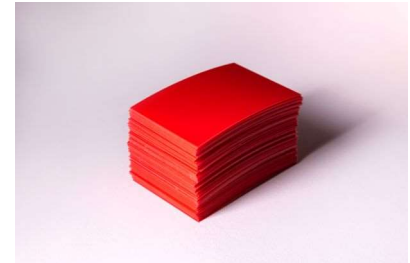


Tutorial

dopa WAMP / to securely fix your precision parts



Product properties

dopa WAMP mounting film is used to securely fix parts for single-side grinding, lapping and polishing processes on mounting plates. WAMP is a double-sided adhesive foil with a thickness tolerance of only about $\pm 1 \mu\text{m}$. Without preheating the base plate, it can be fast and easily applied and the components mounted.

Several gluing, cementing and optical contact bonding processes can be substituted with WAMP. It is compatible with glass, ceramics and metal base plates and nearly all types of substrates. Primarily WAMP is used in single-side grinding, lapping and polishing.

Thanks to the WAMP's very high parallelism and homogeneity, you can produce very parallel parts, cut down the waxing error and have a stable process. After processing the adhesive is deactivated simply by heat. The parts can be picked up from the tape easily without residues from glue or wax.

Benefits of WAMP

Easy and fast to apply

Fast mounting of WAMP on the carrier without pre-heating (usually min. 20 minutes of time saved)

Precise positioning

Compared to conventional gluing or waxing the parts stay at their position. No correction is necessary.

No adhesive gaps or cementing failures

There is no **adhesive gap or cementing failure**. This enables you to produce parts with excellent flatness and parallelism.

Fast and easy to handle

You can immediately start with the processing when the parts are fixed with WAMP on the base plate. No cooling down is necessary (usually min. 20 minutes of time saved).

Low release temperatures

Black and green **WAMP** release already at temperatures as low as **50°C**. Many glues or waxes need much higher temperatures to soften. When heated up to release temperature the adhesion is stopped at both sides simultaneously.

Deactivation is indicated by a color change,

which is clearly visible to the operator. The parts can then be simply picked up from the base plate.

No cleaning effort

You do not need to clean the parts from glue or wax residues when using WAMP. No aggressive or flammable solvents are necessary to clean the parts

WAMP is removed **residue-free**. It can also be used to **protect** delicate faces of your parts

Low thickness tolerance

Also, very thin parts with thickness < 0.1 mm can be processed using WAMP.

Application of WAMP

1. Handling and storage

- dopa WAMP is shipped securely packed. This assures the best quality and performance at your site.
- Store the WAMP in a clean and dry environment avoiding elevated temperatures. Store the film flat and avoid bending and any damage prior to use.
- The release liner of the PSA adhesive on both sides of the WAMP film must not be removed before use.

2. Preparations for part mounting

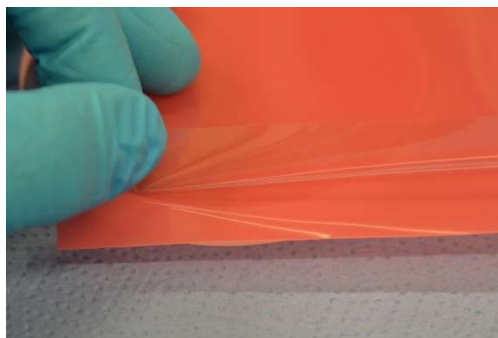
- a) Clean the surface of the mounting plate so that no dirt, oil, dust or particles can make problems to the later process.
- b) Leave a clean and dry surface ready to attach the dopa fixed abrasive pad



- c) Indication of sample positions on mounting plate:
 - A layout showing the sample positions on the mounting plate can now be sketched on the mounting face.
 - If you are using a transparent glass or ceramic plate a pattern can be put underneath the plate. dopa can supply you with customized pattern sheets – please contact our sales service if support is necessary.

3. Attaching the WAMP to the mounting plate

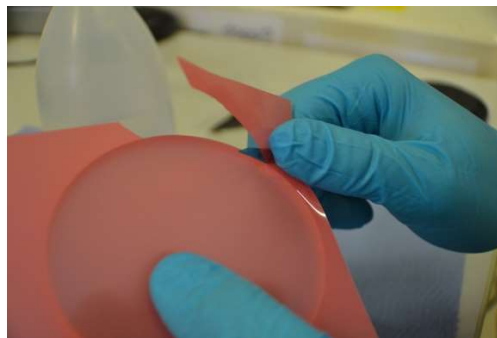
- a) Double-check that the plate is dry and free of contaminations before continuing with the following steps.
- b) Pre-align the WAMP sheet to the Plate. If the WAMP sheet is much too big you can cut off excess material with a sharp cutting knife or a razor blade
- c) Peel the release liner of the WAMP approximately 10 mm from the edge of the pad.



- d) Press the WAMP film carefully against the mounting plate avoiding air bubbles while you peel the release liner further back and simultaneously attach the pad. The best way is to use a straight edge or a squeegee for attachment.

