# **Swissfloat User Manual**



Swissvet Veterinary Products 2010

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# General information:

Swissfloat has been a great success in the equine dentistry market for almost 20 years. Swissfloat is easy, fast and very gentle for horses. Swiss manufacturing guarantees highest quality and a 1 yr limited warranty.

Swissfloat is the most practical and versatile instrument for visual and non-visual dentistry. The head of the Swissfloat is round and smooth and the disk is well protected by lateral disk guards.

The new slimline Swissfloat is the thinnest rotary float on the market and it is designed to easily reach the last molars (such as the 311 and 411) - even in smaller animals or miniature horses.

Swissfloat is available as a corded or cordless model. The motors are interchangeable.

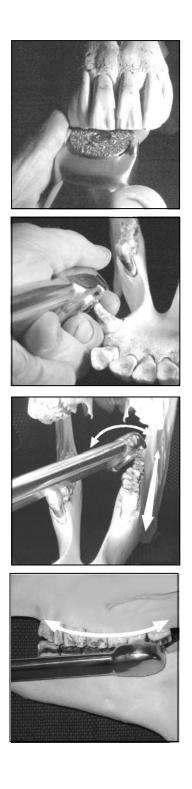
Swissfloat is most efficient. Floating teeth is very easy and thorough - yet very fast. The disk guards do not only protect the oral mucosa from being injured, at the same time they stabilize the instrument during floating by preventing the grinding head from sliding off to the side. This is extremely helpful for non-visual dentistry.

## Safety precautions:

Please be aware that accident can occur when working with horses. Read the user manual carefully and work with experienced assistants only. Please inform the client of the potential risks of dentistry procedures. Always use adequate sedation and a full mouth speculum for examination and treatment.

Swissfloat is very safe and gentle, however it is recommended to use personal protective items such as glasses, masks, gloves and hearing protection. Avoid loose clothing or jewelry, and protect long hear with a hat or by tying it into a pony tail.





## Incisors and Canines

Use the Swissfloat incisor speculum. The procedure is best done at the beginning of the dental work when sedation is the strongest.

Incisor work should be done conservatively and large adjustments are best done over a period of several months and not in one session. Incisor work can very well be done with the regular Swissfloat but there is also a short 7" float available without disk guards specifically designed for incisor work.

Canine work is often done for cosmetic reasons only. Make sure not to open the pulp cavity during any of the grinding procedures.

<u>Position</u>: - Preset the desired speed on the thumb-wheel of the trigger and lock the trigger of the motor. Place the instrument over your shoulder and guide it with one hand holding the head and hold the mandible or maxilla with your other hand.

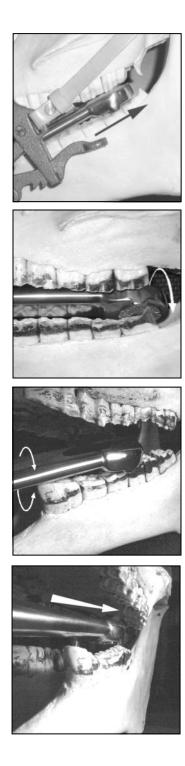
## Points on lower and upper arcade:

Sharp enamel points are seen at the lingual aspect in the mandible and the vestibular aspect of the maxillary cheek teeth. Smoothening these points is one of the main procedure during equine dentistry.

<u>Position</u> – lower or upper arcade: place the shaft in a 45 degree angle on the lingual (lower arcade) or vestibular (upper arcade) side on the points to be floated. Alter the angle of the shaft between 30-60 degrees during floating. Start at the most rostral cheek tooth and move the shaft caudally.

Lowering the opening of the speculum on the treatment side decreases the cheek tension and increases the space between cheek and molars

It is crucial to float only until the points are no longer sharp and to preserve as much of the grinding surface as possible.



#### Hooks on lower and upper arcade

It is recommended to smoothen the enamel points first for the float will more easily reach hooks on the last molars.

You may use your hand to guide the float for rostral hooks on 1/206. Use precaution when having a hand in the mouth for guidance.

Hooks on the last lower molars (3/411) are most commonly seen, but hooks the upper arcade and on the first cheek teeth are often encountered and they are reduced accordingly. Hold the float straight or diagonally when floating hooks on the first cheek teeth.

<u>Position</u>: Beginners may prefer a visual approach, most advanced users are able to place the float into the correct position by feeling only.

Make sure the grinding disk is in the appropriate position over the molar hook. Mild cases: Place the shaft between the two arcades to float small hooks. Use the roll-over approach for longer hooks; start from the medial (lingual/palatal) side and gradually roll to the top of the hook.

