

**Pegasos Edition** 

# 2018 CATALOGUE

High Precision Extraction

Him & Y English

For veterinary use only

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# GENERAL EQUIPMENT





## EQUODENT – DENTAL TROLLEY

Our treatment trolley was developed to place the expanding equipment for routine equine dentistry in a safe and tidy way. It creates a workplace which is easy and fast to set up, take down and accommodate in the practice car. Its versatile cube shape and mixture of materials (coated multiplex boarders and aluminium drawers) make the trolley light and at the same time robust. Its surfaces are easy to clean and durable. It fits through every door with standard widths. It is easy to manage and fits into most compact cars.



ArtNo. #	Description
PEGA_313000	Treatment-Trolley
PEGA_314000	Equodent Dental Burr Model Richard Miller
PEGA_315000	Equodent Dental Burr
PEGA_311005	Dental Burr Bit (3,175 mm)
PEGA_311001	Dental Probe long, strong (18,5 mm)
PEGA_311003	Dental Probe short, fine (15 mm)
PEGA_311005	Dental Halter
PEGA_311008	X-ray-Block

## EQUODENT DENTAL BURR MODEL RICHARD MILLER

This bullet nose head dental burr is especially useful for horses with smaller heads and for the last cheek teeth (11) where most conventional equipment quickly faces anatomical limitations.



## EQUODENT DENTAL BURR

This burr with IC 300-Nakanishi head was developed for the following applications:

- diastema work
- cheek teeth sectioning
- tooth crown remodeling to improve the grip of the extraction forceps
- pre-drilling during Minimal invasive Transbuccal Extraction.

The shaft bearing is greased which makes it "waterproof" and running quiet without vibrations. It has an external water supply, enabling water cooling during drilling. It is available for both HDE-shaft and dremel Key Drive.





## DIASTEMA BURR

This diamond-coated burr with a diameter of 0.12 inches (3.175 mm) was developed for diastema work. It fits the IC 300-Nakanishi head.

## DENTAL PROBES



This dental probe was developed for exploring teeth and cleaning interdental spaces. It is available in a long and robust version (0.71 inches - 18,5 mm) and in a short and fine version (0.59 inches - 15 mm).

## DENTAL HALTER

The separation of dental halter and mouth gag reduces the pressure on the incisors during treatment. Switching between working with and without mouth gag becomes easy.

Furthermore it provides a safe handling of challenging horses during injection.

The dental halter is covered with leather and has a soft and durable padding.



## DENTAL X-RAY BLOCK



This block is a simple tool to open the mouth in 3 different angles for mouth radiographs. It is well tolerated in slightly sedated horses.

## EQUUS JET Multi-purpose rinsing device



This powerful compact system has been developed for mobile practioners in their everyday equine dentistry. Its lithium ion battery has a 1-week autonomy.

It is the perfect equipment for washing the mouth before and after intervention, diastema work and cooling afterwards.



Optional foot pedal



Optional sinus kit

## INSTRUMENTS FOR DENTAL EXTRACTIONS





## THE EXTRACTION SYSTEM FROM PEGASOS4D MODEL: HAUPTNER

## Edition: Johann Heinrich Friedrich Günther



## Benrtheilungslehre des Pferdes.

Die

cand mea

Rebft einem Unbange

liber die Lehre von den gefunden und tranten Bahnen.



Die Jange Fig. 16 unterscheidet sich von der Fig. 15 dadurch, daß der Charniertheil nur  $2^{1}\!/_{4}$ " mißt, die Maulweite  $3'_{|8}$ " beträgt, und die Maulwangen  $5'_{|8}$ " hoch und  $6'_{|8}$ " dich sind.

#### **Comments on Model and Edition**

Model Hauptner: The development and construction of these instruments was supported by the company Hauptner. Hauptner has more than 150 years experience on making instruments and produced in the past some of the best forceps available at that time.

#### **Edition: Johann Heinrich Friedrich Günther**

Who was J. H. Friedrich Günther and what influence did he have to the method of oral extraction of teeth?

He was born in 1794 in Germany. He got educated in Jena, Berlin and Hanover. After he had finished "Royal Equine Vetschool" Hanover in 1818 he started to work as a veterinary surgeon. Only one year later he was called by the school to become a teacher. Apart from his work at the vetschool he ran a private clinic where he tought the older students the practical part. Additionally he was an inspector at the Marstall and gave lessons at the military academy. Since 1840 he did research as well.

In 1847 he became the director of the Hannovarian vetschool. He strongly increased the level of education of veterinary surgeons during that time.

