



making work easy

Quick, simple, reliable Solutions for your daily routine in the dental office



Cleaning From page 3
We save you time:
Cleaning prostheses or removing
temporary cement – our products can do it



**Mixing technique and
model fabrication** From page 23
Precise models from your own dental office –
We are at your side every step of the way



Processing restorations From page 29
It is all about the tooling –
precision products for outstanding results

making work easy
for your daily routine
in the dental office



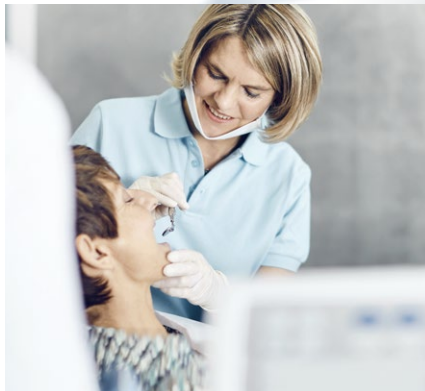
Our goal is to make your daily routine easier. We strive to understand how you work and what your needs are, so we ask questions and listen carefully.

That's why instead of developing our products behind closed doors, we work with people who use them on a daily basis.

Cleaning

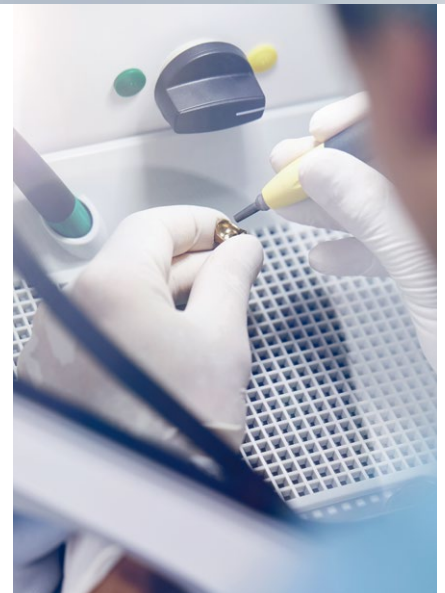
This is what makes work easier

- Greater efficiency in dental office routines
- Time saved for dentists and patients
- Outstanding cleaning with proven material compatibility
- Simple and reliable use
- Coordinated system solutions



Manual cleaning requires resources

Cleaning patient restorations by hand takes a lot of time. Time that you and your team need with your patients. And because we understand how important this time is for you, we develop products that make certain tasks easier or even handle them for you. Giving you more time to take care of your patients.



Cleaning prostheses professionally – and with ease

You don't need us to tell you: Having their prosthesis cleaned professionally on a regular basis boosts the general health of your patients. But direct removal in the dental office of deposits that are often hard is time consuming. If the restoration is given to an external company, waiting times are inconvenient for the patient. With the SYMPRO denture cleaning unit, cleaning can be carried out with ease in your dental office – and it's MDR-compliant, too.

Finishing made easy

When finishing intricate work and for less complex components: With Renfert fine sandblasting units or grinding boxes, matching extraction units, and the corresponding abrasives, you can work reliably and efficiently.



Systematic cleaning

From removable dental dentures, to splints or temporary cement: the SYMPRO denture cleaning unit and special cleaning liquids are perfectly complimentary to one another. Material compatibility has been also been tested, too.

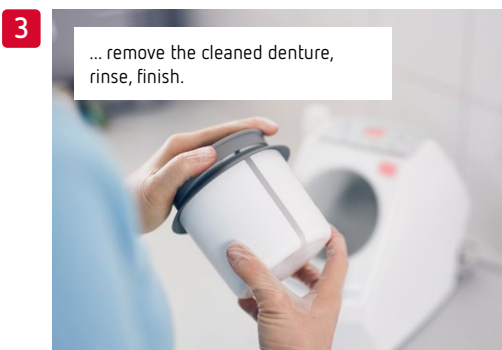
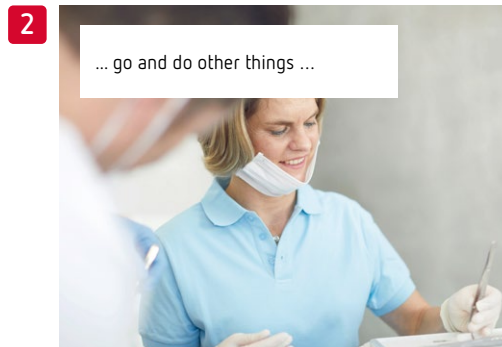
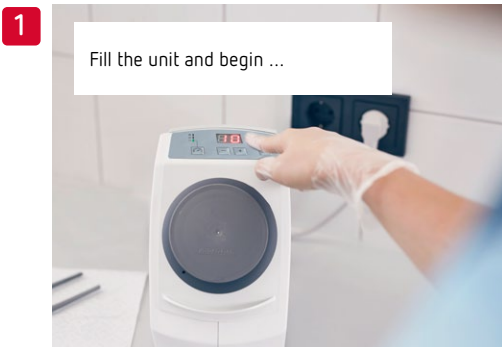
SYMPRO Denture cleaning unit

Automated denture cleaning in your dental office

Expand your performance repertoire with an advantageous solution: with the SYMPRO system, the cleaning of dentures, orthodontic appliances and splints will become an efficient task. The compact denture cleaning unit and the specially coordinated cleaning agents provide a fast and efficient prophylaxis service with minimal effort.



It's so easy to clean dentures using SYMPRO:



- "making work easy" Tip:**
- Benefit from a validated hygienic reprocessing of bowls, cleaning needles and tweezers that allow you to integrate SYMPRO into the hygiene plan of your dental office.

NEW SYMPRO

Denture cleaning unit

Compact denture cleaning unit especially suitable for cleaning removable dental restorations, orthodontic appliances and splints.

Advantages

- Customer retention – a prophylaxis service for denture wearers.
- Processing reliability - validated, hygienic reprocessing of system components.
- Patient satisfaction – externally tested material compatibility with standard dental materials.

Details

- Positive effect on the patient's overall health due to regular denture cleaning.
- High time savings compared to manual methods thanks to effective and automated cleaning process.
- Optimized pin geometry for gentle and at same time effective cleaning.
- High cleaning performance due to optimal bowl inclination.
- Easy cleaning of temporary restorations in combination with SYMPRO mini cup and temp:ex temporary cement remover.

Making work easy

Uncompromising cleaning with SYMPRO system. The effective help:ex cleaning agents are available for cleaning with the SYMPRO denture cleaning unit.



easy use



silent



compact



Before and after cleaning with SYMPRO and help:ex

Technical data

Permissible mains voltage	100–240 V
Permissible mains frequency	50/60 Hz
Power consumption	90 VA
Cleaning intensity	low / medium / high
Dimensions (W x H x D)	150 x 240 x 280 mm // 5.91 x 9.45 x 11.02"
Weight (without bowl)	~3 kg // ~6.6 lbs

Ordering information

SYMPRO, 100-240 V	No. 67001000
help:ex Cleaning agents	Page 7
More accessories	Page 22



My experience with the SYMPRO Denture Cleaning Unit

Automatic denture cleaning which really works!

Fall 2017, Trade Exhibition Stuttgart

Full aisles, lots of booths, practically information overload! Everything new, everything great and everything EXPENSIVE. But then, I saw something out of the corner of my eye as I passed it by. Small, white-grey and unspectacular but somehow, something special. I only then realized that it was the Renfert stand where I had stopped. Laboratory stuff! I'm a Dentist! What is that?

The friendly answer was on point: SYMPRO Denture Cleaning Unit, also for or only for the practice. Great! The laboratory has something like that in large. It takes 2–3 hours to get the teeth back again. But then they look like new. So, I asked for more information. 20–40 minutes cleaning time, post-polishing is not necessary. Wow! And that works? OK, the price is less than I expected.

Whilst waiting for the device to arrive, I did my research. It all sounded very positive. And then, at last, my first practice run. And in fact, it's true, within 20–40 minutes, depending on the state of the denture, you can achieve very good results, which are very close to profession-

al cleaning in the laboratory. Ideal for cleaning the dentures at the same time as the professional tooth cleaning and be able to send the patient away with completely clean teeth.

It's fair to say that now, approximately 80% of denture cleaning is done in the practice. The unit is now well and truly integrated within the daily practice routine and works reliably.

March 2018

Now, we see dentures again, which were cleaned months ago. There are no increased deposits on the dentures, that would indicate any micro-abrasion may have occurred. In the meantime, patients with dentures heavily discolored due to smoking have spoken to us and asked directly for the denture cleaning service.

The plan to use the device for regular cleaning of the dentures from retirement home residents is currently still failing due to logistics. There is a need, but whether this will be paid for will remain to be seen.

Fall 2018

A year has passed. With the exception of



A user report by Christopher Tuxford Dentist from Hochstetten, Germany

new patients, there are hardly any dentures requiring significant and therefore longer cleaning times than > 20 minutes.

Conclusion

Denture cleaning only takes < 20 minutes and can be easily carried out during half a professional tooth cleaning session. I would say, the introduction of the SYMPRO Denture Cleaning system into my dental office, has been a great success.



Upper denture with stubborn deposits before initial cleaning



Upper denture after cleaning

NEW help:ex

Cleaning agents

Effective cleaning agents are available for cleaning with the SYMPRO denture cleaning unit. They are all safe to use due to proven material compatibility with the most common dental materials.

Advantages

- Easy and effective removal of hard and soft deposits on prosthetic restorations, orthodontic appliances and splints, with proven material compatibility.
- Efficient cleaning with ready-to-use liquids that are specially adapted for individual stains.
- Eco-friendly use with powder in portioned sachets and a corresponding neutralizer.

