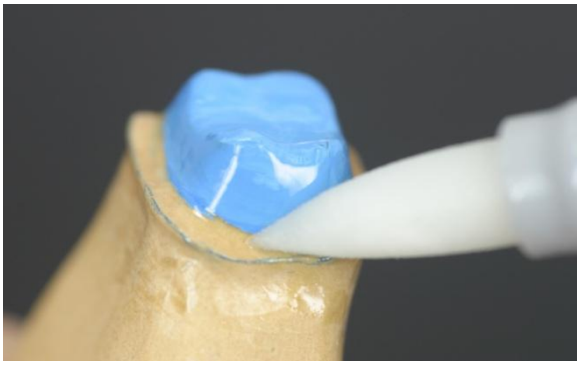
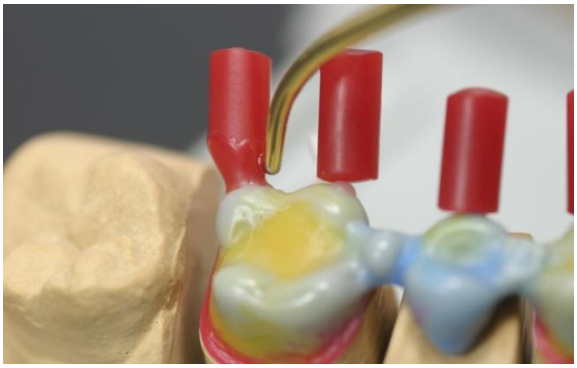
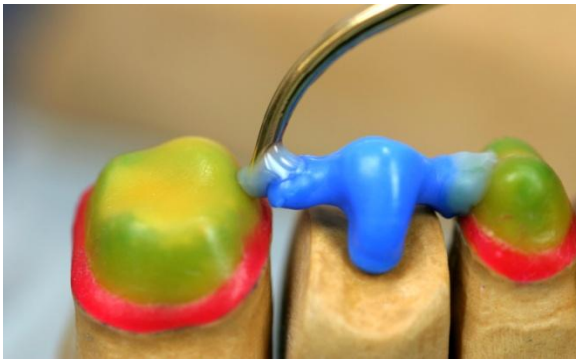
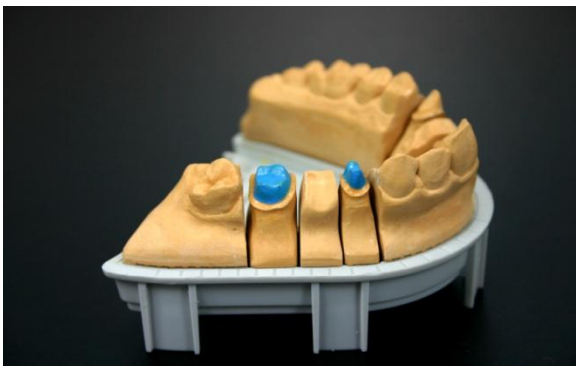
Wax Compendium









YETI DENTAL

Content

Wax Compendium

The working model is the trademark of the laboratory. It´s form, preparation, plaster and skill of the dental technician are all requirements for high quality dental work. The materials used are significant for smooth workflow and for successful finishing of the work. These are the subjects of this wax compendium.

Materials of the Yeti company have enjoyed the trust of customers worldwide for over 20 years!

Plaster
A very hard plaster, Yeti Rock Cream and hard plaster Lemon are important basic casting materials from the Yeti Dental company.

Block out process

Blocking out is adapted for undercuts, caries damage and bubbles. Different materials are going to be used for this work.
Light curing Die Bloc paste and Die Bloc liquid can be applied directly onto the raw plaster surface and then cured. Spacer can be applied onto both materials without exception. The new Cutex Bond is an innovative high-melting wax which can be covered by spacer. The classic Cutex wax which Yeti has produced for years should be applied after using spacer.

Die Bloc paste
This light curing block out material can be applied with instruments.

