

*Vibratón*



**MESTRA®**

TEIDE CIMA  
TEIDE  
TEIDE 1



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[www.mestra.es](http://www.mestra.es)

“Setting the trend” should be one of the main features of anybody who aspires to be a leader: wherever the others just go with the stream, a leader should single himself out and surprise the market with innovations and new features that the others failed to find. Easy as the challenge a priori may seem, implementing it requires a technical and organizing maturity that nowadays only a few companies in the world have. Of course we are talking about the Dental Lab sector.

It seemed that dental plaster vibrators had reached their top development level. Any manufacturer who prides himself have to include this device in his catalogue. Therefore, we dare say that there are as many dental vibrator models as manufacturers in the world. So far the intrinsic simplicity of the product made us think that there was nothing left to improve, so that over the last decades this product remained unchanged. In fact, the models of different manufacturers are so similar that it is extremely difficult to make them out at first sight.

... Nevertheless, Mestra, in its role as leader manufacturer in the Dental Lab sector, has managed to re-invent something as apparently simple as a vibrator: the new Teide has improved substantially the old fashioned design unchanged since the 1940s, and has made it an efficient tool of the XXI century. In the following lines we will try to explain how we have “revolutionised” this simple element, essential in any lab.



## *Innovation*

The Teide project was set out in MESTRA with three clear initial aims:

- A simple design, in order to achieve a very reliable and economical device. Our engineers have always opted for simple designs, firmly convinced that sophistication is expensive and prone to failure.
- New features. Although seemingly this aim goes against the previous one, in fact simplicity and ingenuity match perfectly each other in this project and give rise to a smart and brilliant product.
- A well thought design. Details and design are aspects that any leader priding himself cannot forget.



# MESTRA®

In **MESTRA** we opt for designs with their own personality, which makes them distinguishable from our competition's products.

Taking into account the final output, these three aims have been completely fulfilled in the three interesting products we have marketed:

1. The **Teide "1"** vibrator, it has a simple vibration frequency with adjustable power. Simple but efficient.
2. The **Teide** vibrator, featuring an electronic card that allows adjusting the power and two types of vibration.



3. The **Teide Cima** vibrator, similar to the previous models, but its electronic card allows –apart from adjusting the power– selecting five different types of vibration and adjusting the vibration time.





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## The details

Details are without a doubt the most clear distinction between high quality products and average quality ones. This is why in **MESTRA** we pay them a special attention.

The basic shapes have been designed to prevent plaster debris getting inside the device, since the working environment of the vibrator tends to be specially dirty. The table rubber edges (1), the embedded controls (2), or the rounded corners (3) are details that prevent dirt getting inside the device.

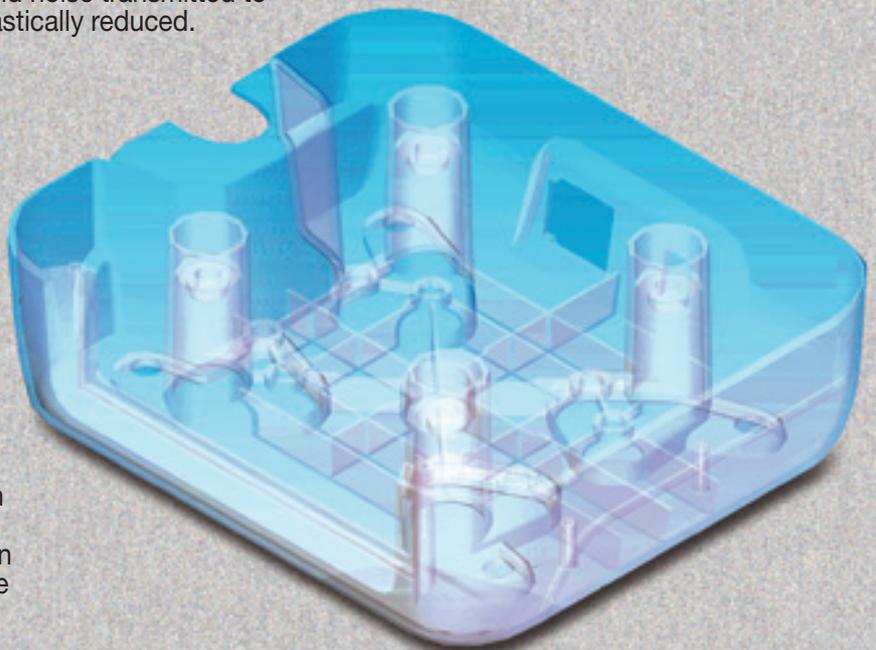
In addition, all its surfaces are perfectly smooth, which means an excellent cleaning.



The table's dimensions have been thoroughly calculated, trying to fit as many cylinders of different size as possible on the smallest possible surface. After a complete combinative work, our engineers concluded that the best combination was a 220x180 mm table.



The legs are an important element to reduce vibrations. Traditionally the vibrator legs were equipped with suction pads to fix the legs to the table, or designed as highly flexible hollow pivots. Our engineers in **MESTRA** succeeded in joining both approaches in a design of hollow legs with a suction pad at their end. The result of this ingenious solution is astonishing: the vibration and noise transmitted to the table are drastically reduced.



