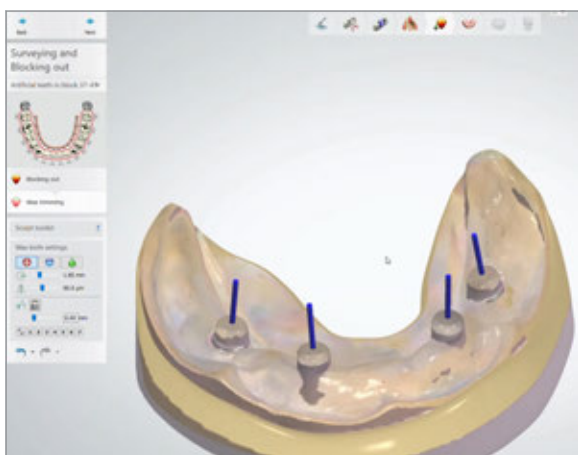

4

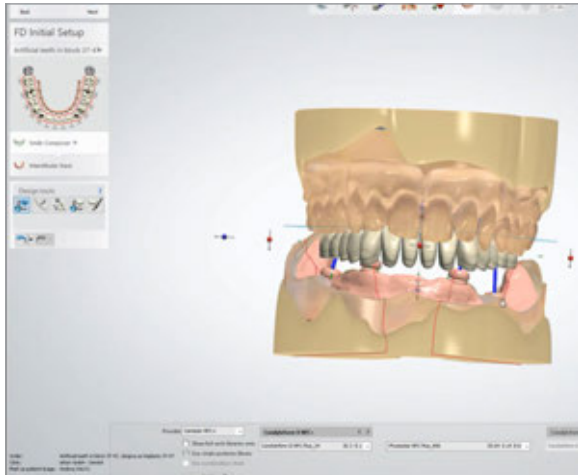Align scanned Novaloc® Scanbody using the usual 1pt or 3pt alignment.

5

In the Surveying and Blocking out section, the block-out angle needs to be set to 3.0 degrees.
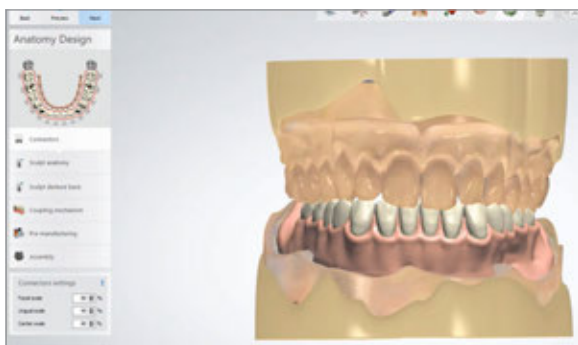This avoids undercuts around Novaloc® Scanbody and abutment.