Alongside teaching he did tremendous high а quality work concerning the development and surgical construction of instruments. Furthermore, he gathered a comprehensive collection of diseased teeth. He is, indeed, considered as a founder of the equine dental surgery. Together with his son he wrote a booklet about horses' teeth which was published in 1859, one year after his death.

Even 50 years after, his extraction forceps were widely used and highly valued. He was doing oral extraction of equine teeth at a high level. Unfortunately this knowledge got lost over the following century. His early work is only little known and it is a mission to make it accessible again to veterinarians. His early literature of 1859 is highly recommended because it is still up to date in many aspects. In order to support the rediscovery of his work we named this forceps and spreader line after him: Edition "Günther". The Spreader and Forceps System was developed to improve oral

extraction techniques in equine dentistry.

Great efforts have been invested to design the instruments as ergonomic and efficient as possible. The different sizes of spreader blades enable a standardized stepwise working process. Thereby, the duration and success rate of the extractions are influenced very positively.



The extreme precision of the joint creates the possibility to disassemble and reassemble the single halves of the instruments.

of combinations not lt | enables а variety that has been available within vet. like the combination of spreader and forceps one instrument. It is most helpful in cases of slab fractures and very tight interdental spaces especially in the lower jaw. It also enables a thorough cleaning of all parts.



#### Manufacturing

- Instruments are made of heat-treated surgical stainless steel.
- The body is milled out of one piece on a 5-axis-CNC-milling centre.
- The spreader inserts are laser-welded and labeling is done with a laser marking system.
- The construction was tested with FEM-analysis and does still have, at a 80 kg handle pressure, a safety factor of 3.
- Made in Germany.
- 5-year warranty.

#### General notes on maintenance

The possibility to disassemble the instruments enables an easy and thorough cleaning. This should be done after each use. From time to time the fulcrum pin should be treated with silicone spray for surgical instruments.

All instruments are fully autoclaveable and chemically disinfectable.

## MOLAR SPREADERS

Molar spreaders are used to loosen the periodontal ligament and hence the tooth, through applying it to the interdental space.

There are three different sizes of spreaders. They allow a standardized stepwise working process. This enables a very careful and crown-saving work. It significantly improves the success rate of oral extractions.



## Differences between No. 1–3



Molar Spreader No.1, the thinnest one with a 0.16 inches (4 mm) thickness (blue), does additionally have a cleft (red) between the jaws. Therefore, the handles don't need to open that far. This enables a more ergonomic first spreading step. One can apply a much more controlled force. This is especially helpful in case of fragile teeth.

The varying jaw thickness enables different spreading effects.

**Spreader No. 1 – Narrow** – the 0.16 inches (4mm) thickness works much finer than No. 2 – Medium. No. 1 is mainly used as the first step spreader for the maxillary cheek teeth because they are wider than mandibular cheek teeth.

**Spreader No. 2 – Medium** – the 0.19 inches (5 mm) thickness works for the upper jaw as a second step and for mandibular cheek teeth as a first step.

**Spreader No. 3 – Wide** – the 0.24 inches (6 mm) thickness is used only partially (1/3-2/3) for the maxillary cheek teeth and up to full effect for mandibular cheek teeth.

It is recommended to use the forceps to loosen the tooth with rotational movements between the spreading steps, otherwise the risk of breaking the tooth/roots will increase.

## Interchangeability



Additionally, the application of spreaders in combination with forceps is possible thanks to its interchangeability. This is especially helpful in cases where the interdental space is not wide enough to use conventional spreaders. This is the case in slab fractures and in the lower jaw.

Cavity: one has to be careful on side of the forceps part otherwise breakage of the tooth can occur.

## EXTRACTION FORCEPS



Extraction forceps are used to further loosen teeth with rotational and tilting movements and finally to extract the teeth in combination with a fulcrum.

The **Extraction Forceps No. 1** is particularly helpful for mandibular cheek teeth extractions but can be used for the upper jaw as well.

The **Extraction Forceps No. 2** is specifically designed for the wider maxillary cheek teeth.

The Extraction Forceps can be disassembled and reassembled again in many different ways like the spreaders.

For horses with small heads we developed the **"Pony Model"**. The actual version is dedicated to **Professor Padraic Dixon** from the University of Edinburgh who, at the end of the 20<sup>th</sup> century, made great efforts to reintroduce oral extraction techniques.



