

User manual

Dry trimmer

HSS-TR



Fig. 1: HSS-TR



Die Basis für ihr Labor

WASSERMANN
DENTAL-MASCHINEN

Dear customer,

Thank you for choosing a product from the Wassermann range. Wassermann dental equipment incorporates the highest standards of quality and the latest technology. In order to enjoy maximum performance and years of trouble-free operation, please read this user manual carefully before you start work, and operate the machine according to the recommended guidelines.

Please ensure that all persons who will operate the machine have read and understood this user manual.

Keep this user manual on hand for ready reference.

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1 For your safety

1.1 Proper use of the product

The HSS-TR dry trimmer is designed for use in dental laboratories and must be used **exclusively** for grinding (trimming) completely dry and set plaster moulds (except Class III plaster). Otherwise, you could overload the grinding wheel and/or seriously reduce the power of the attached suction unit.

In order to avoid damaging the machine and/or the grinding wheel, you should work **only** with the above materials.

1.2 Safety symbols used in this manual



Warning!

This is a warning of risk situations and dangers.

Failure to observe this warning could be life-threatening.

These warnings must be observed.



Information!

This symbol draws your attention to specific features which must be observed.

1.3 Safety tips



- Only authorised technicians should carry out servicing and repairs.
 - Always remove the plug from the power socket before undertaking maintenance or cleaning work.
 - Always wear protective goggles when working with grinding wheels.
 - Electric motors operate with dangerous rotating and electrically live parts. Incorrect use and faulty maintenance can result in physical or material damage.
 - Only qualified technicians should work on the motor.
 - Capacitors must be discharged before the machine is opened.
 - When working with the machine, wear close-fitting clothing and roll sleeves inwards only. Do not wear gloves.
 - If you have long hair, wear a hair net or similar.
 - Under no circumstances wear rings, chains, bracelets or similar articles when working with the HSS-TR!
 - Make sure that the machine is operated with the correct voltage.
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1.4 Sources of danger



- **WARNING:** Rotating parts and grinding wheels can cause injury.

1.5 Your user manual

You should read and follow the instructions carefully in this user manual for setting up and operating the machine. The machine is intended only for the specified purpose.

1.6 Responsibility for operation or damage

The responsibility for operating the machine lies exclusively with the owner or user if said machine is incorrectly serviced, maintained or altered by persons not employed by an authorised dealer or if the machine is used in a manner contrary to its specified purpose.

The machine must be maintained and operated in accordance with this user manual. Wassermann Dental-Maschinen GmbH is not responsible for damage arising from the ***non-observance*** of these instructions.

Guarantee and responsibility provisions contained in the sales and supply conditions of Wassermann Dental-Maschinen GmbH are not extended by these instructions.



- **The product warranty becomes void if modifications are made by third parties or if inappropriate parts are installed. Use only original WASSERMANN replacement parts. If, after installation, a third-party grinding wheel causes damage, responsibility lies exclusively with the person(s) introducing the replacement wheel.**



- **If diamond wheels are used, grinding embedding materials and metals will result in *extreme wear*. We assume no responsibility under these circumstances.**
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1.7 Authorised users

The owner of the machine must provide users with this manual and ensure that they have read and understood it. Only then should they operate the machine.



Make sure that the user manual is on hand at all times, and has been read and understood.

2 Maintenance and cleaning

2.1 Maintenance



- Always remove the power plug from the socket before undertaking cleaning and maintenance.
- The machine should not be opened until the wheel has come to a complete stop.
- The HSS-TR is a low-maintenance machine. When opening the grinding wheel chamber for cleaning or to change the wheel, just make sure that the seal surfaces are clean.
- Regularly check that the suction hose is firmly in place.

2.2 Cleaning

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- Remove plaster dust from the outside of the machine from time to time, using a dry cloth.
- The HSS-TR does not need any special cleaning.
- If the wheel has been used to grind unset plaster moulds, wait until it dries, then remove the residue with a standard nylon brush.
- Use only cold cleaning materials in order to avoid damaging the paintwork and/or the lettering.
- Recommended cold cleaner: A151 Universal Cleaner

3 Use/ Area of application

The HSS-TR dry trimmer is intended for use in grinding (trimming) completely dry plaster moulds. Grinding unset plaster (or Class III plaster) will overload the wheel and reduce the effectiveness of the suction unit.

***** Use the machine only for its intended purpose! *****

4 Before you start

4.1 Unpacking/transport

- Open the box, remove the packing material, then carefully lift out the machine and its accessories. Check that all accessories are present.
- When transporting the unit, ensure that it is packed correctly in order to avoid accidental damage.

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Remove the user manual and read it carefully.



It is important to identify any transport damage at the time of unpacking. You may need to fill in a condition report.

4.2 Contents/accessories

The contents include:

- HSS-TR trimmer
- diamond-coated grinding wheel
- sloping support

4.3 Set-up and storage

- When setting up the machine, make sure that the grinding wheel is readily accessible and that the suction unit (WTS-1) is close by.
- The storage location can be very important for the machine's operation, even if it is only stored for a short time. The location should be dry, well ventilated and vibration-free. It will help if the temperature remains constant and if the machine rests on a wooden base.
- **The machine should not be stored or set up outdoors.**



Warning!!! The machine must be at room temperature before you start work.

5 Operation



NEW: The HSS-TR is the first dry trimmer to have a low-voltage trip switch and a breaker point triggered when the front panel is removed.



After switching the machine on, wait a few seconds for the motor to come up to speed so you can use it at full power. Never press down so hard on moulds that the motor labours. This could lead to overloading and possible motor damage.

Use only light pressure for grinding and move the mould slightly to the left and right.



Of course, only fully set plaster moulds should be ground. Soft plaster can clog the wheel surface and reduce the power of the suction unit.