Easy neutralization and disposal

The cleaning powder help:ex plaque p can be easily disposed of by proven neutralization of the cleaning liquid in the SYMPRO denture cleaning unit.



Easy disposal through neutralization of help:ex plaque p (Please observe local instructions for disposal)



A perfect match: the help:ex cleaning liquids and the SYMPRO denture cleaning device

Overview

	help:ex plaque p	help:ex plaque f	help:ex discolor f
Plaque, tartar	■	■	
Coffee, tea, tar			■
Typical contamination	■		
Heavy contamination		■	■
NEW Neutralization	■		
Presentation	Powder	Liquid	Liquid

Ordering information

help:ex plaque f	4 x 1 l (4 x 0.26 gal)	No. 67000100
help:ex plaque p	20 x 20 g (0.7 oz.) cleaning powder + 20 x 4,5 g (0.16 oz.) neutralizer	No. 67000000
help:ex discolor f	1 l (0.26 gal)	No. 67000200
Further accessories		Page 22



Professional cleaning of prostheses:
Improving the oral and general health of patients with prostheses

Chemical-mechanical cleaning of prostheses can prevent and alleviate infections

It is well known that careful and regular oral hygiene is important for healthy oral flora and that it can prevent inflammatory conditions throughout the body. However, what many of us don't realize is that, in addition to the obvious staining and unpleasant odors, inadequate cleaning of prostheses can also have a negative impact on the function of a dental restoration as well as on oral and general health. That's why it's all the more important to provide advice on the importance of cleaning prostheses and to also offer a high-quality service for hygienically reprocessing dental restorations. The most effective option has been shown to be a combination of mechanical and chemical cleaning¹⁵, such as as offered by the SYMPRO system by Renfert.



A study of the literature by Patrick Märthesheimer, Dentist from Düsseldorf, Germany

In my dental office, I have a lot of older patients who wear removable dentures, some of whom also have pre-existing conditions. They are often no longer able to clean their dentures properly or regularly. The result: Buildup of stubborn plaque and tartar deposits on their prosthesis that can no longer be removed using dental hygiene practices followed at home. Unpleasant odors and stains can also develop if in-

creasing numbers of micro-organisms but also stains from tobacco, alcohol or foodstuffs accumulate in the biofilm and disperse from there into the prosthesis (see Figure 1).

Patients notice some of these unfortunate consequences themselves, or we speak to them directly about it and offer to clean their removable dentures professionally. Usually we don't need to of-

fer a lot of explanation as to why these stains should be removed, and the patient agrees.

Before I describe the benefits for our dental office, I will discuss currently published studies in order to demonstrate the fundamental importance of effective prosthesis reprocessing for dentures, oral hygiene and the general health of those who wear a prosthesis. At the same time, the study results also provide a sound basis for discussion during patient consultation, which is particularly important for older patients with pre-existing conditions.

Poor cleaning of prostheses = increased health risks

The literature provides numerous indications that cleaning has a significant impact on the durability, function and appearance of removable dentures. It has been shown for example that the initial surface quality of a restoration can be maintained with appropriate personal and professional cleaning measures⁵ – a clear prerequisite for the long-term success of a prosthesis.



Fig. 1: Lower denture (soiled) Photo: Patrick Märthesheimer

With inadequate oral hygiene, biofilm^{1,2} can develop both on the tooth surface and on the surface of the prosthesis. The amount and type of bacteria and fungi in the deposits fluctuates while the prosthesis is in the patient's mouth^{1,2,21}, which can cause unpleasant odors and staining^{1,7,8}. If the biofilm is not removed, it hardens over time to become tartar^{7,23,30}. As hard deposits also build up on the connecting elements and contact surfaces of the prosthesis, the correct fit and positioning of the dental restoration on the support / abutment teeth is impaired. This can result in a poor fit with painful pressure points³⁰.

In short: Every dental restoration can cease to be fit for purpose if it is not cleaned thoroughly on a regular basis. Yet long-lasting cleaning of prostheses is essential for both oral and general health^{22,31}. The biofilm on most prosthetic restorations can potentially contain pathogenic micro-organisms¹⁷ that can cause a variety of chronic infections^{2,30}.

The amount is proportional to the occurrence of lesions in the oral mucosa⁷. However, biofilm does not just have a direct impact on the tissue contact surfaces. Rather, it influences the entire microbiome of the oral cavity and can therefore also increase decay of the remaining teeth as a result of caries and periodontitis^{2,6}. One study not only demonstrated a higher ratio of staphylococci and mutans streptococci in the mouth of those who wear a prosthesis, it also found enterobacteria on the dental restorations⁶!

Significantly greater frequency of denture stomatitis

Poor prosthetic hygiene can also lead to chronic atrophic candidiasis^{4,7}, often caused by the *Candida Albicans* fungus. This type of denture stomatitis, which is accompanied by inflammation and reddening of the oral mucosa covered by the prosthesis, is a common condition among denture wearers; epidemiological studies indicate an incidence of more than 70% in some cases²⁰! This condition can be treated with antimycotic medications; however if the prosthesis is not decontaminated and kept hygienically clean in the long-term, it will reoc-

Fig. 2

As a result of poor prosthesis hygiene, more than 70% of those who wear a prosthesis suffer from candidiasis caused by the *Candida Albicans* fungus.

Photo: Science Photo Library / Dr. P. Marazzi



cur once medication is discontinued²⁰ – denture wearers who suffer from lung diseases such as COPD are at particular risk¹⁶.

As oral health and general health are closely linked, several oral health conditions and general health conditions also show a direct correlation. Be it diabetes mellitus, psychological conditions or heart disease, eating disorders or poor nutrition: all of these have an impact on the body – and as a result, on the teeth and gums, too. Conversely, complaints of a purely dental nature such as periodontal disease and occlusal disturbance can have far-reaching consequences for the entire body.

As microorganisms can also build up on the surface of dental restorations⁸, poor prosthetic hygiene can lead to an increased risk of infection. That's because if pathogens spread in the respiratory organs and stomach area, they can result in infections and systemic conditions such as aspiration pneumonia, fungemia and endothelial dysfunction^{4,7,18}.

In other words: Poor oral hygiene and prosthesis care increase the incidence of pulmonary infection, while improvements in hygiene practice reduce it. This is particularly critical for high-risk patients in hospitals and care facilities²⁵.

As a result, particular care should be taken when cleaning prostheses belonging to patients with a HIV or *Helicobacter Pylori* infection, with diabetes mellitus, cancer, or pulmonary or cardio-

vascular disease¹¹. As dentists, we have a very important role to play here in terms of education and follow-up.

Hygienic reprocessing with a special pin geometry

So what is the best way to clean removable dentures? As well as a daily oral hygiene routine using special care products (brushes, gel, special toothpaste, denture cleanser tablets, etc.), professional reprocessing of the prosthesis using a mechanical, chemical or combined cleaning process is a useful addition. Studies show that the selected method has a significant impact on the activity of the biofilm and on the amount of *Candida Albicans* fungus on a prosthesis. They indicate that combining mechanical and chemical reprocessing of the prosthesis is more effective than a purely mechanical process¹⁵. Previously, I would arrange for my dental laboratory to carry out cleaning as it was time-consuming and expensive for our dental office. However, outsourcing this service often met with organizational challenges as the prostheses had to remain in the laboratory for several hours at least and sometimes even overnight – an unacceptable situation for many patients!

That is why I looked for a solution that would allow us to offer this service to patients at our dental office at a reasonable price. As part of my Internet research, I found denture cleaning units from different manufacturers. To me, the best and most effective seemed to be the SYMPRO device from Renfert (see Figure 3), with its mechanical-chemical operating principle.

In combination with a liquid that is specially adapted to the system, it cleans the prosthesis with fine rounded metal pins that are activated by a rotating magnetic field.

As well as the automated cleaning process, I particularly liked the clear operating concept (see Figure 4) and the appealing design – factors that increased acceptance, particularly in terms of use by the employees of our dental office. The competitive purchase price and a recommendation by a colleague did the rest to convince me to buy it.

In addition, my employee who takes care of prophylaxis and SPT was also very happy that we purchased the device as she regularly has to deal with patients whose prosthesis hygiene often needs improving. She immediately understood how to set the rotational frequency of the magnetic field and the operating time and soon developed rules based on her own experience in addition to the manufacturer's recommendations. Loading and removing the dental restoration



Fig. 3: SYMPRO
Denture cleaning unit
Photo: Renfert GmbH



Fig. 4: SYMPRO keypad
Photo: Renfert GmbH



Fig. 5: Lower denture base before and after cleaning
Photo: Patrick Märthesheimer

as well as cleaning and care of the device also proved easy as the SYMPRO is very ergonomic. Moreover, a manual explaining hygienic reprocessing of the system components is also provided that can be included in the dental office's QM system.

Reliable and gentle removal of biofilm and tartar

With the SYMPRO system, we have already cleaned all kinds of removable dentures made from a variety of materials and alloys, full dentures, combination restorations with a variety of retaining elements, implant-supported restorations, and occasionally, even crowns or bridges that had come loose. The amount of soiling in these cases varied from slight visible discoloration to significant tartar deposits together with total plaque coverage. It was possible to reliably remove biofilm in all cases, regardless of how much was present (see Figure 5). As a result, the negative impact on the oral flora that this caused can also be considered resolved.

Thanks to the effective combination of the mechanical action of the steel pins and the chemical effect of the cleaning agent help:ex plaque f, tartar could be reliably and automatically removed in most cases (see Figure 6). Only rarely did a little residue remain in very narrow areas or on finished acrylic surfaces. It was possible to remove this though easily and completely using a denture brush. It is possible that deposits of this kind that were difficult to access could also have been removed by running the machine for a little longer, however it

was not always possible to allow additional time for this in our dental office routine.