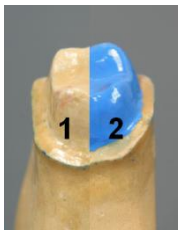
Die Bloc liquid
Due to it´s flow ability the Light curing liquid has the advantage that very small areas of damage in plaster can be blocked out. It can also be used to block out teeth whitening mouth trays which can be filled with gel. Light curing of Die Bloc can be processed in the PRECI NT SHUTTLE II/IV by Yeti.

Cutex Bond
Cutex Bond is wax based block out material. It should be applied before the spacer. It is high-melting and can be used while making a laminated mouth guard. Spacer holds on Cutex Bond without exceptions.

Cutex
This wax block out material should be applied after spacer.

Sealing

Yeti Die Spacer seals plaster and serves to simulate the space needed for the fixing cement. All your efforts are in vain if your preparation does not fit upon completion. Being aware of this, we offer a selection of SPACERS which fulfill even the highest demands. Smooth and homogeneous layering, scratch-resistant and even surfaces in different layer thicknesses.



Clear Spacer
For the fixing of margin line, sealing of the die, base for other spacers. Apply to below the margin line (1).

Die Spacer
Following layers (2) Die Spacer bonds with Clear Spacer. Enough space for fixing cement is prepared.

Spacer
7 mµ; 10 mµ; 13 mµ; oradd more thickness by additional layering. Apply beginning 1mm above the margin line.

Colours:

clear yellow red dentin blue gold silver

Special characteristics:
Spacers have different characteristics. Color Spacer red changes its colour from orange to red during the drying process, it does not contain colour pigments, is very flowable and transparent. Suitable for Inlay/Onlay technique. Die Spacer dentin is suitable for full ceramic technique with translucent crowns and inlays. Die Spacer gold/silver provide colour by friction if the crown does not fit exactly onto the die. It helps to avoid die damage.

Light curing Spacers
Light curing Spacers with homogeneous curing and very hard, scratch-resistant and durable surface. Layers can be cured in Preci NT Shuttle.

Colours:

clear blue red

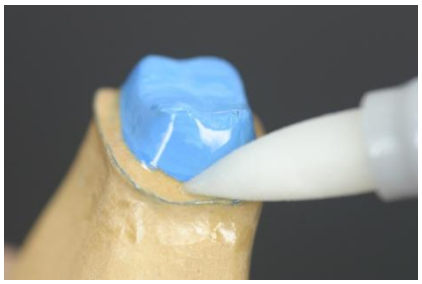
Due to their heat resistance Light curing Spacers are perfect for adapt ons and for laminated mouth guards. The foils can be put onto the die at high temperatures.

Separating

Yeti separating materials Lube and Iso Quick can be used for die-from-wax and wax-from-alloys separation as well as in the total prosthesis for wax-from-plaster separation. The Iso Quick pen is filled with Yeti Lube. It contains neither alcohol nor solvents, it´s water-soluble and has no chemical reactions with investments.

Yeti Lube / Iso Quick
Wafer-thin layer of Yeti Lube reduces streaks and rings inside crowns.

To make the layer wafer-thin simply reduce the liquid quantity with your fingertips.



Iso Quick
Since 1995 Iso Quick has meant economical use of liquid even in tiniest corners such as sharp line angle preparation for inlays. It makes wafer-thin separating layers, with no necessity to remove spare liquid by air flow.

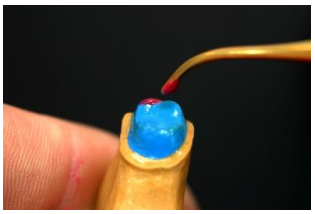
Preparation Set
This set is an accessory for systematic die preparation. Spacers and isolating liquid harmonize and are clearly arranged for use. Just insert the die into sponge and turn it by 90°. The micro fibre wick provides the sponge with the perfect amount of separating liquid from the tank. The separating liquid layer is always evenly thin. No wasting of material.

