



SCANTIST 3D

General information

Even when using the most modern scanners, it is necessary to use matting agents in many applications in order to achieve good contrast values and thus precise measurement results. precise measurement results:

Transparent parts

Optical metrology is based on the fact that light emitted by the scanner is reflected from the surface of the part to be scanned back into the scanner's sensor. However, in the case of a transparent surface, the light passes through the surface instead of being reflected from it. As a result, the scanner cannot detect the surface structure.

b) Reflective parts

With reflective or specular surfaces, the light beam is reflected back in a focussed rather than diffused manner. As a result, the scanner is unable to detect the surface.

c) Recesses

If the object to be scanned has pronounced depressions, the scanner receives a reflection from the walls of the depression. This leads to a disturbance of the light pattern, which shows up in the scan as "artefacts" or erroneous data.

d) High quality and accuracy

For the most accurate and high quality measurements, a dental scan spray should be used to eliminate possible interfering factors such as differences in reflectance characteristics, texture and/or colour of the object being scanned. The use of SCANTIST 3D - vanishing creates a matt, white and homogeneous coating that reduces reflections and other inhomogeneities, thus creating excellent scanning conditions.

The matting sprays used in 3D scanning technology for the anti-reflective coating of surfaces can be divided into two product groups:

Semi-permanent pigment spray

- White, non-slip coating remains on the component after scanning
- Necessary cleaning of the scan object or its disposal if cleaning is not possible

Volatilising (sublimating) dental scan spray

- White, non-slip coating evaporates automatically after scanning - no need to clean the component
- Labs, sensors, environments and users are not contaminated by pigments





SCANTIST 3D

1. SCANTIST 3D - permanent - definition

SCANTIST 3D – permanent is a white pigment scan spray, which was developed for extraoral use in dental laboratories.

A coating with **SCANTIST 3D – permanent** leads to an improvement in the optical properties of tooth models, plaster casts, preparations, wax-ups, stumps and impressions.

After the application, **SCANTIST 3D – permanent** forms a homogeneous and very fine matting layer on the object. This avoids any reflection and the object can be scanned precisely. Fine details in geometry and surface are not affected by the coating. Thanks to a special valve with a fine nozzle, **SCANTIST 3D – permanent** can be applied permanently and efficiently to the smallest parts.

SCANTIST 3D – permanent contains pigments, but is free of titanium dioxide (TiO₂). The coating remains on the surface after the scanning process and can be cleaned with a soft brush in combination with a wet cloth.

SCANTIST 3D - vanishing product features:

- Extraoral scan spray for use in the dental industry
- To optimize the scanning quality for CAD / CAM applications, camera / video recordings, structured light scans, blue light scans, etc.
- Contains pigments – but free of titanium dioxide (TiO₂)
- Ultra-thin layer thickness
- Very fine, homogeneous coating
- Efficient and economical thanks to precise spray application using a special valve with a fine nozzle
- Adheres to all materials – even on very smooth surfaces
- No corrosive effect

2. Areas of application

SCANTIST 3D dental scan sprays facilitate or enable (e.g. for transparent/ shiny components) optical digitisation in modern dental laboratories, etc:

- Plastic design
- Digitisation of shiny metallic materials
- Digitisation of semi-transparent objects
- Creation of 0° telescopes
- and much more

3. Material compatibility

SCANTIST 3D - dental scan sprays are optimised for material compatibility, however material compatibility for specific applications cannot be guaranteed.

The specific material compatibility must therefore be checked by the user before use. SCANTIST 3D - permanent contains solvents. For details, please refer to the Safety Data Sheet (SDS) (available on request).

4. Layer thickness

SCANTIST 3D - permanent has been optimised for a minimum layer thickness. This is between 2 µm and 6 µm. The experienced user can achieve layer thicknesses of less than 1µm!

5. Surface structure

SCANTIST 3D - vanishing forms a homogeneous, thin whitish surface on the cleaned object to be measured.



SCANTIST 3D

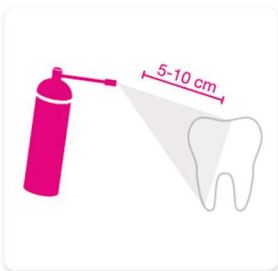
6. Application

SCAN



Shake the can until a clear noise can be heard.

SPRAY



Apply SCANTIST 3D - permanent from a distance of 5-10 cm. Spray the surface to be scanned.

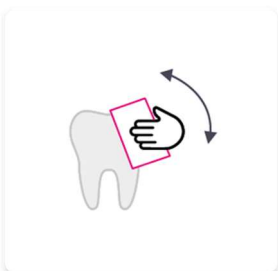
SCANTIST 3D – permanent is applied “wet”. The solvent evaporates within a few seconds, while the pigments remain on the surface as a coating. If drops form or if the solvent evaporates too slowly, increase the spraying distance or the spraying speed. Note that multiple spraying increases the layer thickness. The ideal ambient temperature is 21°C/69.8°F.

SCAN



After SCANTIST 3D – permanent has completely dried, the object can be scanned as usual.

REMOVE



SCANTIST 3D – permanent is a remaining scanning spray. The coating can be removed after use with a soft brush in combination with a wet cloth. In order to obtain a perfect cleaning result, SCANTIST 3D – permcleaner can be used to clean the surface.



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7. Further information

a) Storage

- *Optimal storage temperature between 18°C and 21°C (64.4°F and 69.8°F)*
- *Minimum shelf life: 5 years*
- *Store in a dry place and avoid direct sunlight*

b) Hazard information point

- *If you feel unwell after using SCANTIST 3D - permanent, please contact the 24-hour emergency number +49 (0) 761/192 40.*
- *Never spray on hot or glowing components and ensure adequate ventilation.*
- *Do not use for products intended to come into contact with food - avoid food contact.*
- *Exclude contact with food. Carefully read the safety instructions in the corresponding safety data sheet (available on request).*

Further information can be found on our website at www.SCANTIST3D.com and in the safety data sheet (available on request).

Disclaimer

The information provided has been compiled with great care.

However, we cannot accept any liability for any incorrect or incomplete information.