That the pin-impact cleaning unit is not just very effective but also very gentle is demonstrated by the fact that none of the surfaces of the prostheses that we cleaned (regardless of metal or acrylic) showed any visible changes as a result of the action of the steel pins, even at 6x magnification.

Similar to the studies that we already described, we saw in our dental office that the cleanliness that we were able to restore and the improved surface smoothness of the prostheses resulted in a significant reduction in stomatitis. The oral hygiene of patients also improved in combination with obligatory professional teeth cleaning that also took place regularly – this can be clearly seen in the overall reduction in plaque buildup on the remaining teeth and the taut, healthy pink appearance of the gingiva.

Patients had quite a positive attitude, right from the start
Our new hygiene offering was very popular among those who wear prostheses. Those who had looked for a special cleaning method themselves were particularly happy with the results. Patients who only became aware of the problems associated with poor cleaning of prostheses after our dental office had advised them were also convinced of its effectiveness.

"Golden agers" to whom esthetics are important were particularly impressed by the impact of cleaning on stains that were not immediately obvious at first glance (such as darkened composite veneers on telescope restorations), as they had not expected such a noticeable brightening of their "yellowed" dental restoration.

Summary: Improved health and customer retention

The SYMPRO denture cleaning unit, in combination with the special cleaning agents (liquid or powder), are a recommended and cost-effective tool for chemical-mechanical cleaning or removable dentures in the dental office.

The effective hygienic reprocessing of prostheses not only has a positive impact on the durability, function and appearance of dental restorations, but also on the oral and general health of older patients, some of whom already of pre-existing conditions.

At the same time, additional private services and prophylaxis (with a high impact that surprises many) can result in a long-term increase both in the cost-effectiveness of a dental office as well as in customer retention and in compliance, ensuring that those who wear a prosthesis feel good about it, too.

Literature list

The complete list is available on request from Renfert GmbH

1. J Oral Microbiol. 2018 Oct 29;11(1):1538437. doi: 10.1080/20002297.2018.1538437. eCollection 2019
2. PLoS One. 2018 Nov 15;13(11):e0207262. doi: 10.1371/journal.pone.0207262. eCollection 2018
3. PLoS One. 2018 Aug 30;13(8):e0203187. doi: 10.1371/journal.pone.0203187. eCollection 2018
4. Front Microbiol. 2018 Jul 9;9:1522. doi: 10.3389/fmicb.2018.01522. eCollection 2018
5. Journal of Applied Biomaterials Functional Materials, 14(3):e248-e255.
6. J Dent Res. 1992 Jul;71(7):1374-81
7. J Appl Oral Sci.19(6); Nov-Dec 2011PMC3973472
8. J Contemp Dent Pract. 2000 Feb 15;1(2):28-41.
9. Gerodontology. 2006 Mar;23(1):33-7.
10. Int J Prosthodont. 1999 Mar-Apr;12(2):153-9.
11. J Indian Prosthodont Soc. 2015 Oct-Dec;15(4):292-9. doi: 10.4103/0972-4052.171828
12. J Prosthet Dent. 2016 Feb;115(2):183-8. doi: 10.1016/j.prosdent.2015.08.007. Epub 2015 Nov 4.
13. Int Dent J. 2017 Sep;67 Suppl 2:14-18. doi: 10.1111/ijdj.12360.
14. Clin Interv Aging. 2015 Feb 11;10:461-7. doi: 10.2147/CIA.S54630. eCollection 2015.
15. J Prosthodont Res. 2018 Jul;62(3):353-358. doi: 10.1016/j.jpor.2018.01.005. Epub 2018 Feb 7
16. Adv Exp Med Biol. 2015;839:25-30. doi: 10.1007/5584_2014_42
17. Gerodontology. 2016 Sep;33(3):322-7. doi: 10.1111/ger.12156. Epub 2014 Nov 12
18. Arch Med Sci. 2017 Feb 1;13(1):66-74. doi: 10.5114/aoms.2017.64715. Epub 2016 Dec 18
19. J Prosthodont. 2016 Jun;25(4):288-301. doi: 10.1111/jopr.12454. Epub 2016 Apr 6
20. J Prosthodont. 2011 Jun;20(4):251-60. doi: 10.1111/j.1532-849X.2011.00698.x. Epub 2011 Apr 4.
21. J Oral Rehabil. 2002 Mar;29(3):300-4.
22. J Prosthet Dent. 2016 Feb;115(2):183-8. doi: 10.1016/j.prosdent.2015.08.007. Epub 2015 Nov 4
23. BMC Oral Health. 2018; 18: 78. Published online 2018 May 4. doi: 10.1186/s12903-018-0543-1
24. Oral Dis. 2017 Oct;23(7):973-982. doi: 10.1111/odi.12682. Epub 2017 Jun 13
25. Oral Dis. 2007 Nov;13(6):508-12.
26. Curr Opin Infect Dis. 2016 Apr;29(2):160-6. doi: 10.1097/QCO.0000000000000255.
27. J Dent Sciences, Volume 6, Issue 4, December 2011, Pages 216-220
28. Gerodontology. 2011 Dec;28(4):264-70. doi: 10.1111/j.1741-2358.2010.00378.x. Epub 2010 May 26.
29. J Appl Oral Sci. 2015 Mar-Apr; 23(2): 179 – 186.
30. <https://www.kzbv.de/prothesen-reinigen.62.de.html>
31. Spec Care Dentist. 1999; 19: 128 – 134.

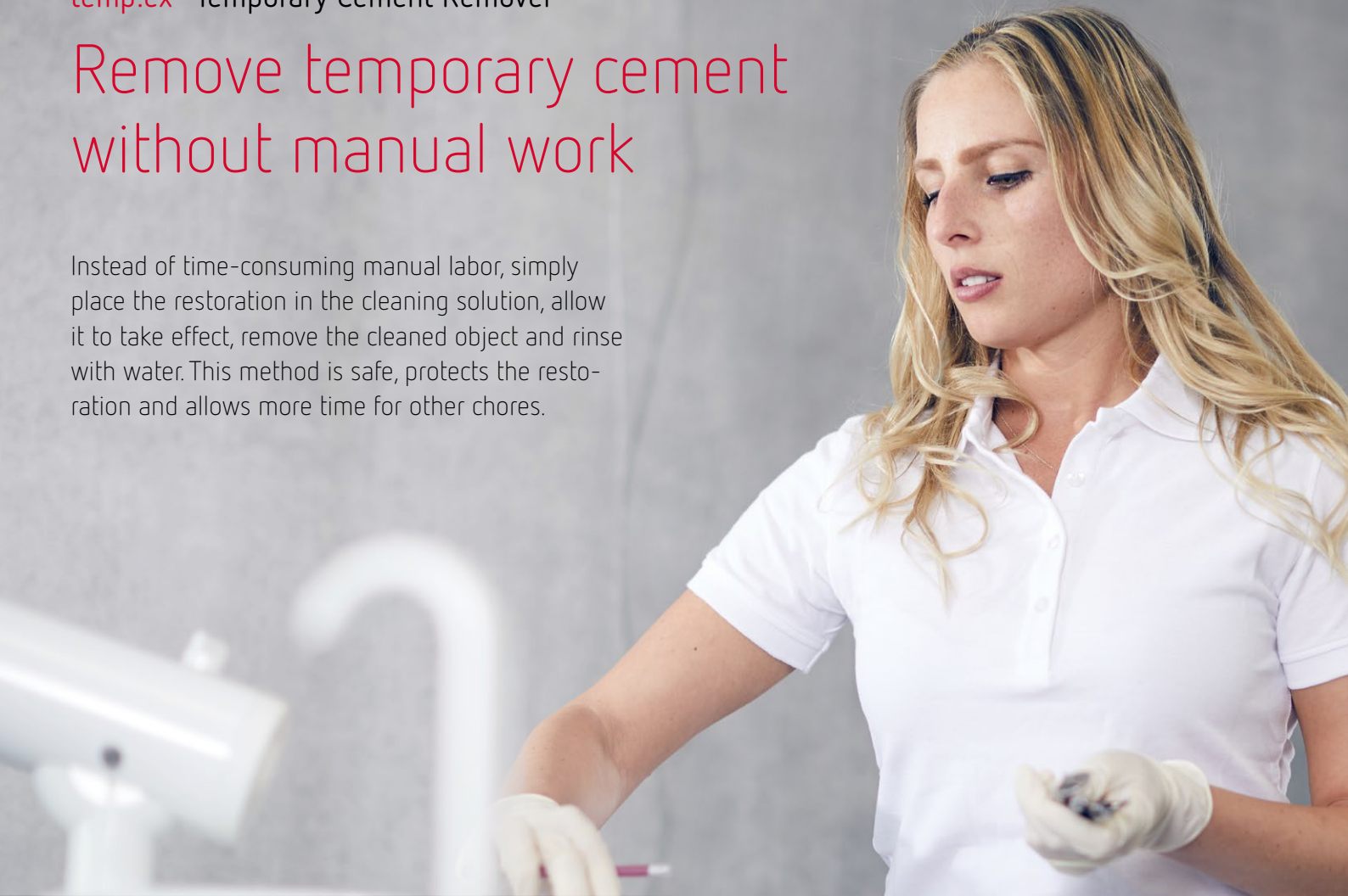


Fig. 6: Upper temporary restoration with stubborn tartar before and after cleaning.
 Photo: Patrick Märthesheimer

temp:ex - Temporary Cement Remover

Remove temporary cement without manual work

Instead of time-consuming manual labor, simply place the restoration in the cleaning solution, allow it to take effect, remove the cleaned object and rinse with water. This method is safe, protects the restoration and allows more time for other chores.