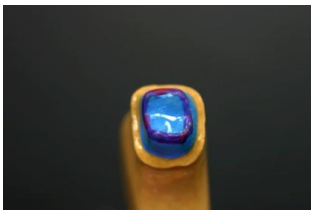
Dipping technique

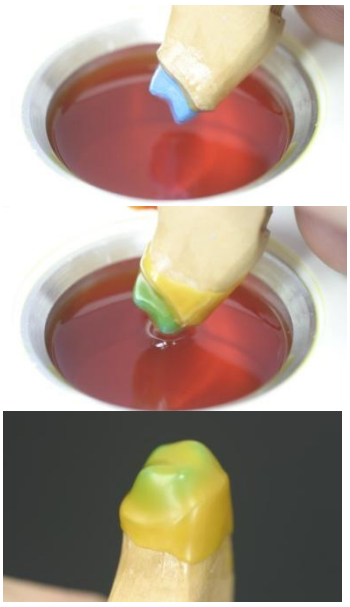
Melted dipping waxes are perfect for use on the die. Homogeneous structure and smooth surfaces mean high casting quality of metal coping and less finishing work.

Yeti dipping waxes
Duo Dip is ready to use granulated wax. Its form allows fluent melting.
Preci Dip is precise dipping wax in plate form and yellow and red colours. It´s slightly elastic and stable.
Elasto Dip is a highly elastic and stable wax due to added natural resin. It´s especially suitable for secondary parts in telescope and conus technique.

Yeti dipping units
Dippy NT Digital is place-saving due to its ergonomical design (no need of an additional transformer). With no wear intensive parts, temperature control is via contact sensors and there is a two-line LCD display. Simultaneously indicating the set and current temperature, automatic memorization of the latest data adjustments is included.



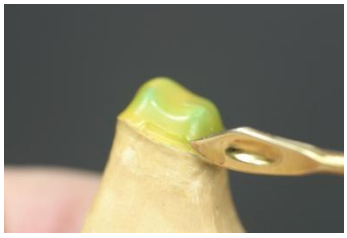




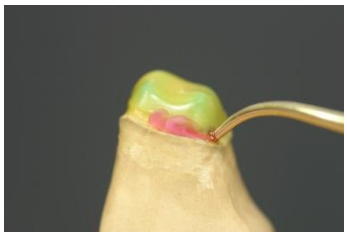
Workflow:
Normally the isolated die should be dipped once to get an even wax surface. If sharp-edged parts on die are present, they should be smoothed by underlining wax. Easy preparation and smooth metal coping are the results required for ceramic work. The creation of the reduced tooth shape can be started.

Wax coping

Dipped wax copings fit exactly onto the model if created in a proper way. Depending on wax temperature the coping can have different thicknesses. For this reason the Dippy wax pots are adapted to dipping waxes. IQ Waxer knives are perfect for further wax up works because the constant temperature control secures minimal wax shrinkage. Modeling tips in different forms and sizes can be used in a great variety of dental technician works.

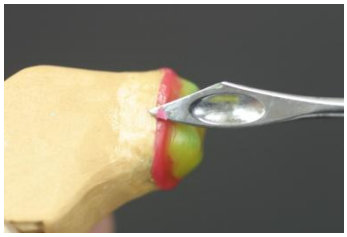


Wax coping
This method of wax coping has long been the most popular. Edges can be cut using a hot knife or a sharp instrument.



Cervical wax
The coping edges should be completed by tension free cervical wax using a hot wax knife. This wax builds a soft flowing layer which can be thinned to a wafer-thin margin.

IQ Waxer NT light
Precise temperature control, “Continuous” and “Touch control“- functions.
Due to different modeling tips IQ Waxer NT light is a multifunctional unit for all dental techniques. The modeling tips heat up and cool down in fractions of a second.