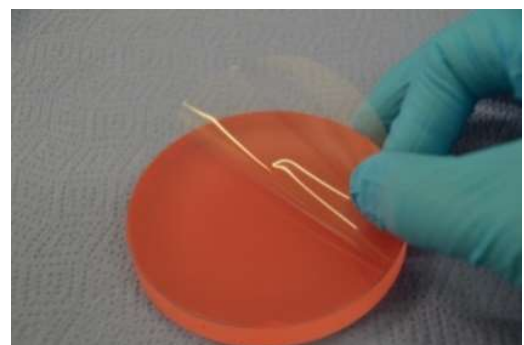


- e) Minor bubbles can be corrected immediately by removing the WAMP carefully and pressing it on the mounting plate again.
- f) Make sure that the WAMP adheres safe to the top base plate.
- g) Cut off excess WAMP at the edge of the mounting plate using a razor blade or a very sharp cutting knife



4. Mounting of samples on the WAMP

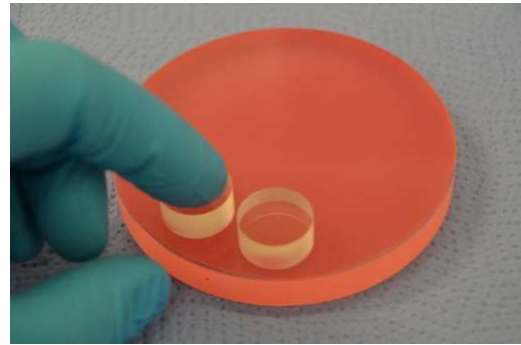
- a) Double-check that the samples surface is dry and free of contaminations before continuing with the following steps.
- b) Pre-align the samples on the plate.
- c) Peel the release liner of the WAMP layer.



- d) Press the samples on the WAMP film carefully avoiding air bubbles.
- e) Make sure that the samples adhere safe to the WAMP.
- f) **Your Sample fixture is now ready for the process.**

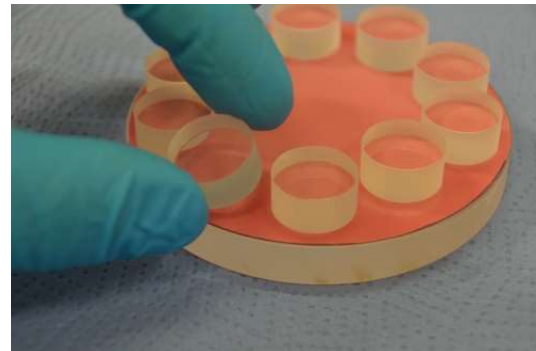
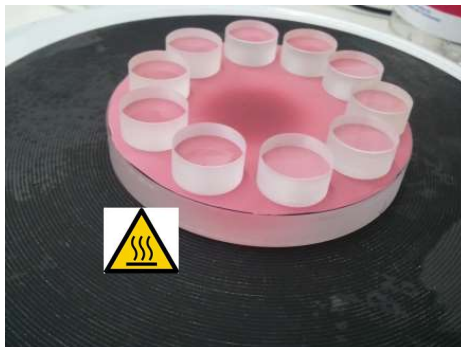
If desired you additionally can spray a protective lacquer on the parts to protect the parts shell.

WAMP is compatible with all common protective lacquers



5. Removing the samples from the WAMP

- a) The Adhesive of WAMP is deactivated by raised temperature.
- b) Heating up can be done by putting the sample fixture to a water bath, by heating up on a heating plate or by using a heat gun. You will notice a slightly white color appearing when the adhesive is deactivated



Important notice: *Immediately remove the WAMP part fixture from the heat when the adhesive is deactivated. Longer exposure to heat can lead to decomposition of the foil.*

- c) The samples usually do come off easily. You can remove them carefully by hand or using tweezers.
- d) Peel the WAMP off the mounting plate



- e) Cleaning of residues on the samples and on the mounting plate can be done with alcohol or acetone

6. Additional product information

The WAMP mounting film that we ship out to you has a total thickness of approximately 0.246 mm. It consists of totally 3 individual Layers:

Layer	Description	Thickness
1st layer	Protective film	0.036 mm
2nd layer	WAMP film	0.174 mm
3rd layer	Protective film	0.036 mm

WAMP is

available with 3

different release temperatures shown by a **color code**:



When the WAMP is heated up to the release temperature it expands to approx. 300 µm thickness causing the release of the parts.

Standard WAMP sheets are 35 cm x 35 cm. dopa also offers customized WAMP sheets tailored to your needed dimensions. Parts larger than 35 cm simply can be fixed by combining multiple WAMP sheets due to the excellent uniformity of the WAMP films.

7. Contact

In case of further questions about application and best possible performance of WAMP please do not hesitate to contact us:



dopa Entwicklungsgesellschaft für
Oberflächenbearbeitungstechnologie mbH

Zu den Krugwiesen 1 / 13057 Berlin - Germany
fon +49 (0) 30 5858428-00
fax +49 (0) 30 5858428-99
info@dopa-diatools.com
www.dopa-diatools.com