Manual work with scaler



VS

Automated with temp:ex



Place the restoration into the bowl ...

let it soak for 10 minutes ...

quickly disinfect, rinse with water ...

→ FINISH

temp:ex

Temporary cement remover



MD

temp:ex is a solvent for zinc oxide based, dental temporary cements.

Advantages

- Working time savings through a significant reduction in manual working steps.
- Avoids damage to the restoration via instruments during manual working steps.
- Tested compatibility with standard dental materials.

Details

- Up to 50% quicker cleaning performance using temp:ex in the SYMPRO denture cleaning unit.
- Economical use due to dosage aid on bottle.

Ordering information

temp:ex	250 ml (8.45 fl.oz.)	No. 66000000
More accessories		Page 22

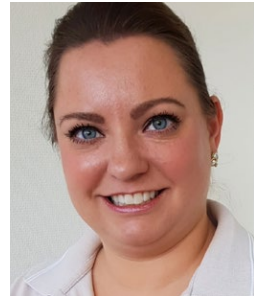


The combination of temp:ex and the SYMPRO denture cleaning unit speeds up the cleaning process

temp:ex Field report

Temporary fixation

A field report by Janine Multhaupt, Qualified Dental Assistant, Dental Prevention Management, from Düsseldorf, Germany



There is a variety of indications for the use of provisional restorations in dental practice. Also referred to merely as provisionals, temporary or provisional restorations are usually removed and cemented back in several times during the course of treatment. The same applies to the permanent restoration that is fixated provisionally at first. But before the temporary or permanent restoration can be reinserted, any cement residues must be removed. A probe, excavator or scaler are the instruments usually used for this purpose. It is common practice to hold the restoration with one hand while wielding one of these instruments to remove the excess cement with the other (Fig. 1).



Fig. 1: Removing the cement

It is a very common occurrence, however, that the provisional is pierced from the inside or that parts of its thin rim are chipped off. In the worst case scenario, the temporary restoration may need to be replaced entirely. Moreover, the sharp instruments employed may cause injuries. Instruments also frequently slip or can stick through gloves. Although this does not usually result in serious injury, there is nevertheless the risk of infection. In addition, the scaled-off flakes from



the temporary luting cement can lead to contamination of the surgical field. In conclusion, it can be stated that the process of removing temporary cement from restorations is an unpleasant task that also carries the risk of injury, but is nevertheless an essential part of routine in the dental office.

So I was all the more delighted when I visited Renfert's stand at the IDS 2019 to learn about their convenient alternative temp:ex—a temporary cement remover. Our dental office was provided with a product sample. Its application is very simple: The restoration to be cleaned is placed in a beaker (Fig. 2) and covered with the blue alkaline liquid. Within about 10 minutes' exposure, the zinc oxide-based cement is softened such that it only needs to be rinsed off with water. Occasionally, you might need a toothbrush to remove any cement residues still left on. Obviously, you are required to wear gloves and eye protection when performing these steps.

In this way, residual temporary cement can be removed even from definitive dental restorations after temporary

Fig. 3: The SYMPRO with Mini-Cup Set



cementation. A study by the University of Erlangen certifies that temp:ex is safe to ceramics, resins and metals. After up to 60 minutes of storing materials in temp:ex, we compared their surfaces against a reference measurement in water and found that the solvent had no negative effects on the surface quality of the materials tested. Therefore, when the task is to remove temporary cement from provisionally fitted restorations, the use of temp:ex is highly recommended for streamlining workflows in the dental office. The product is simple, time-saving and reliable.

The restoration to be cleaned is placed in the bowl with the appropriate quantity of cleaning needles and cleaning fluid and left in the cleaning unit for 5 minutes at 2000 rpm. In the meantime, you and your practice staff can perform other chores while the SYMPRO does the cleaning work on its own and in half the time. Once the cleaning cycle is over, you just have to rinse off the restoration with water. What the two application options featured by the temp:ex temporary cement remover both have in common is that they are safe, fast and ultra-convenient.



Fig. 2: Restorations in the beaker

And compared to the use of an immersion bath alone, an additional pin impact cleaning device is even more time efficient. The SYMPRO denture cleaning device also features a Mini-Cup Set extension for cleaning provisional restorations. This set contains a small bowl that is hygienically reprocessable, a dosage aid for the cleaning needles that also serves as a seal, along with an adapter ring that attaches the mini cup to the SYMPRO cleaning unit (Fig. 3).

Conclusion:
temp:ex really works.
Safely and reliably.
And delivers!



Fig. 4: Dental restoration before cleaning



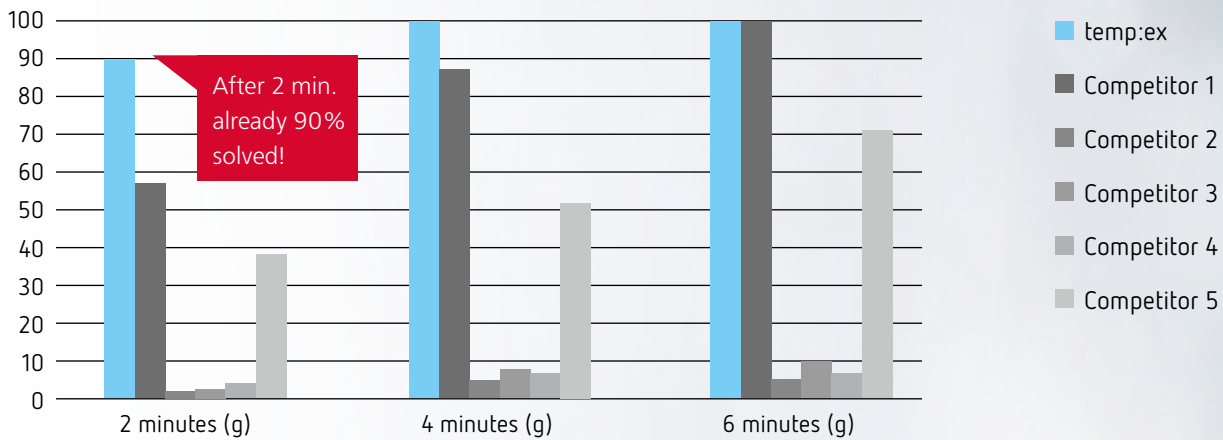
Fig. 5: Dental restoration after cleaning

temp:ex in comparison with competitor products

Cleaning performance of temporary cement removers

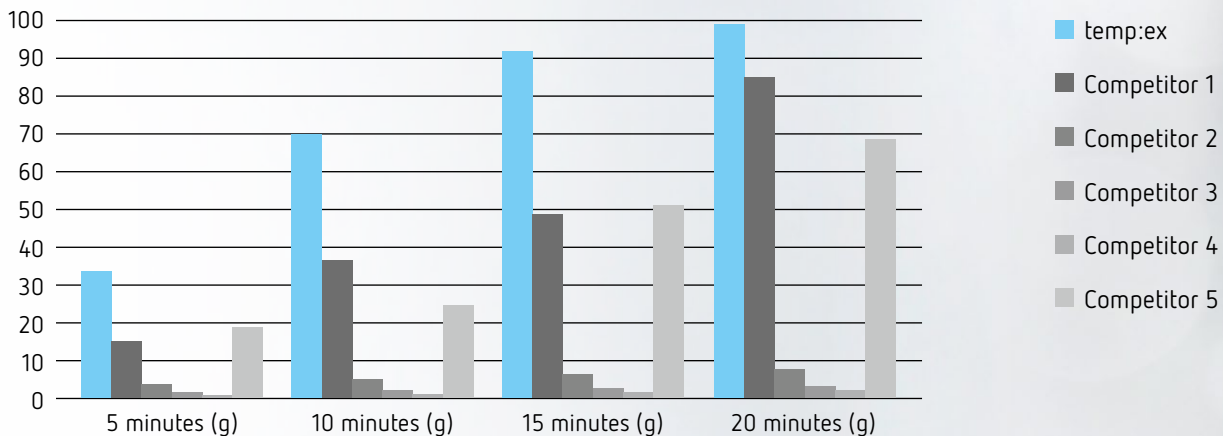
Cleaning performance of resin copings with temporary cement (without eugenol) in a denture cleaning unit.

The figure below shows the cleaning performance of temp:ex and competitor products in respect of resin copings in a SYMPRO denture cleaning unit. The layer thickness of the temporary cement in the specimens was set in advance to 0.25 mm in a standardized procedure.



Cleaning performance of resin copings with temporary cement (eugenol) in a dipping bath.

The picture below shows the cleaning performance of temp:ex and competitor products with resin copings in a dipping bath. The layer thickness of the temporary cement in the specimens was set in advance to 0.25 mm in a standardized procedure.



NEW Easyclean MD

MDR compliant ultrasonic cleaning unit

The Easyclean MD ultrasonic cleaning unit is used for powerful cleaning or pre-cleaning* of medical devices such as e.g. abutments and dentures as well as instrumentation (*does not replace reprocessing in the automated washer disinfectant). The MDR compliant unit (MDR = Medical Device Regulation) is the ideal solution for cleaning medical devices and equipment as easily as possible. Easyclean MD is intuitive to operate, offers several ultrasonic modes, and impresses with a modern design.

Advantages

- As a Class I medical device, Easyclean MD meets the requirements of the Medical Devices Regulation (EU) 2017/745.
- With five pre-configured ultrasonic modes, the right program can be activated for any situation.
- Intuitive operation facilitates effortless creation of custom programs.

Details

- Powerful cleaning.
- Smart feedback function.
- Ultrasonic frequency of 37 kHz.
- Configurable threshold temperature.

