

	WORKINSTRUCTION	
	TEMPLATE	
	Code: TEMPLATE	Version: 1

**WORK INSTRUCTION PRE-PLANNING FOCUSED ON DENTAL PLASTER
MODEL SCAN.**

TABLE OF CONTENTS

1. INTRODUCTION 2

2. OBJECTIVE 2

3. ANATOMY INTRODUCTION 2

4. Maestro 3D Scan Training..... 3

 4.1. Create a new group of scan models: 4

 4.2. Scan the arcades. 6

	WORKINSTRUCTION TEMPLATE	
	Code: TEMPLATE	Version: 1

1. INTRODUCTION

Orthodontic white plaster models accurately record the static occlusion desired by the orthodontist considering the patient's upper and lower arch. The company design team requires the scan of the plasters in three positions (Closed Occlusion, Upper Arch, Lower Arch) that is performed in the Maestro 3D Dental Scan software and exported as STL files.

2. OBJECTIVE

This work instruction aims to give a detailed overview of all steps to be performed in the dental plaster model scan by company Planning Assistant using Maestro 3D Dental Scan software.

3. ANATOMY INTRODUCTION

The models facilitate the observation of the occlusal and dental relationship of the patients. The adult human being has 32 healthy teeth, and for their dental identification, there are 2 types of nomenclature common in the medical field. The “*Federation Dentaire International nomenclature*” consists of dividing the two jaws, upper and lower, into 4 quadrants from the centerline, between the central incisors backward.

The “*universal nomenclature*” or “*American Nomenclature*” that begins with the number 1 in the upper right third molar and then numbered the piece of the entire upper arch continuously until the third left molar with the number 16, for the lower arch continues with the lower third molar left with number 17 until reaching its contralateral with number 32.

WORKINSTRUCTION

TEMPLATE

Code: **TEMPLATE**

Version: **1**

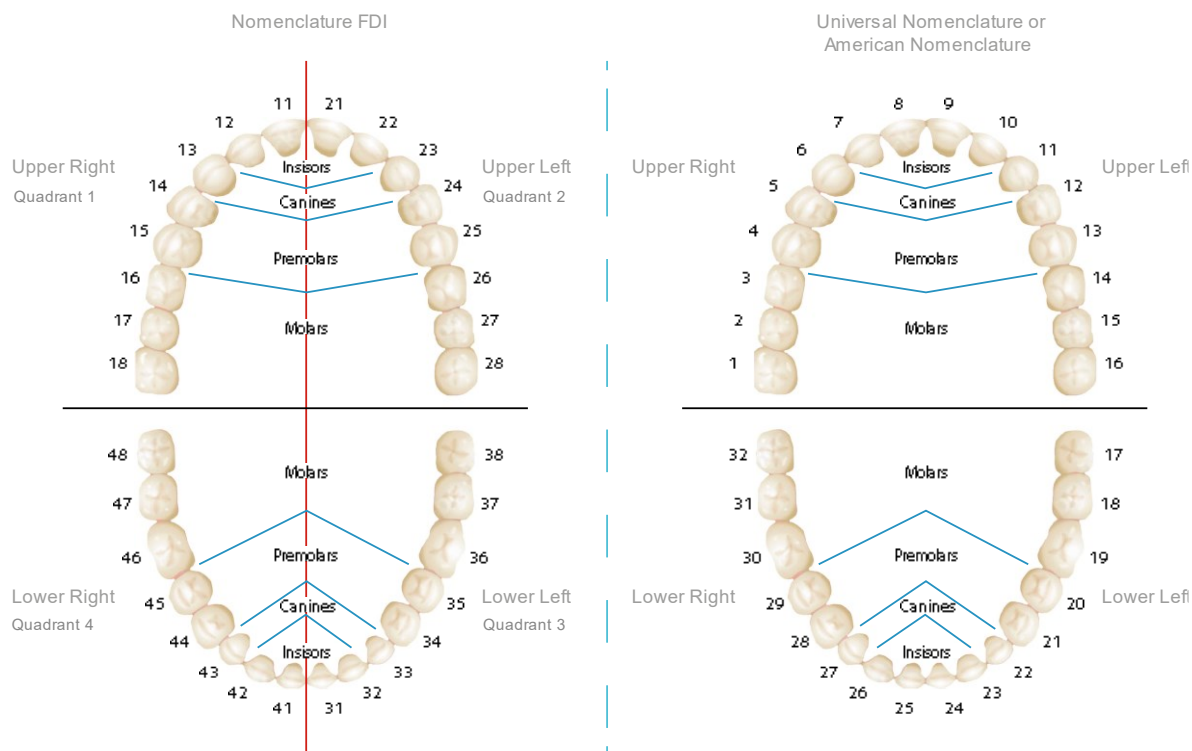


Figure 1. FDI Nomenclature and Universal Nomenclature.

4. Maestro 3D Scan Training

Verify that the occlusion is marked by the specialist, that it has been fixed with silicone or marked with positioning lines as shown in the next image.

Then the plasters must be separated and individually reviewed to confirm that the anatomy does not have any fracture of the material.

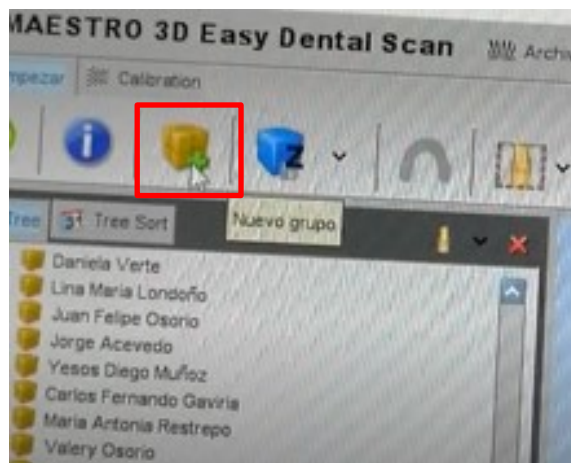
	WORKINSTRUCTION	
	TEMPLATE	
	Code: TEMPLATE	Version: 1



Figure 2. Dental occlusion.