6 Installation

6.1 Location

If possible, set the machine up on a solid base in the casting workshop. Make sure that it cannot slide accidentally.

Set up the suction unit (WTS-1) close to the trimmer to avoid having to use long suction hoses.

6.2 Suction hose

The **D50** suction hose should be as level as possible and with no twists. The **HSS-TR** and the suction unit (we recommend the **WTS-1**) should be as close together as feasible. Shorten the hose if you can.

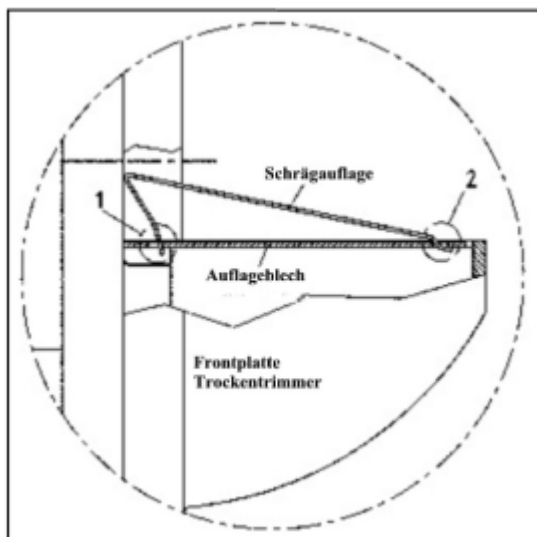
7 Set-up

7.1 Installing the sloping support

If required, the sloping support can be clamped to the base plate of the HSS-TR. Please observe the following instructions.



When working with the sloping support, make sure that it is set up correctly. It should be set up as in the following diagram.



Make sure that points 1 and 2 are correctly located in the base plate.

Description: sloping suport
 baseplate
 frontplate of dry trimmer

8 Assembly

Aside from the items mentioned under *7.1 Installing the sloping support*, the HSS-TR dry trimmer does not require any further assembly.

9 Servicing

9.1 Maintenance

For maintenance, see *2.1 Maintenance*. No other maintenance is required.

9.2 Troubleshooting

Fault	Likely cause	Likely solution
Motor does not start	After wheel change, no safety switch contact in front panel	Clean contact surfaces
	After a power outage or interruption to power (plug pulled out) the power-out trip has triggered (main switch)	Reset main switch
Excessive dust in workroom	Suction hose obstructed	Check hose layout
	Dust bag full	Check suction unit / Replace filter bag
Poor material removal	Clogged wheel	Clean wheel
	Worn wheel	Replace wheel

9.3 *Technical specifications*

Motor power	1000 Watt
Mains voltage	230 Volt / 50 Hz
Power consumption	4.6 Amp.
Operation type	S3 – 40 %
Speed	3000 rpm
Weight	19.5 kg



Dimensions

Width	340 mm
Height	335 mm
Depth	385 mm
Table	120 mm overhang

Noise emission of dry trimmer = 66db(A).



We reserve the right to make technical changes

9.4 *Replacement grinding wheels*



Attaching a replacement wheel, regardless of its origin and type, to an existing blade mounted in the machine is strictly forbidden.



Warning!

Grinding embedding materials and metals will result in extreme wear on the wheel. We assume no responsibility in these circumstances.

9.5 Accessories/spare parts

Accessories	
Item no.	Description
163010	Replacement dry grinding wheel for HSS-TR
164026	Extractor tool for changing wheels
168037	HSS sloping support (as supplied)

Spare parts	
Item no.	Description
163015	Base plate for HSS-TR
163016	Screw plugs HSS-TR
163017	Switch cap HSS-TR
163020	Hose connector HSS-TR
390035	Power cord, series no. E7
392008	Rubber feet 32 x 32 – H6 SW
511137	Low-voltage safety switch

10 Warranty

The warranty period for our equipment is 12 months. If faults occur within the warranty period, contact your dental depot or get in touch directly with our service department.

The dry trimmer should only be operated in perfect technical condition. If faults occur which could harm operators or third parties, the unit should not be used until it has been fixed.

The warranty does not cover damage caused by improper use, external mechanical causes, transport damage or interference with the unit by unauthorised persons.

11 EC conformity certificate

in accordance with 73/23/EWG (low-voltage guidelines) modified by 93/68/EWG and 89/336/EWG (EMV guidelines) and 89/392/EWG (Machinery guidelines), with modifications

Manufacturer: W A S S E R M A N N Product description: Dry trimmer for
Dental-Maschinen GmbH dental
Rudorffweg 15 - 17 applications
D-21031 Hamburg

Machine type: HSS-TR dry trimmer (163990)

Applicable standards: EN 61010-1:1993 + A2:1995
EN 50081-1 + EN 50082-1
DIN 45635 Part 1

Hiermit wird bestätigt, dass die oben bezeichnete Maschine den genannten EG-Richtlinien entspricht. Diese Erklärung wird ungültig, falls die Maschine ohne unsere Zustimmung verändert wird.

This is to confirm that the above-mentioned machine complies with the described EC rules. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur de la Communauté Européenne. Cet avis est nul et non avenant si cette machine est modifiée sans notre accord.

Esta máquina, anteriormente mencionada, cumple con los límites requeridos por el reglamento EC. Ahora bien, esta declaración quedará invalidada en caso de realizar modificaciones al aparato sin nuestra aprobación.

Hiermee wordt bevestigd dat bovengenoemde machine voldoet aan de voorgeschreven EU normen. Deze verklaring verliest geldigheid als er zonder onze uitdrukkelijke toestemming wijzigingen aan de machine worden aangebracht.

Place, date: Hamburg, den 10.Apr.2003 Company stamp :

Signed: 
Wilfried Wassermann
(Managing Director)

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