Tip

Despite its many options and considerable flexibility, Easyclean MD is incredibly "easy" to use. The user-friendly control panel features an easy-to-read, integrated display that provides information on important parameters such as the operating mode, duration, or temperature. Moreover, the unit signals when cleaning has come to an end, for example, or when the threshold temperature has been reached.



easy use

MD


Application example: Cleaning of medical device

Technical data

Permissible mains voltage	220–240 V
Permissible mains frequency	50/60 Hz
Power consumption	320 W
Ultrasonic frequency	37 kHz
Ultrasonic effective power	120 W
Heating power	200 W
Dimensions (W x H x D) (Device, exterior size)	305 x 170 x 230 mm // 12 x 6.7 x 9.1"
Weight	~3,6 kg // ~8 lbs
Volume (Tank, max. volume)	2,7 l // 0.71 gal
Volume (Tank operating volume)	1,6 l // 0.42 gal

Ordering information

Easyclean MD, 220-240 V	No. 18510000
Further accessories	Page 22



Basic eco

Fine sandblasting unit

Compact, fine sandblasting unit with 1 or 2 blasting tanks.

Advantages

- Great cost efficiency through special mixing chamber technology (Venturi-Principle).
- Precise sandblasting due to excellent illumination of the blasting chamber with LED technology
- Sufficient freedom of movement in the large blasting chamber (10 l).

Details

- Tool-free extension to 2 tanks.
- Renfert offers suitable extraction units as necessary accessories.

Recommendation: Cobra abrasives

This abrasive contains one of the hardest materials: aluminium oxide (Al_2O_3). We recommend a grit size of 25–70 μm for cleaning. A grit size of 50–110 μm is recommended for conditioning.



tool included



perfect view



compact



High-precision pre-treatment



Cleaning

Technical data

Permissible mains voltage	220–240 V 120 V 100 V
Permissible mains frequency	50/60 Hz
Working pressure	1–6 bar // 14.5–87 psi
Max. connection pressure	6–8 bar // 7–116 psi
Air consumption	98 l/min (6 bar) // 3.46 cfm (87 psi)
Intensity of lighting	4800 lx
Lamp power	9 W
Dimensions (W x H x D)	350 x 275 x 400 mm // 13.8 x 10.8 x 15.7"
Tank capacity	1000 ml // 34 fl.oz.
Number of tanks	1–2
Blasting chamber volume	10 l // 2.64 gal
Weight (empty, 2-tanks)	~5,5 kg // ~12.1 lbs
Weight (empty, 1-tank)	~4,4 kg // ~9.7 lbs

Ordering information

Basic eco, 25–70 μm , 230 V	No. 29491050
Basic eco, 25–70 μm , 120 V	No. 29493050
Basic eco 25–70 μm , 100 V	No. 29495050
Cobra, 25 μm abrasive Al_2O_3	5 kg canister No. 15941105
Cobra, 50 μm abrasive Al_2O_3	5 kg canister No. 15941205
Cobra, 90 μm abrasive Al_2O_3	5 kg canister No. 15841005
Cobra, 110 μm abrasive Al_2O_3	5 kg canister No. 15831005



SILENT compact

Single workbench extraction



silent



compact



Compact, bag-free extraction unit with automatic filter cleaning and long-lasting collector motor.

Advantages

- No follow-up costs due to bag-free dust collection.
- Low operating noise of max. 55 dB (A).
- 3x longer service life in comparison to conventional collector motors (1,000 operating hours guaranteed).

Details

- Comfortable operation of the switch-on function through key combination.
- Working without interruption due to an uncomplicated motor change within minutes.

Technical Data

Permissible mains voltage	220–240 V 120 V 100 V
Permissible mains frequency	50/60 Hz
Suction turbine	490 W (230 V) 480 W (120 V) 480 W (100 V)
Volume flow (max.)	2500 l/min // 1.47 ft ³ /s
Max. depression	219 hPa // 3.2 psi
Filter quality	Class M according to EN 60335-2-69
Max. permitted connected load of the plug-in socket	1350 W (230 V) 480 W (120 V) 320 W (100 V)
Number of suction hoses	1
Sound pressure level (LpA) at max. volume flow	55 dB (A)
Weight (empty)	~13,2 kg // ~29.1 lbs
Dimensions (W x H x D)	245 x 440 x 500 mm // 9.6 x 17.3 x 19.7"
Ø suction fittings interior	35 mm // 1.38"
Ø suction fittings exterior	40 mm // 1.57"
Fill level dust collector	~2,6 l // ~0.69 gal

Ordering information

SILENT compact, 220-240 V	No. 29340000
SILENT compact, 120 V	No. 29341000
SILENT compact, 100 V	No. 29341500

Dustex master plus

Dust extractor box



perfect view



The non-tip and non-slip Dustex master plus extractor box protects against splinters, dust and fumes. An ergonomically well-conceived form and height-adjustable arm rests enable free, comfortable working.

Advantages

- Clear view due to suction effect directly at the object.
- Maximum freedom of movement thanks to a large inner volume (17 l).
- PerfectView: Innovative LED Technology for best contour and detail recognition.

Details

- Comfortable working due to large arm inlets.
- Bright, built-in illumination (4,800 Lux).
- High safety thanks to laminated protective screen with silicone coating.
- Versatile use due to compact and sturdy, light-weight powder-coated housing.
- Wooden support made of hard beech wood.

Technical Data

Permissible mains voltage	220–240 V 100–120 V
Permissible mains frequency	50/60 Hz
Lamp power	16 W
Weight	5 kg // 11 lbs
Dimensions (W x H x D)	380 x 285 x 400 mm // 15.0 x 11.2 x 15.8"
Ø suction fittings interior	35 mm // 1.38"
Ø suction fittings exterior	40 mm // 1.57"
Working chamber (volume)	17 l // 4.5 gal

Ordering information

Dustex master plus, 220-240 V	No. 26260105
Dustex master plus, 100-120 V	No. 26261105



NEW POWER steamer 2

Steam cleaning unit with automatic filling

The new, powerful POWER steamer 2 sets new standards in reliability and durability and impresses with its outstanding cleaning performance. Any kind of typical soiling can be easily and effectively removed. Using the mains water connection and integrated pump, the pressure tank is filled automatically and ensures availability of steam at all times.

Advantages

- Particularly durable heating system – the heating element is cast inside the floor of the boiler to protect it against water, limescale, and the chemicals used during cleaning.
- High functional reliability and dependability thanks to a real-time calcification indicator.
- Simple cleaning of the pressure tank thanks to an extra-large service opening.
- Smart operation plus additional functions via app interface // Renfert CONNECT stick*.

*(optional accessory available from end of 2022. Limited country availability).

Details

- Continuous and effective cleaning performance thanks up to 2,000 W and 4.5 bar working pressure in combination with innovative steam nozzle technology.
- Availability of steam at all times – even during heavy-duty continuous use – thanks to automatic filling using the mains water connection and integrated pump.
- Optimal control through display of the current working pressure using a manometer.
- Significant reduction in workload when rinsing, cleaning, and descaling the pressure tank thanks to an effective rinsing program.



tool included



easy use



compact



smart control



Protected heating element

Technical data

Permissible mains voltage	220–240 V 120 V 100 V
Permissible mains frequency	50/60 Hz
Power consumption	2000 W 1280 W 1550 W
Pressure vessel volume	4 l // 1.06 gal
Volume (Recommended fill quantity)	2,8 l // 0.74 gal
Volume (Maximum fill quantity)	3 l // 0.79 gal
Working pressure	4,5 bar // 65.3 psi
Connection pressure	1–5 bar // 14.5–72.5 psi
Dimensions (W x H x D)	370 x 422 x 350 mm // 14.6 x 16.6 x 13.8"
Weight	~10,1 kg // ~22.3 lbs

Ordering information

POWER steamer 2, 230 V	No. 18460000
POWER steamer 2, 120 V	No. 18461000
POWER steamer 2, 100 V	No. 18462000
Wall bracket	No. 18450200
POWER steamer descaler	Page 21
POWER steamer water softener	Page 21



NEW POWER steamer 1

Steam cleaning unit for manual filling

The new, powerful POWER steamer 1 sets new standards in reliability and durability and impresses with its outstanding cleaning performance. Any kind of typical soiling can be easily and effectively removed. The location can be selected flexibly thanks to manual filling.

Advantages

- Particularly durable heating system – the heating element is cast inside the floor of the boiler to protect it against water, limescale, and the chemicals used during cleaning.
- High functional reliability and dependability thanks to a real-time calcification indicator.
- Simple cleaning of the pressure tank thanks to an extra-large service opening.
- Smart operation plus additional functions via app interface // Renfert CONNECT stick*.

* (optional accessory available from end of 2022. Limited country availability).

Details

- Continuous and effective cleaning performance thanks up to 2,000 W and 4.5 bar working pressure in combination with innovative steam nozzle technology.
- Flexible location selection thanks to manual filling.
- Safe and convenient steam cleaning thanks to an ergonomic handpiece (the housing safely dissipates electrostatic charge).
- Easy filling of water and descaling solution thanks to handy, hopper-shaped fillers.
- Wall mounting possible using an optional wall bracket.



tool included



easy use



compact



smart control



Extra large service opening

Technical data

Permissible mains voltage	220–240 V 120 V 100 V
Permissible mains frequency	50/60 Hz
Power consumption	2000 W 1550 W 1280 W
Pressure vessel volume	4 l // 1.06 gal
Volume (Recommended fill quantity)	2,8 l // 0.74 gal
Volume (Maximum fill quantity)	3 l // 0.79 gal
Working pressure	4,5 bar // 65.3 psi
Dimensions (W x H x D)	370 x 422 x 350 mm // 14.6 x 16.6 x 13.8"
Weight (empty)	~9,5 kg // ~20.9 lbs

Ordering information

POWER steamer 1, 230 V	No. 18450000
POWER steamer 1, 120 V	No. 18451000
POWER steamer 1, 100 V	No. 18452000
Wall bracket	No. 18450200
POWER steamer descaler	Page 21



NEW POWER steamer descaler

Concentrated descaling solution
(for POWER steamer 1 and 2)



POWER steamer descaler is a concentrated descaling solution for effective as well as gentle descaling of both POWER steamers.