Molar chisel or cutters have a high risk of creating a tooth fracture and they are no longer recommended.

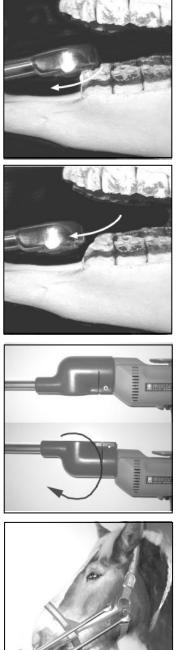
#### Waves and steps

Using the diamond disk will decrease the grinding time and minimize the heat production. Do not reduce too much tooth material in one session. There is a risk of pulp exposure, or lack of molar contact if too much tooth material is removed at once.

<u>Position</u>: place the grinding head over the desired area and float with medium speed.

Since a large amount of tooth material needs to removed, it is important to clean the disk several times during floating from the dental debris. When using water for cleaning, the disk is cooled at the same time which reduces excessive heat production.

Waves should be treated conservatively, for it is our opinion that overfloating results in reduced molar contact requiring incisor reduction.



#### <u>Bit Seat</u>

Bit seats refer to the creation of a round surface of the mesial (rostral) portion of the first cheek teeth in the upper and lower arcade.

It has been shown that horses with bit seats may significantly improve their athletic performance. Side effects are uncommon as long as the procedure is done gently without heat production and without opening the pulp cavity. Do not remove an excessive amount of tooth material.

<u>Position</u>: - Holding the head of the float with one hand helps to better guide the instrument – which requires a full mouth speculum and must be done with precaution.

Place the head flat on the second premolar. Press the head down while pulling the shaft rostrally. Repeat the procedure multiple times and change the position of the shaft from straight to a more diagonal position until the desired degree of rounding and smoothing is achieved.

# Rotate the shaft:

The Swissfloat shaft can be rotated freely. Once the set screw on the gearbox is loose, the shaft can be rotated.

Rotating the shaft is used by some dentist to switch from the lower to upper arcade. Others prefer turning the entire instrument for work on upper teeth.

Some users like to rotate the shaft to a preset angle in accordance to the table angle.

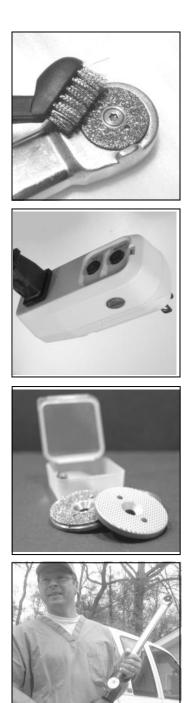
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#### Float size:

The longer 21" (52cm) shaft is the traditional length of the Swissfloat. Since the introduction of the slimline Swissfloat in 2002 the instrument is also available in a shorter 17" (42cm) version.

The shorter 17" shaft is more convenient to handle and it is long enough to work on draft horses. For exclusive work on very large horses the 21" model might be more convenient.

There is also a short 7'' float available without disk guards for incisor work.



#### **Maintenance**

Maintenance is minimal in the Swissfloat. Lubrication is not necessary.

The disk must be cleaned it after each use. Dried dental debris becomes very hard and is difficult to remove from the disk. We recommend a wire brush and water to clean the disk.

The head of the Swissfloat is water resistant, but there is a risk of water entering the motor which is an electric shock hazard. We recommend a GFCI protection for the corded model and restricted use of water.

A belt drives the disk. If a horse bites on the disk, the belt slides and no clutch is necessary. The belt does not require maintenance, but it may become loose over time. Please refer to the manual for the belt tension adjustment.

#### **Disk Selection**

Three grinding disks are available for the Swissfloat: a carbide disk (right) and a diamond-chip disk (left). The diamond disk is available as a medium cut, or a coarse cut with larger diamonds.

We recommend the carbide disk for users with little experience with the Swissfloat. The disk grinds not as aggressive as the diamond disk and leaves a smoother grinding surface. You can expect to float 50-100 horses with the carbide disk. Prolonged floating with the carbide disk will increase the heat production.

The diamond disk floats faster and the disk is more durable. You can expect to do 200-600 horses with the diamond disk. Heat production is less compared to the carbide disk.

Most Swissfloat users switch to the diamond disk after an initial beginner phase.

#### Service:

We recommend yearly service on Swissfloat for cleaning the instrument and replacing bearings and seals. The service is offered in the US, Canada and Mexico.

Please contact Swissvet if you need a replacement instrument during maintenance.



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