6

In Full Denture Initial Setup, choose denture library and adjust teeth for best occlusion (standard in single-arch workflow). Check you have enough space for the matrix housings and select gingiva aesthetics.
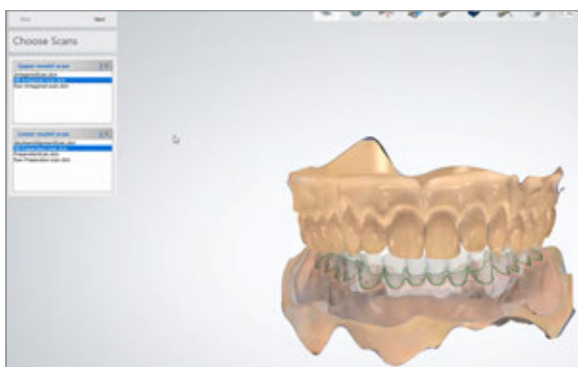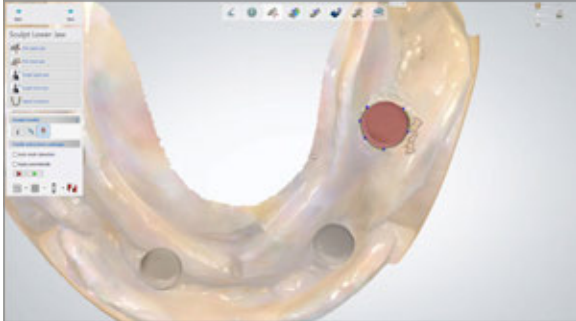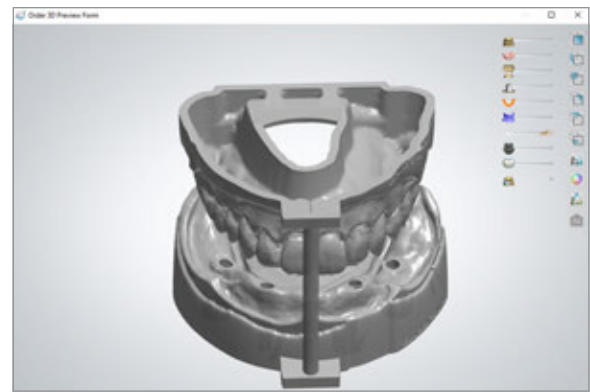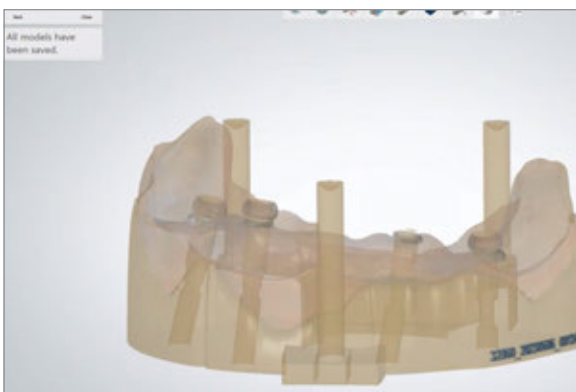

7

Go through anatomy design.

8

Use the Model workflow to design the model and go through the standard steps.

9

In order to prevent artifacts from interfering with the insertion of the analogs in the finished model, cut the scanbody surface by using the intended tools.


Note:

Analog screw channels are integrated in the model. This allows the analog to be screwed into the model from below so that the analog is not pulled out when the Novaloc® connection is used.

10

→ Close design module and export manufacturing output files.

→ Print or mill the denture and finalize.

→ Print the model.

→ Novaloc® housing can be cemented on the model.

3. IMPLANT-LEVEL WORKFLOW – WITH PRINTED MODEL (3SHAPE ONLY)

| Scan Implant Level | Design Denture | Design Model | Manufacture Model | Manufacture Denture |
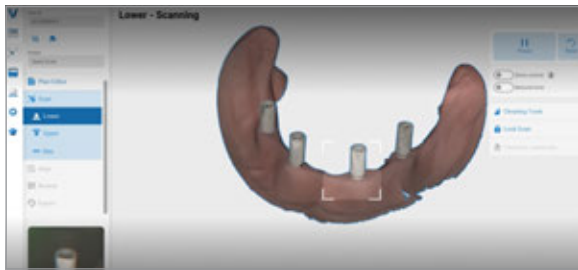
1

Once the implant-level scanbodies are in place, take digital impressions (of the jaw or the model) of the jaw with no scanbody, jaw with scanbody, opposing jaw, and bite registration.


2

In Order Form, select the Novaloc® abutments with the required height in the software (angled abutments are not integrated).
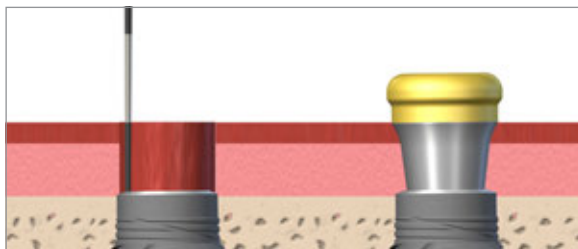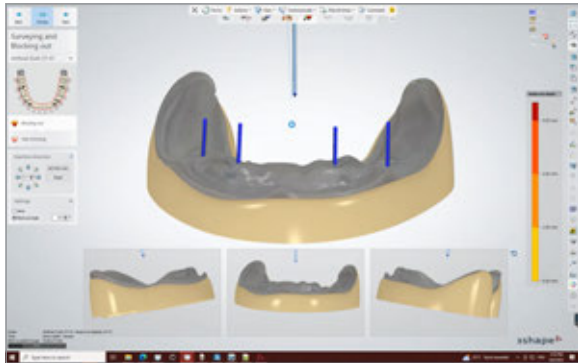

The abutment height needs to be selected in the order creation. The abutment is **NOT** visible during the design step.