4.1. Create a new group of scan models:

- Click on "new group" and then in the left window double click on the new folder that has been created to change the name and add the TDS code generated for the case in question.



A



B

Figure 3. Dental occlusion.

	WORKINSTRUCTION	
	TEMPLATE	
	Code: TEMPLATE	Version: 1

- It is recommended to locate the casts in the scanner in the right lateral view as shown in the figure.



Figure 4. Locate the casts.

- Click on "new acquisition" for the software to start the scanning process, The software activates a new window where the "Mandibular maxilla relation (M.M.R)" tool must be selected.

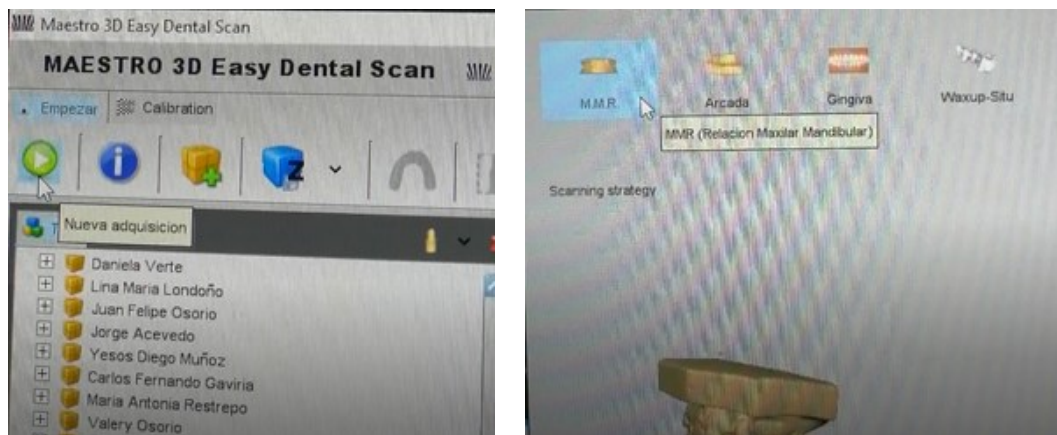


Figure 5. Select new acquisition and M.M.R.

	WORKINSTRUCTION	
	TEMPLATE	
	Code: TEMPLATE	Version: 1

- It is important to verify that the “MMR-default” option for this type of scan is selected, finally click on start scan.

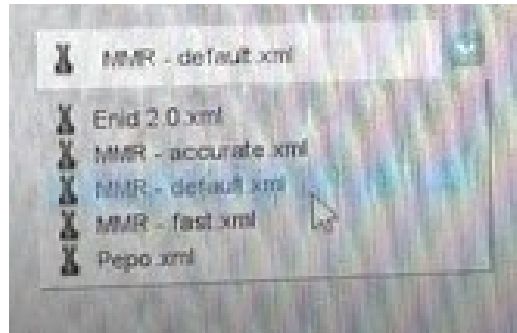


Figure 6. MMR default

Note: When the software is performing the scan, do not open the scanner door for any reason until it has finished.

- The software automatically displays the scanned casts on the main screen.

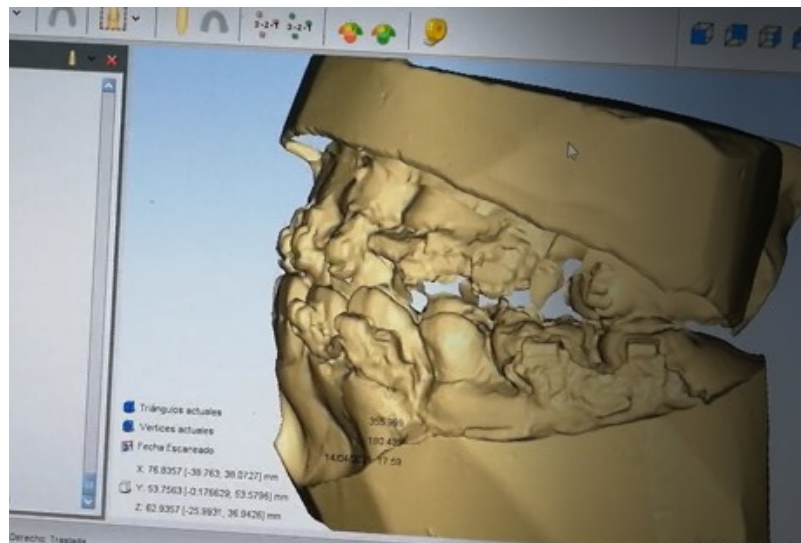


Figure 7. Scanned Occlusion.

4.2. Scan the arcades.

Separate the occlusion and place each of the arches separately in the scanning camera as shown in the figure.

	WORKINSTRUCTION	
	TEMPLATE	
	Code: TEMPLATE	Version: 1



Figure 9. Separate occlusion.

- For the scan of the arch to remain in the same folder where the occlusion is saved, you must first select the folder where the previously scanned occlusion is located and then you must click on "new acquisition".
- In the window that opens automatically you must select arches and then the type of arch that we are going to scan "upper arch" or "lower arch". Finally select the option "arch-default", and star scan.



Figure 9. select the type of arcade.

- repeat the same steps to scan the lower arch.