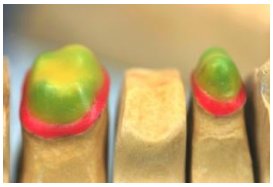


Cervical margin
The border to the margin line is extraordinarily important for high quality coping. If it changes its form or tears while adjusting with an instrument, this flaw will be copied in metal and can be corrected only by soldering or laser.

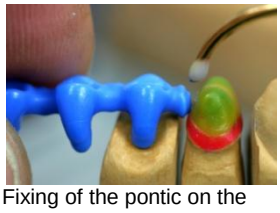
Underlining wax
This wax is an alternative to dipping waxes in case of cavities or sharp line angle preparation. It serves as a buffer zone between hard sculpturing wax and the die. It is tension free and doesn´t deform.
It should be applied with a wax up instrument because air bubbles are unavoidable if dipped.

Bridge modeling

Before making a veneer bridge, a bridge construction should be created. Placement of the pontics and the making of a bridge with wide remote parts will be explained in the following working steps.



Tooth abutments with dipped wax coping



Fixing of the pontic on the 4th

Cuting off the pontic

Fixing the pontic on the 6th

Preparation of the bridge for casting in metal
View from buccal
Distances of more than 2 mm to the counter bite should be avoided for veneers because of high breach danger. This is the reason why the cusp areas get support modeling.

View from lingual

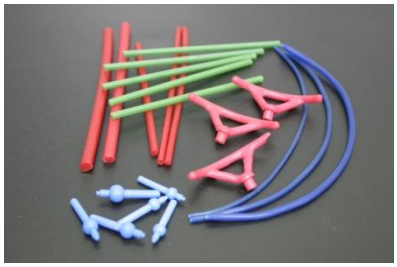
Yeti Retentions and Stick on wax
For later fixing of points to ceramic layering, a small drop of very sticky Stick on wax is applied close to the preparation border. One small retention can now be placed. It adheres to the wax and its angle can be regulated and fixed due to the sticking characteristics of Stick on wax.

Stick on wax / Yeti Retentions

Casting preparation

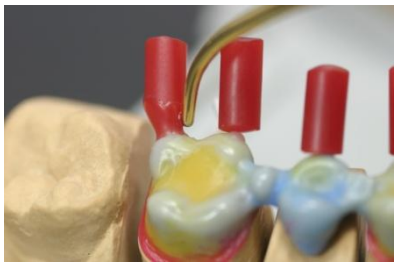
After the wax bridge is finished and fixed on the model it should be provided with sprues and prepared for embedding.

Casting channels
Use Stick on wax to fix the casting channels. One small drop is enough.



Casting channel assortment
Yeti company offers different casting channels. These are soft rolled wax channels or hard IQ sticks, sprues with reservoir and preformed IQ Triangle casting bars with feeding channels. In addition quadratical IQ Quadro Sticks are available. All channels are used to channel the alloy flow to the wax bridge during the casting.

Fixing cutting channels on the casting
Casting channels of 2,5 mm should be fixed on to the casting model. Stick on wax assists you during this careful works. Small warp during fixing can cause problems for the technician if a previously perfectly fitting bridge sways after fixing.



Working temperature
Protect the casting object against heat to avoid deformation. By using a hot wax knife of ca. 90°C touch the casting object slightly, the casting channel will be fixed and rejuvenates by itself. The junction to model is round and without edges. The melting flows in an optimal way.

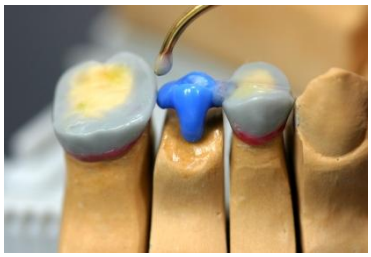
Completion
Casting channels should be cut to the same height. Connect them by cross channel and lead channels to the casting funnel. The bridge is ready for casting.