Therefore, it is important to measure the gingiva height accurately with a periodontal probe and then select the appropriate Novaloc® abutment height.
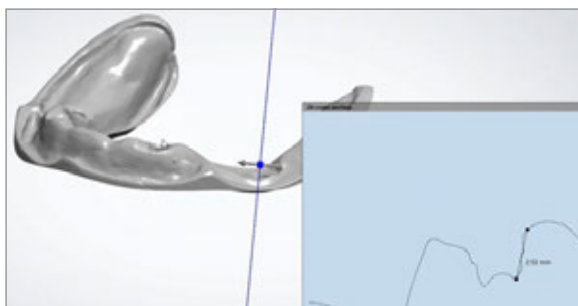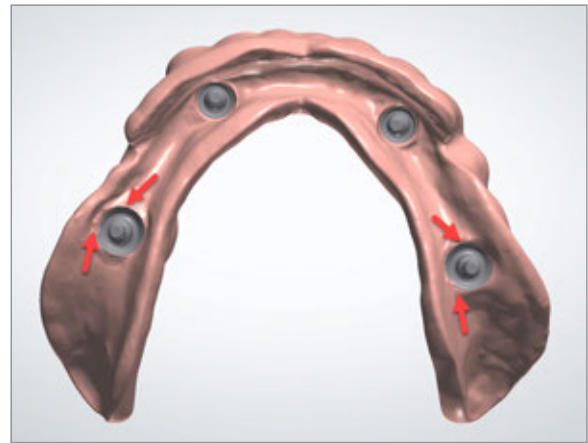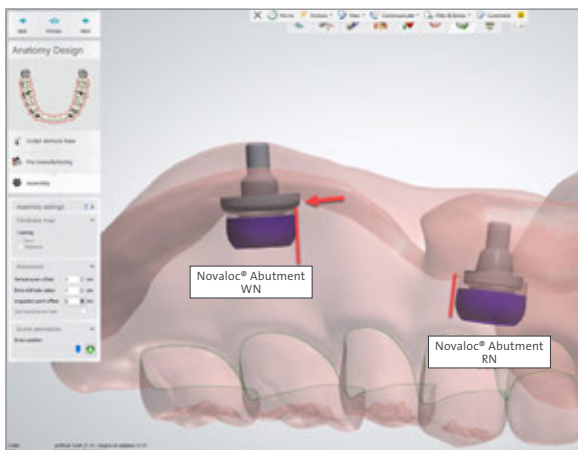
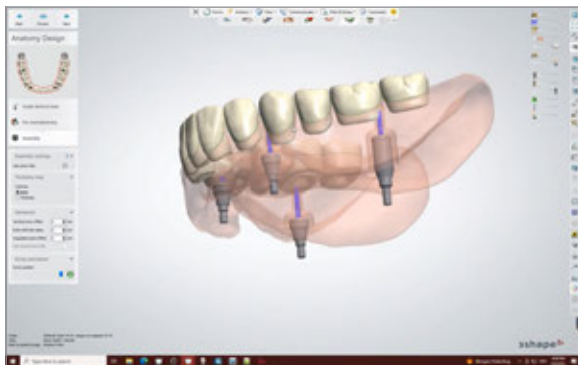Alternatively, the gingiva height can also be measured from the scan.

3

In the Surveying and Blocking out section, it is not possible to block out the Novaloc® abutment undercuts. This could lead to residuals in the denture and require manual reworking. The arrows below show where the undercuts that need to be reworked are.

4

Create the final denture design.

5

Use the Model workflow to design the model if a model is not already available and go through the standard steps.

Step 6

→ Close design module and export manufacturing output files.

→ Print or mill the denture and finalize.

→ Print the model.

→ Novaloc® housing can be cemented on the model.

NOTES

Technical handling information

NOTES

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