Advantages

- Descaling that is both effective and gentle on material – the formulation is especially adapted for the aluminum pressure tank (incl. corrosion protection).
- Considerably faster descaling than with standard commercial descaling solutions.

Details

- 1 liter of concentrate: practical handling, effective cleaning.
- Can be poured in directly and only requires dilution with water.

Ordering information

POWER steamer descaler 1 l (0.26 gal) No. 18450100



NEW POWER steamer water softener

Water softening system for POWER steamer 2



silent



compact



Reliable water softening and filter system, especially adapted for POWER steamer 2. The system provides optimal protection of the POWER steamer, increasing its efficiency, reliability, and durability.

Advantages

- Inexpensive and advanced water softening / filter technology that is usually only available in large expensive systems.
- Provides the POWER steamer 2 with clean water with reduced calcium content.
- Easy, compact installation (free-standing or wall-mounted) that can be completed within minutes.
- Simple operation and monitoring (visual and acoustic signal) via a flow sensor unit with an OLED display.

Details

- Fast replacement of filter cartridges within seconds – remove, insert, that's it.
- Long-lasting filter cartridges.
- Venting and rinsing directly at the filter head, without disconnecting the tubes (via automated inlet and outlet shut-off valves).
- Automatic replacement of all seals between the head and cartridge each time a cartridge is replaced.

Technical data

Weight (cartridge) ~1,8 kg // ~3.96 lbs











Ordering information

POWER steamer water softener	No. 18460100
POWER steamer water softener Flowmeter	No. 18460101
POWER steamer water softener Filter head	No. 18460102
POWER steamer water softener Filter cartridge M	No. 18460103
POWER steamer water softener Filter cartridge L	No. 18460104



Accessories

Cleaning

	SYMPRO Mini-cup set	<p>Hygienically reprocessable bowl (for 4 single crowns or up to 4 unit bridges) for cleaning small objects in the SYMPRO denture cleaning unit, incl. adapter ring and cleaning needles.</p> <p>For SYMPRO, help:ex, temp:ex</p>	Set	No. 65000410
	SYMPRO Cleaning needles	<p>The rotating needles heat up the cleaning solution to approx. 45°C, which accelerates the chemical reaction. The needles are made of an acid-resistant alloy. They are cut precisely at right angles and also designed for maximum efficiency and durability.</p> <p>For SYMPRO</p>	75 g	No. 65000550
	SYMPRO Retrofit set	<p>Retrofit set with disinfected SYMPRO cleaning beaker.</p> <p>For SYMPRO</p>	1 cleaning beaker, 1 cleaning needles and 1 manual for hygienic preparation	No. 65000460
	Plastic lid	<p>Quicker heating. Protects against evaporation and dust infiltration.</p> <p>For Easyclean</p>	1 piece, gray	No. 18500001
	Stainless steel cover	<p>Cover for use with the cleaning jar or plastic cup with lid.</p> <p>For Easyclean</p>	1 piece	No. 18500002
	Stainless steel basket	<p>For storage of cleaning items.</p> <p>To protect the floor of the ultrasonic tank.</p> <p>For Easyclean</p>	1 piece	No. 18500003
	Stainless steel immersion basket	<p>For cleaning small and very delicate items.</p> <p>For use with the stainless steel cover or with the cleaning jar.</p> <p>For Easyclean</p>	1 piece	No. 18500004
	Plastic acid bath insert	<p>For acids and fluids not suitable for use in the stainless steel tank.</p> <p>For Easyclean</p>	1 piece	No. 18500005
	Cleaning jar	<p>For the use of additional cleaning liquids. For use in the stainless steel cover.</p> <p>600 ml</p> <p>For Easyclean</p>	With lid and rubber band, 1 piece	No. 18500006
	Plastic cup with lid	<p>Ideal for cleaning smaller items and working with acids.</p> <p>Can be also used in conjunction with the stainless steel cover.</p> <p>For Easyclean</p>	1 piece	No. 18500007



Mixing technique and model fabrication

This is what makes work easier

- Homogeneous, bubble-free and reproducible mixing results with any material
- Easy to use
- Quick-clean parts
- Work is relaxing thanks to quiet equipment



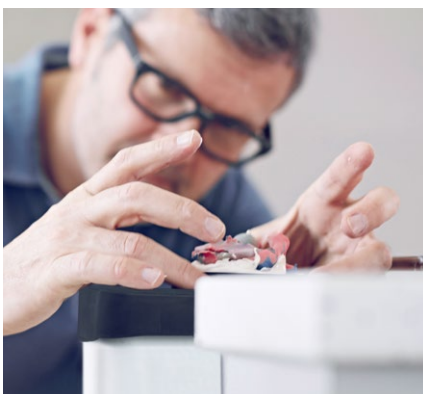
Added value for your dental office

What if you could take care of smaller laboratory tasks directly in your dental office? If high-quality plaster models could be produced in your own mini-laboratory in your dental office? Sound good? We think so too: Added value would stay in your practice and idle periods could be utilized effectively.



Master technicians don't grow on trees

You don't need to know how to do everything. We are happy to share our knowledge with you: step by step. From alginate impressions to plaster models. In our online manuals and videos. Clear and easy to understand. Making model fabrication child's play.



Clever products for perfect results

Mistakes can happen, but they don't have to. With our intelligent and consistently designed products, we can make your processes reliable and reproducible. How do we do it? As with everything we do at Renfert, we stick to our motto: making work easy!

Twister

Vacuum mixing unit



easy use



silent



compact

High speed vacuum mixing unit with diaphragm pump for the vacuum and base mixing functions.

Advantages

- Reliable processing of large amounts due to high speed.
- Easy and fast entry of mixing parameters using a large, highly luminous display.
- Reduction of bubbles due to vacuum which can be regulated from 70% to 100%.

Details

- Can be used flexibly for alginate impression materials and all duplicating and model materials used in dental technology.

Technical Data

Permissible mains voltage	100–240 V
Permissible mains frequency	50/60 Hz
Power consumption	180 W
Vacuum pump capacity	16 l/min // 0.56 cfm
Max. vacuum	≈-890 mbar < ≈-12.9 psi
Bowl pressure abs.	≈80 mbar // ≈1.16 psi
Vacuum reduction	70–100 %
Rotational speed	100–450 rpm
Dimensions (W x H x D) (wall unit)	152 x 285 x 235 mm // 6.0 x 11.2 x 9.3"
Dimensions (W x H x D) (with stand)	230 x 640 x 295 mm // 9.0 x 25.2 x 11.6"
Weight (without bowl)	~5,2 kg < ~11.5 lbs

Ordering information

Twister, 220-240 V	No. 18260000
Twister, 100-120 V	No. 18261000
Mixing bowls	Page 25
More accessories	Page 25

Twister venturi

Vacuum mixing unit



easy use



silent



compact

High speed vacuum mixing unit, Venturi vacuum technology and base mixing functions.

Advantages

- Reliable processing of large amounts due to high speed.
- Easy and fast programming and operation using a large, highly luminous display.
- Reduction of bubbles due to vacuum which can be set to 80% or 100%.

Details

- Can be used flexibly for alginate impression materials and all duplicating and model materials used in dental technology.

Technical Data

Permissible mains voltage	100–240 V
Permissible mains frequency	50/60 Hz
Power consumption	180 W
Min./max. extern connection pressure	4,5–6 bar // 65–87 psi
Max. vacuum	≈-890 mbar < ≈-12.9 psi
Bowl pressure abs.	≈80 mbar < ≈1.16 psi
Vacuum reduction	80 % 100 %
Air consumption	28 l/min < 0.99 cfm
Rotational speed	100–450 rpm
Dimensions (W x H x D) (wall unit)	152 x 320 x 235 mm < 6.0 x 12.6 x 9.3"
Dimensions (W x H x D) (with stand)	230 x 640 x 295 mm // 9.0 x 25.2 x 11.6"
Weight (without bowl)	~4 kg < ~8.8 lbs




Ordering information

Twister venturi, 220-240 V	No. 18270000
Twister venturi, 100-120 V	No. 18271000
Mixing bowls	Page 25
More accessories	Page 25



Accessories

Vacuum mixing units

	<p>Mixing bowl with paddle, 200 ml</p>	<p>Well-designed paddle geometry for optimal, thorough mixing. Marking indicates maximum filling capacity. Reservoir protects against unintentional over filling. Bowl made from high-strength polycarbonate. For Twister evolution, Twister evolution venturi, Twister, Twister venturi</p>	<p>incl. paddle, 200 ml</p>	<p>No. 18200200</p>
	<p>Alginate mixing bowl, incl. paddle, 500 ml</p>	<p>Specially designed for the requirements of alginates. Bubble-free material thanks to the specially contoured mixing paddle for alginate material. The special surface coating ensures easy cleaning.</p>	<p>incl. paddle, 500 ml</p>	<p>No. 18230500</p>
	<p>GO 2011 speed</p>	<p>Suitable for cleaning different instruments and aids quickly and thoroughly in only 50% of the time in comparison to conventional plaster and alginate solvents.</p>	<p>2 l</p>	<p>No. 20120000</p>



Vibrax

Vibrator

The wide-ranging vibration spectrum optimally processes any material. The functionally sophisticated handling enables comfortable use even under difficult conditions.