Model preparation for NAT wax up technique

To understand the wax up concept of Dieter Schulz it is necessary to observe all contact surfaces of the corresponding teeth and their role in the dynamic occlusion. This easy to implement instruction can help you to learn the technique. The model we have chosen for the overview has no special qualities and shows the process in the simplest steps.



Making the wax coping
On the previous pages we have already studied this process. The new point is the creation of a plateau which ends on the occlusal. It shows the tooth in its original diameter and the modeling is finished in its cervical part.



Separating and pontic
The model under the pontic should be isolated with an ISO Quick pen; the pontic connects both plateaus and should be waxed onto them.

Ready plateaus
In this simple way an easy training model is created where NAT technique can be practiced and implemented. The counter bite should be used to find out the stop points and the dynamical occlusion.

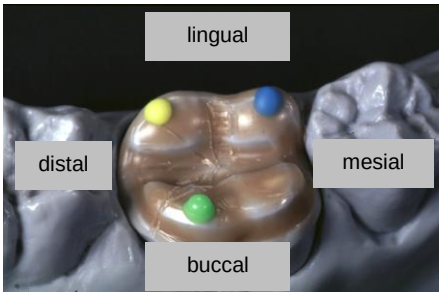
Tribos 501
On the following pages we go on with an explanation of Dieter Schulz NAT concept. Due to Dieter Schulz the Tribos 501 teeth of Gebdi company represent a consequent development of this functional concept and its implementation into total prosthesis.
www.gebdi-dental.com e-mail: info@gebdi-dental.com

Natural Wax-up Technique NAT by Dieter Schulz

Applying the concept of Natural Wax-up Technique (NAT) the creation of teeth which are similar to nature in their constructional morphology is possible. A reproducible standard can be reached by segmentation and colour marking. Natural mechanical movement coordinates are systemized in the occlusal compass and are reflected by the wax-up concept. Each functional direction corresponds with its own wax colour to make the influence of each segment onto masticatory movements immediately visible.

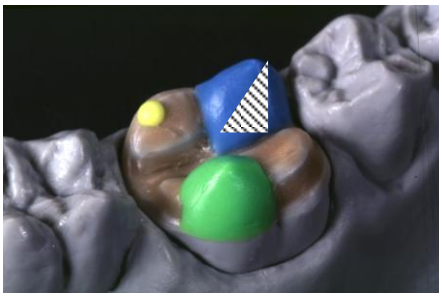
Ask for our dental course program or see www.dentalkurse.com

- ● = disto – buccal cusp
- ● = Underlining wax
- ● = mesio – lingual cusp
- ● = Cervical wax
- ● = disto – lingual cusp
- ● = mesio – buccal / approximal disto – buccal cusp

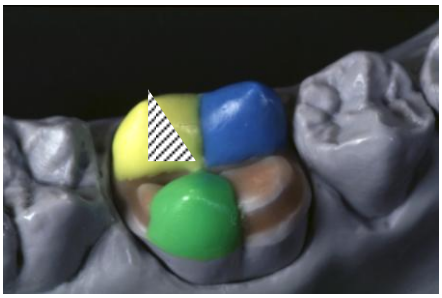


Positioning of wax points on the die or on a created plateau, in this example on lower jaw, to reproduce the external form of the tooth. Disto-buccal cusp is the point to start with (green).

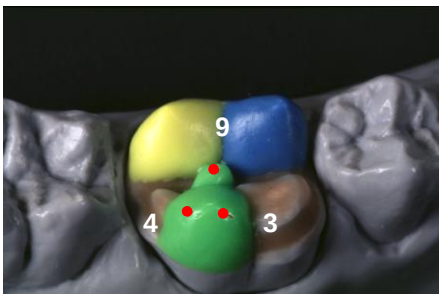
The wax drops can be brought up almost to the final cusp height if placed in a technically correct way. Check the articulator if they get the first contact. Each wax drop should be modeled to a conus shape and should have convex surfaces only.