The multiple ribs and supports give the frame an exceptional stiffness, similar to the stiffness of those made of steel plate. In addition, it is built in one single piece, which makes it even stiffer. The result is an extremely smooth operation and a very low transmission of vibration and noise.

## The pouring stand

The pouring stand is based in a completely innovative concept. Traditionally most manufacturers have designed this element based in the same basic concept: a rubber ball attached to the vibration table by a retractable rotating arm.

Nevertheless, our engineers in **MESTRA** opted for a completely innovative approach: a spike-shaped stand screwed to the table. The advantages of this idea over the previous one are evident:

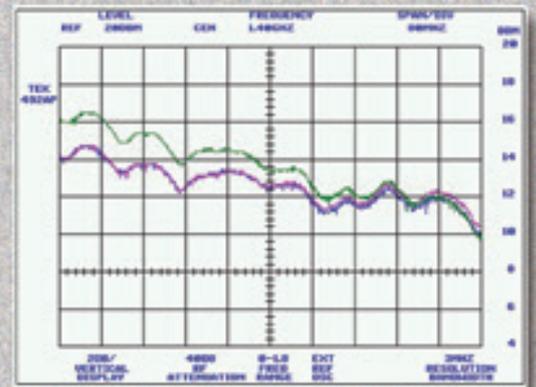
1. Simplicity, which is not at odds with practicality. Simple design = economical and reliable design; besides, it performs its duty.
2. Design in line with the other shapes of the unit.
3. No need to increase the outer dimensions of the vibrator.
4. Elimination of the characteristic noises in the “retractable” type stands due to the vibration of the rotating arm.
5. The stand can be removed and stored in the lower part of the vibrator.
6. It doesn't take room in the vibrator table: you can vibrate the same amount of cylinders with or without the stand.



## The perfect frequency

For simplicity reasons in construction, most dental vibrators operate at the same frequency as the mains (50 Hz) or at its double (100 Hz). This strategy makes the design much easier and reduces the cost. When the management in **MESTRA** explained the ambitious Teide project to the engineers, for a time they persisted in finding a technically perfect frequency to vibrate plasters, apart from the traditional 50 or 100 Hz. They carried out hundreds of field trials, and at the same time they thoroughly tested industrial vibration-units used in Civil Works and consulted experts in concrete-vibrating. The results were very modest. The frequency varied depending on the density, the thickness, the type of material, and the proportion of water. It seemed that each type of material had its “perfect frequency”, different from all the others. At the beginning they tried to find the compromise frequency that could be best adapted to all the cases. The results were still poor. But suddenly the key idea came up: “if each material has its own frequency, why don't we provide the vibrator with a selector to choose the most suitable frequency for each case?”. Altogether, our engineers identified five frequencies, and they were applied to the model. The subsequent trials showed that the quality of the mixture obtained by applying the correct frequency was higher than the quality obtained by applying the traditional 50 or 100 Hz frequency.

And this is how the Teide Cima vibrator was born. Besides the automatic selector of frequency, the Cima vibrator features a practical timer to optimize the vibration time: a too short time is not enough to release all the bubbles. If the vibration time is too long, there is the risk of the mixture starting to harden and jeopardizing its fluidity and texture. With the timer, you no longer need to worry about these matters.





# MESTRA®

## *The design*

Simplicity and economy do not need to be at odds with an attractive design. A good example is the design of the Teide vibrator: modern, smart, different... are the adjectives that come to your mind the first time you see the device. It is often said that one of the distinctive features of a good professional is the tools he uses; we are convinced that the design of Teide vibrators will be a breath of fresh air in your lab, and will improve your professional image.

All the MESTRA products are designed to be functional and, at the same time, harmonious. In addition, they include construction details, characteristic of the brand, that make them high quality products. If you are a customer of the brand, you must have noticed it. If you are not our customer, you are invited to confirm it.



# Vibrator

## Advice to choose a vibrator

You may be currently interested in buying a vibrator. In this case, you are lucky, because you will find many models and manufacturers of excellent products in the market. We would like to give you several useful tips for you to choose the most suitable model.

- First of all, be objective. Do not let names, nationality or any other information from the dealer influence you. Do not pay attention to set phrases such as “there must be something wrong if it is so cheap”, “cheap products often prove to be expensive”, “in XX (country) they have never been good at manufacturing machines” and so on. Take into account just reasons, facts and arguments. Never accept disparaging remarks from dealers. Compare at least three models (four, better) before choosing one.

- A smooth operation is the most important feature in this type of machines: vibration must be steady in the vibration platform, but at the same time it must not be transmitted to the worktable. A good design of the suspension system of the electromagnet and of the outer legs is essential. Some low quality products are unable to stay in their position, and when vibrating they move across the table

- Take special care in cleaning the device. Due to the operation environment, these devices tend to gather a lot of dirt. Its smooth surfaces, rounded edges, embedded controls and electrical elements make cleaning very easy.