Advantages

- Bubble-free flow behavior using two wave ranges with 4 levels of intensity.
- Low transfer of the vibrations to the workbench as the housing is oscillation decoupled.
- Long service life using maintenance-free vibration magnet.

Details

- Uncomplicated adaptation of the intensity via the large lever switch using only one finger.
- Extremely quiet, ensuring a comfortable working atmosphere.
- Time-saving due to quickly cleaned elements.
- Non-tip and extremely stable even when high pressure is applied to the edges.
- No springing of the impression tray thanks to the soft tray rest.

Optional accessory

The vibrating sphere ensures uniform flow behavior during pouring of impression trays.



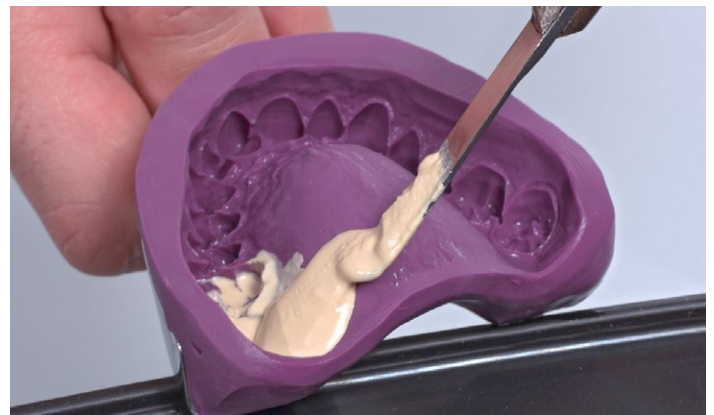
tool included



easy use



silent



Ideal for a bubble-free model

Technical Data

Permissible mains voltage	230 V 120 V 100 V 220 V
Permissible mains frequency	50 Hz 60 Hz
Power consumption	185 VA (230 V) 170 VA (120 V) 190 VA (100 V) 170 VA (220 V)
Mains input fuse	2 x 1,6 A (T)
Frequency	100 Hz (50 Hz)
Dimensions (W x H x D)	275 x 140 x 220 mm // 10.8 x 5.5 x 8.7"
Weight	~6,4 kg // ~14.1 lbs

Ordering information

Vibrax, 230 V	No. 18300000
Vibrax, 120 V	No. 18301000
Vibrax, 100 V	No. 18302000
Vibrax, 100 V	No. 18303000
Vibrax, 220 V	No. 18304000
Vibrating sphere, 1 piece	No. 18300001



NEW MT premium

Wet trimmer with a work light and aqua stop

Taking wet trimming to the next level: With sophisticated features that are perfect for everyday work, the MT premium trimmer is in a class of its own.

Advantages

- Efficient and precise wet trimming of dental plaster models.
- Fatigue-free work thanks to the integrated work light.
- Cost reduction and resource conservation thanks to aqua stop.
- Quick adjustment of the trimmer table angle using the handy tilt mechanism (90°/98°).

Details

- Easy and fast cleaning with tool-free removal of the trimmer table, door, and spray tube.
- Clean, interference-free work thanks to optimal sealing.

Further details

- Exceptionally powerful motor for outstanding surface removal even with harder types of plaster.
- Easy guidance of the plaster model with the aid of slotted angle lines on the trimmer table.
- Optimum view of the model due to a 10° inclination of the unit.
- Uniform coverage by the optimally positioned spray tube prevents clogging of the trimmer disc.



tool included



easy use



perfect view



Optimal lighting of the work area

Technical data

Permissible mains voltage	220–240 V 100–120 V
Permissible mains frequency	50/60 Hz
Power consumption	1300 W (230 V) 1325 W (120 V) 1.74 hp (230 V) 1.78 hp (120 V)
Motor performance (P1)	1300 W // 1.74 hp // 1.78 hp
Motor performance (P2)	900 W // 1.21 hp // 1.34 hp
Rotational speed	2880–3400 rpm
Water consumption max.	7 l/min // 0.25 cfm
Water pressure min./ max.	1–5 bar // 14.5–72.5 psi
Ø (Connection piece for drain hose)	36 mm // 1.42 "
Ø (Trimmer disc)	234 mm // 9.2 "
Dimensions (W x H x D)	305 x 330 x 410 mm // 12.0 x 13.0 x 16.2 "
Weight (without trimmer disc)	~13,2 kg // ~29 lbs

Ordering information

MT premium incl. Klettfix trimmer disc, 220-240 V	No. 18070000
MT premium incl. Marathon trimmer disc, 220-240 V	No. 18070500
MT premium incl. Klettfix trimmer disc, 100-120 V	No. 18071000
MT premium incl. Marathon trimmer disc, 100-120 V	No. 18071500



MT3

Wet trimmer

The MT3 wet trimmer is impressive due to its exceptionally powerful motor. With the MT3 Renfert provides high-performance trimming at a low price.

Advantages

- Quick change of the trimmer table angle using the practical tipping mechanism (90° / 98°).
- Safety: when the front door is opened a safety switch stops the motor and water.
- Uniform coverage by the optimally positioned spray tube prevents clogging of the trimmer disc.

Details

- Optimum view of the model due to a 10° inclination of the unit.
- Easy guidance of the plaster model with the aid of slotted angle lines on the trimmer table.



tool included



easy use



Very easy handling and cleaning

Technical data

Permissible mains voltage	220–240 V 100–120 V
Permissible mains frequency	50/60 Hz
Power consumption	1300 W (230 V) 1325 W (120 V) 1.74 hp (230 V) 1.78 hp (120 V)
Motor performance (P1)	1300 W // 1.74 hp // 1.78 hp
Motor performance (P2)	900 W // 1.21 hp // 1.34 hp
Rotational speed	2880–3400 rpm
Water consumption max.	7 l/min // 0.25 cfm
Water pressure min. / max.	1–5 bar // 14.5–72.5 psi
Ø (Connection piece for drain hose)	36 mm // 1.42 "
Ø (Trimmer disc)	234 mm // 9.2 "
Dimensions (W x H x D)	305 x 330 x 410 mm 12.0 x 13.0 x 16.2"
Weight (without trimmer disc)	~13,2 kg // ~29 lbs

Ordering information

MT3 incl. Klettfix trimmer disc, 220-240 V	No. 18080000
MT3 incl. Marathon trimmer disc, 220-240 V	No. 18080500
MT3 incl. Klettfix trimmer disc, 100-120 V	No. 18081000
MT3 incl. Marathon trimmer disc, 100-120 V	No. 18081500
MT3 100-120 V 50/60Hz JP + Klettfix trimmer disc	No. 18082000



Processing restorations

This is what makes work easier

- Perfectly prepared scan objects
- Precise separating and grinding discs for all materials
- Sophisticated mixing trays and high-strength brushes
- Fast high-gloss results thanks to pastes and brushes that are adapted to one another



The tool defines the result

It doesn't matter how good your skills are if you use the wrong tools. That's why Renfert has developed precise, powerful and user-friendly instruments and materials that do exactly what they should: help you achieve optimum results.



Ready to scan

Renfert-Scanspray provides perfectly matte and even coverage for impressions or components made from shiny materials such as titanium abutments. Achieve optimal results in scanning and digitalization.

A glowing finish

Helping you create surface structures and perfect your restorations with a flawless gloss finish – the brushes, polishers and polishing pastes from Renfert that are perfectly adapted to one another and to the respective material. Take the Renfert Polish polishing pastes, for example: they contain the ideal diamond grit size for the material in question. For a perfect high-gloss finish in no time at all, even with materials that are difficult to polish such as hybrids.



Separated – and grinded

A lot is expected of separating and grinding discs: they need to be thin and elastic to separate milled restorations from blocks, yet stable at the same time. They should not generate too much heat, so as not to stress the material. But they should still precisely separate without compromising grinding power. Renfert's diamond-coated separating and grinding discs are also reinforced with glass-fibers for long-lasting durability. That's good for your wallet, too.

Artificial restorations – almost as good the real thing

Characterizing and glazing restorations is an artistic and highly individual craft. That's why mixing trays and brushes from Renfert are just as varied as individual requirements. But they do have one thing in common: they are consistently well-designed in terms of the features they offer, making them easy for you to work with.

Stain-Mix

Mixing Tray

Stain mixing tray for porcelain and acrylic stains.

Advantages

- Black lid for light curing stains.
- 30 small wells with sharp edges for wiping the brush.
- 1 large well for glaze liquid.



Ordering information

Stain-Mix ≈ 155 x 95 mm // ≈ 6.10 x 3.74" No. 10650100

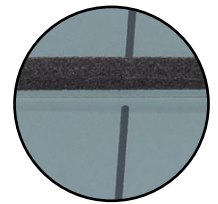
lay:art crystal aqua s

Mixing Tray

Partially self-moistening glass mixing tray with two moistening strips.

Advantages

- Gentle on the brush and completely abrasion free using float glass.
- Homogeneous moistening and consistency of the porcelain thanks to dimensionally stable and durable moistening strips.
- Optimal moisture transport ensures there is no formation of microbubbles or porosity.



Ordering information

lay:art crystal aqua s 159 x 4 x 90 mm // 6.26 x 0.16 x 3.55" No. 10432000

lay:art color

Mixing Tray

Glazed ceramic tray for preparing and storing stains.

Advantages

- Versatility due to 13 drop-shaped, 2 large and 4 small round mixing wells as well as a smooth mixing surface.
- Newly developed drop shape: sharp-edged at the back for wiping the brush, tapering at the front to allow controlled dispensing of the stain on the brush surface.



Ordering information

lay:art color 159 x 11 x 90 mm // 6.26 x 0.43 x 3.55" No. 10470000



Takanishi

Synthetic bristle brush



Very high quality synthetic bristle brush which has been well proven for many years for the optimal porcelain build-up.