## **REVERSE FULCRUM**

Thanks to this NEW Reverse Fulcrum Extension there is no extra Reverse Fulcrum Forceps needed. This system works both for lower and upper cheek teeth. It is especially recommended for 06 and 07's. It can be a quite helpful approach for lower 09 and 10 as well due to the curved nature of these teeth.



ArtNo. #	Description
PEGA_321020	Molar Forceps – Pony
PEGA_321001	Molar Forceps No. 1 – large
PEGA_321002	Molar Forceps No. 2 – large
PEGA_321010	Reverse Fulcrum Extension (fits Molar Forceps No. 1 and No. 2)

## KIT FOR MINIMALLY INVASIVE TRANSBUCCAL EXTRACTION (MTE)

The MTE-technique is indicated in the following cases:

- Force applicable to the crown is insufficient
- Crown is broken off or too fragile
- Malformation of the crown
- Removal of root fragments

To use the MTE Kit, it is necessary to attend a workshop where this technique is taught in-depth.



ArtNo. #	Description
PEGA_322000	MTE Kit

## DENTAL PICK SYSTEM: 4 DIFFERENT HANDLES

Dental picks are intended for intraoral use. There are 4 different handles, coresponding to 4 different angles:



The **0**° Handle can be helpful for the mandibular jaw.



The **8**° Handle is the most often used one (up to 80% of the cases can be solved with it). Inserts can be used in a backward direction as well (helpful for lower premolars).



The **18°** and **30°** Handles are used for the more caudal teeth.

## INSERTS

Additionally, there are different types of inserts available. They can all be used with the short straight handle (see page 20) as well to have even more versatile applications.



Narrow Luxator Set – 4mm (5 lengths) The narrow luxators are used for extra small fragments.



**Chisel Set (4 lengths)** The chisels are used to get into the interdental space to loosen or remove tooth fragments.



**Probe Set (5 lengths)** These probes are particularly useful for exploring deep fistula canals and other dental and periodontal pockets.



Sharp Spoon Set (4 lengths) These curettes are useful for cleaning the tooth socket and removing deep root fragments.

## DENTAL PICK SET-BASIC

This set contains a 8° T-handle, a set of 0.19 inches (5 mm) luxators in different lengths, a screwdriver and an autoclavable storage block. It can be used to loosen gingiva, to remove tooth fragments or remaining roots. The luxators have a fine and sharp tip and can be applied in any direction.

The short and blunt insert is intended to keep the screw in place during transport.



ArtNo. #	Description
PEGA_310100	Dental Pick Set – Basic contains T-Handle – 8°, Wide Luxators-Set – 5 mm, Screwdriver, Storage Block
PEGA_310101	T-Handle – 0°
PEGA_310102	T-Handle – 8°
PEGA_310103	T-Handle – 18°
PEGA_310104	T-Handle – 30°
PEGA_310000	Wide Luxators Set – 0.19 inches (5 mm), 5 different lengths
PEGA_310010	Narrow Luxators Set - 0.16 inches (4 mm), 5 different lengths
PEGA_310020	Chisel Set – 0.19 inhes (5 mm), 4 different lengths
PEGA_310030	Probe Set, 5 different lengths
PEGA_310040	Sharp Spoons Set, 4 different lengths
PEGA_312001	Handle (short, straight)

## SHORT HANDLE EXTRACTION KIT



This kit consisting of a short handle with different luxators is very useful for the extraction of wolf teeth, incisors, canines and deeply located root fragments.

It contains straight, concave and convex curved luxators in a 4 and 5 mm version.

Particularly the concave curved tips allow a very good access to the palatal side of the wolf tooth and enable a careful extraction with minimal damage.

The short handle is designed to allow the gentle usage of a hammer as well. Furthermore, this short handle can be combined with all different inserts from the Dental Pick System.

#### Shapes

#### Widths





0.16 inches - 4 mm 0.19 inches - 5 mm



ArtNo. #	Description
PEGA_312001	Handle (short, straight)
PEGA_312004	Luxator Insert 150/4 straight
 PEGA_312002	Luxator Insert 150/5 straight
PEGA_312005	Luxator Insert 150/4 concave
PEGA_312003	Luxator Insert 150/5 concave
PEGA_312006	Luxator Insert 150/4 convex
PEGA_312007	Luxator Insert 150/5 convex
PEGA_312040	Wolf Tooth Extraction Kit
	Contains a short handle and 4 luxators (straight and concave curved inserts in 4 and 5 mm width)
PEGA_312041	Extraction Kit with short Handle and 6 Luxators Contains a short handle and 6 luxators (straight, concave and convex curved inserts in 4 and 5 mm width)

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