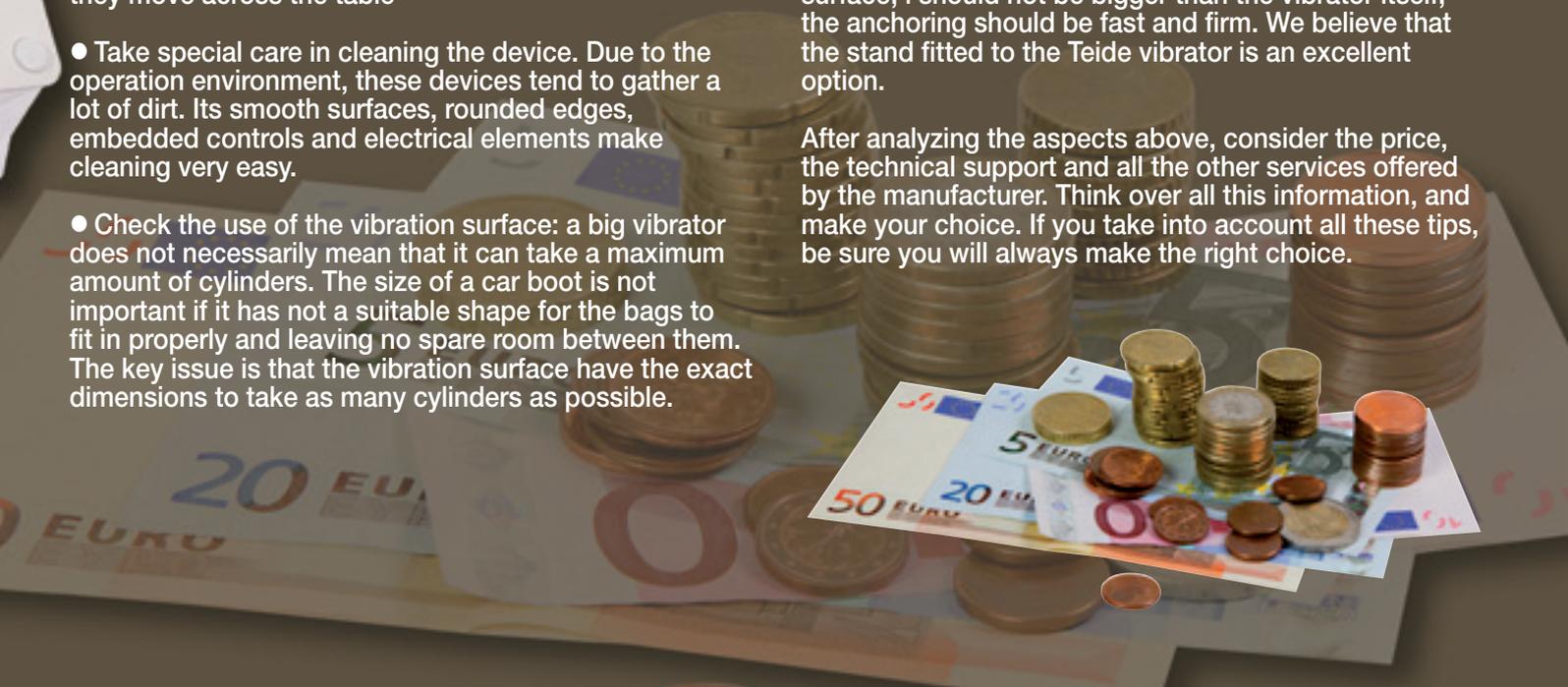
- Check the use of the vibration surface: a big vibrator does not necessarily mean that it can take a maximum amount of cylinders. The size of a car boot is not important if it has not a suitable shape for the bags to fit in properly and leaving no spare room between them. The key issue is that the vibration surface have the exact dimensions to take as many cylinders as possible.

- Although it is a secondary aspect, do not forget the design of the product: a modern and efficient professional should use modern and efficient tools. Old fashioned designs from past decades make a poor impression.

- The vibration frequency is another basic point: the Teide Cima vibrator operates at different frequencies, which can be adapted depending on the texture and thickness of the mixture you want to vibrate. It is the perfect device for the most demanding customer. You will understand it once you have tried out the device. Another important feature is its operation timer, with which you will no longer have to worry about the exact moment to retrieve the cylinders.

- Look at the pouring stand. This piece needs to be practical: it should not take up room on the vibration surface; it should not be bigger than the vibrator itself; the anchoring should be fast and firm. We believe that the stand fitted to the Teide vibrator is an excellent option.

After analyzing the aspects above, consider the price, the technical support and all the other services offered by the manufacturer. Think over all this information, and make your choice. If you take into account all these tips, be sure you will always make the right choice.



# Specifications

TEIDE 1 R-080021  
TEIDE R-080022  
TEIDE CIMA R-080024

Voltage	220 V, 50 Hz	115 V, 60 Hz
Working surface	220 x 180 mm	
Height	117 / 197 mm	
Width	265 mm	
Depth	227 mm	
Weight	5.5 kg	

\* The manufacturer reserves the right to change and modify the information and technical data of this leaflet without prior notice.



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