Advantages

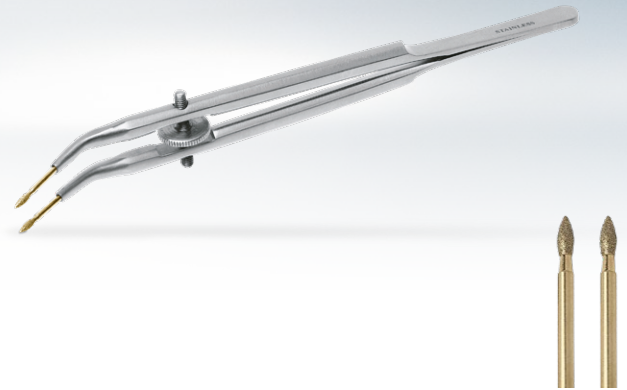
- The brush tip remains stable.
- Highly flexible brush bristles.
- Ideal for reducing porcelain.

Ordering information

Takanishi staining brush set size 00 and 000	2 pieces each	No. 17010000
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Jacketgrip

Holding instrument with diamond tips



[1]

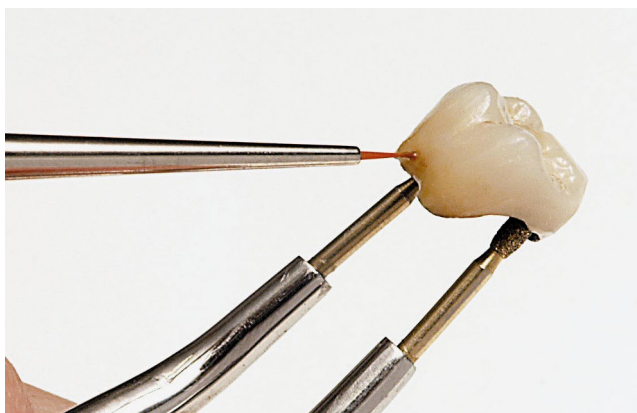
Tweezers for a secure hold on crowns and bridges.

Advantages

- Replaceable, fine diamond tips.
- Elliptical shaped tips suitable for small crowns.
- Infinitely adjustable with the thumb screw.

Ordering information

Jacketgrip	1 piece	No. 11050300
[1] Replacement tips	2 pieces	No. 11090100



Stain application



Always well under control



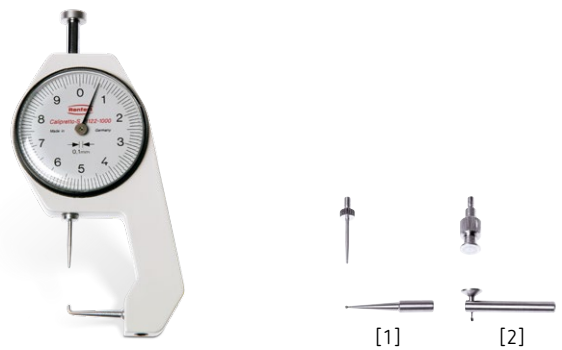
Calipretto S

Precision measuring instrument

Measuring system for precise wall thickness of dental objects.

Advantages

- Interchangeable special tips.
- Standard tips: all-purpose use within normal space conditions.
- Modified tips: specifically for use in slender anterior crowns.



Ordering information

Calipretto S	incl. 3 pairs of tips, adjusting sleeve and Allen key	No. 11221000
Measuring tips Standard, 1 pair		No. 11221001
[1] Measuring tips, modified, 1 pair		No. 11221002
[2] Measuring discs for casting wax, 1 pair		No. 11221003
Protective glass, 1 piece		No. 11221004

Dynex Brillant

Separating discs

Flexible diamond separating discs with glass fiber reinforcement, created for cutting, separating and trimming veneering porcelain, zirconium oxide and lithium disilicate.

Advantages

- Avoids material damages due to very low thermal impact.
- Safe separation and trimming of press sprues due to very good cutting characteristics and removal capacity.
- Gentle to material due to extremely low vibrations.



Ordering information

Dynex Brillant, 20 x 0.25 mm	10 pieces	No. 562520
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Dynex Brillant

Grinding discs

Diamond grinding discs with glass fiber reinforcement, created for processing and trimming ceramic materials, especially suited for lithium disilicate.

Advantages

- Avoids material damages due to very low thermal impact.
- Safe trimming of press sprues due to very high removal capacity.
- Gentle to material due to extremely low vibrations.



Ordering information

Dynex Brillant, 20 x 0.8 mm	1 piece	No. 560820
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NEW Renfert Polish

Diamond polishing pastes

Diamond polishing pastes for universal application and specific use, for high-gloss polishing of ceramic materials such as lithium disilicate, zirconium oxide, veneering ceramics, of hybrid materials as well as high performance polymers.

Advantages

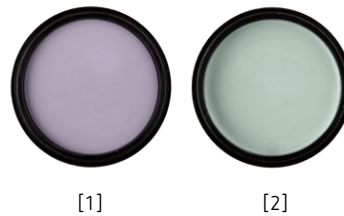
- Easy high-gloss result with a great shine and at the same time low material consumption.
- High gloss finish is achieved quickly especially in difficult to reach occlusal areas.
- Smear-free and clean polishing due to a balanced ratio of binder.

Renfert Polish all-in-one

- Universal polishing paste with a wide spectrum of diamond grain sizes, for extra-oral use.
- Quick, high-gloss finish on various materials such as lithium disilicate, zirconium dioxide, veneering ceramics and high performance polymers.

Renfert Polish hybrid materials

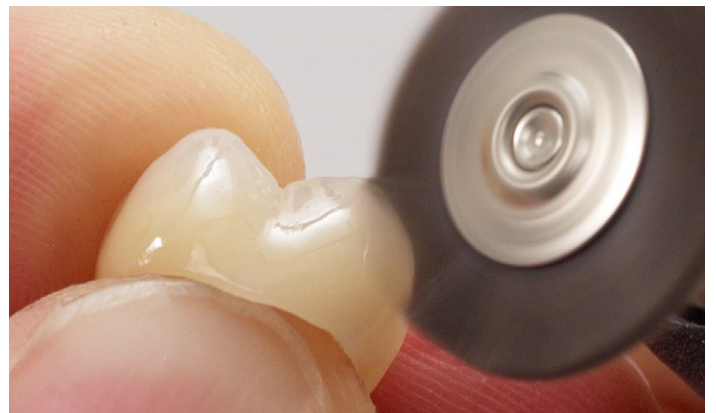
- Diamond polishing paste specifically for high-gloss polishing of hybrid materials, for extra-oral use.
- Optimal polishing result thanks to diamond particles in the polishing paste that are specially matched to hybrid materials.
- Reduced plaque build-up and longer service life of the tooth restorations thanks to optimal surface finish.



Hybrid workpiece finish with Renfert Polish hybrid materials

Ordering information

[1] Renfert Polish hybrid materials	13 g (0.46 oz.)	No. 5103000
[2] Renfert Polish all-in-one	18 g (0.63 oz.)	No. 5100100



Lithium disilicate workpiece finish with Renfert Polish all-in-one



Opal L

High-luster polishing paste

White high-luster polishing paste for all acrylic facings using a handpiece.

Advantages

- Particularly suitable for light-curing acrylics.
- Quickly smoothes the surface without altering the structure.
- Quick polishing effect.



Ordering information

Opal L	35 g (1.23 oz.)	No. 5200001
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Silicone polishers

Polisher

For pre-polishing porcelain and metal.

Advantages

- No smear build-up on porcelain.
- Ideal for the transition between metal and porcelain.



Ordering information

Silicone polishers, 22 x 3.2 mm	100 pieces	No. 860000
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Bison

Polishing brush

This unique mixture of bristles ensures a powerful and quick high-luster polish on alloys, porcelain and acrylic facings.

Advantages

- Long service-life thanks to dense, firm bristle arrangement.
- Particularly suitable for polishing occlusal surfaces and interdental spaces.
- Excellent take-up of polishing pastes.



Ordering information

Bison, 14 mm	25 pieces	No. 7631000
Bison, 14 mm	100 pieces	No. 7631100
Bison, 18 mm	25 pieces	No. 7661000
Bison, 18 mm	100 pieces	No. 7661100



Goat hair brush

Polishing brush

For polishing precious metal and acrylics surfaces.

Advantages

- Good take-up of polishing paste for an excellent polishing result.



Ordering information

Goat hair brush, 19 mm	12 pieces	No. 2040000
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Cotton buff

Polisher

For high-luster polish of dental materials using a hand-piece.

Advantages

- Optimum take-up of polishing paste, no sticking.
- Long service life.



Ordering information

Cotton buff, 22 mm	12 pieces	No. 2051000
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NEU Renfert-Scanspray extra fine

Matting spray

Thanks to its micro-fine, homogeneous structure, Renfert-Scanspray extra fine can be applied very thinly. Enhanced adhesion, especially on polished ceramics/metals and reflecting surfaces.

Advantages

- Thinner layer thickness (< 1 µm) and higher opacity compared to conventional scan sprays. This ensures more homogeneous and more detailed scanning results.



Ordering information

Renfert-Scanspray extra fine	200 ml (6.80 fl.oz.), 1 precision spray nozzle	No. 17312000
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making work easy



It is our firm belief: Equipment, tools and materials have just one purpose – to make your work easier. During daily cleaning of prostheses, restorations and other items, this means less manual work, for example, while achieving excellent results.

If time consuming work can be transformed so you have time for other tasks, that's what we call "making work easy".



**WORKFLOW
GUARANTEE**

- 3 year guarantee
- 10 year spare parts service
- Activity guarantee

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