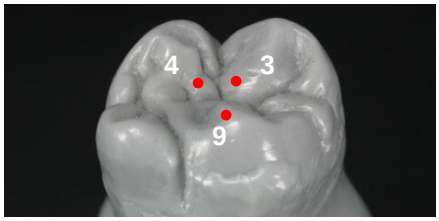
Also a mesio - lingual cusp (blue) should be waxed up to a conus shape. It has no contact points with the opposite tooth.



Disto-lingual cusp (yellow) has no contact points and should not be reached by mesio-palatinal cusp of upper jaw during latero-protrusion movements.

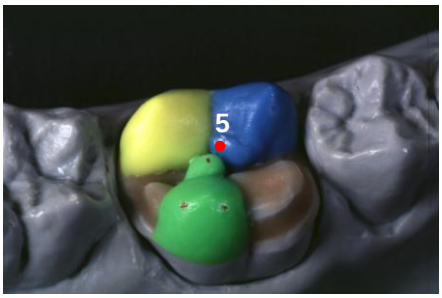


Medio-buccal cusp is prelocated to disto-buccal cusp. Contact No 9. On the conical tip should be modeled to a shape element. On the opposite jaw it contacts with the mesio-palatinal cusp, on the buccal triangular cusp and under the conical tip. Contacts No 3. and No 4. are going to be completed on the conus.

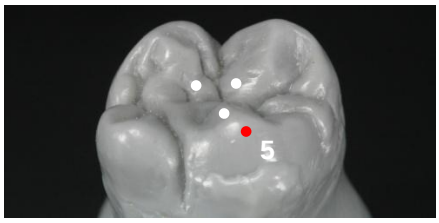


Contacts No 3; 4; 9 on upper jaw

Mesio lingual cusp of the lower jaw which is completed by the buccal triangular cusp.

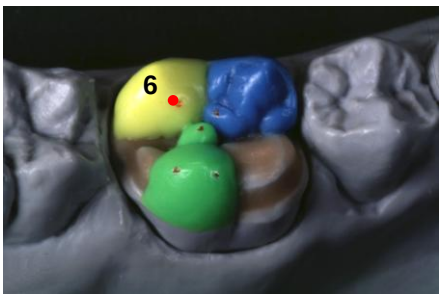


Mesio – lingual cusp should be completed by a pre-located element. It contacts in point No 5. with the mesio – palatinal flank of mesio – palatinal cusp of the upper jaw.

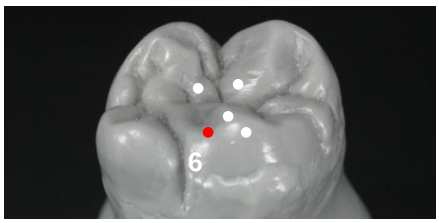


Contact No 5.

A mesial and distal enamel crest completes the mesio – lingual cusp.



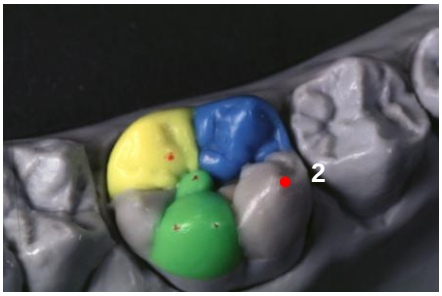
The disto – lingual upper jaw cusp has the stop No 6. on its buccal triangular cusp.



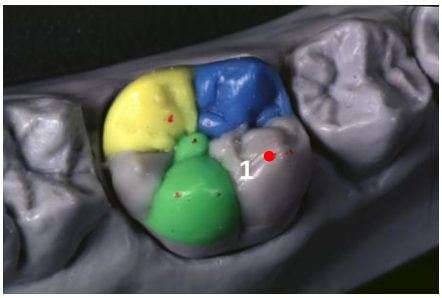
Contact No 6.

After the closing of articulator the disto – lingual upper jaw cusp shows stop No 6 on the disto – palatinal incline of the mesio – palatinal cusp of upper jaw. On this place we have a 3 point contact (tripodisation). The cusp should be completed mesial and distal by an enamel crest and auxiliary ridge.

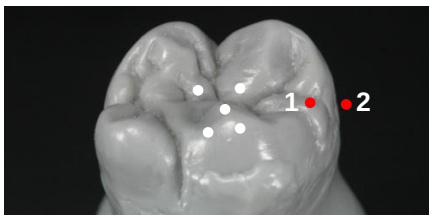
In grey wax the cones of mesio-buccal and disto-buccal parts of the cusp should be modeled.



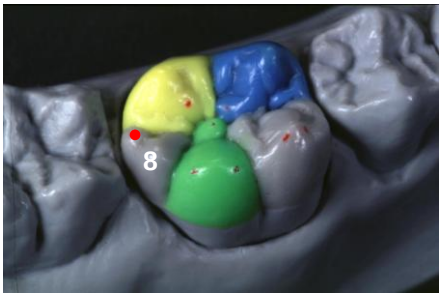
A further stop No 2. takes place on the mesial enamel crest of mesio – buccal cusp of the upper jaw. The crest merges into mesial subordinate ridge. The mesio – buccal conus was extended to a triangular ridge. Its mesial enamel crest starts on the conical tip and forms also the mesio-approximal edge ridge which has approximal contact to the neighbouring tooth.



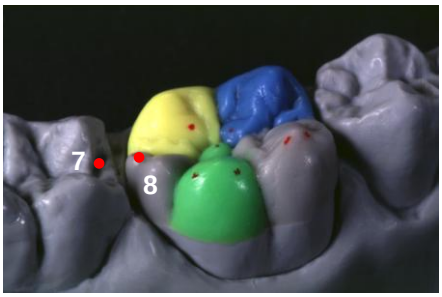
In distal direction the mesio – buccal cusp is going to be completed, starting from fossa, by a mirrow-inverted L-formed ridge. One further stop No 1. is situated on distal side of the mesio – buccal conical tip.



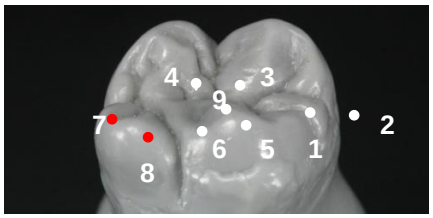
Contact no 1. Contact no 2 is situated on the disto-approximal marginal cusp of the 2. premolar on upper jaw.



The last cusp to complete is the disto – buccal cusp of lower jaw molar. The part to finish is the disto – approximal marginal ridge which close the lower jaw molar in distal direction and supports the 2. lower jaw molar in approximal direction. On this place a further stop no 8 is situated.



Disto-palatinal cusp of upper jaw corresponds in the stop 7 with the mesial marginal enamel ridge of the second molar on the lower jaw. This is unimportant the making of our first lower molar. It's described for reasons of completeness.



Contact No 7 and 8.

View of lingual.

View of bucco – mesial.

After the modeling
The occlusal surface should be carefully cleaned of wax remains. Use a brush and some soapy water. All wax particles which remain in the fissures will cause problem areas in casting.

Yeti Finale

- layer of ca. 2-3mµ
- for smoothing of surfaces
- contact areas are going to be strengthened
- scratches and uneven surfaces disappear
- short drying time
- better casting results

IQ K & B casting waxes for Natural Wax-up Technique by Dieter Schulz were used in these examples for modeling training. In everyday work monochrome wax is going to be used for quick creation of tooth structure. Nawax Compact modeling wax by Dieter Schulz is perfect for this purpose. It is available in grey, sand and apricot colours.

Creation set
This set of colored waxes brings you closer to nature. In this way patient-friendly accurate dental restoration can be constructed and quickly tested and adapted in the patient´s mouth.