

NewPro Nano Instruction SPG Spray Coating for Glass (automatic and manual)

This information about NewPro SPG ESA and plate glass users will illustrate the necessity for carrying out the preparatory steps prior to the application. It should clarify the properties of the material and answer possible questions.

1. Cleaning of the Pane

- Test the cleanliness of the pane by spraying some water on it. The water should build an even film on the surface and not form water drops.
- Water drops indicate soiling by oily substances or remains of prior coatings.
- Remains of silicone based coating (oil creates an even film, only water creates drops) can be removed easily using NewPro Precleaner103 I (cleanser with abrasivum).
- If old coating remains can not be removed using NewPro Precleaner 103 (cleanser with abrasivum), then these are not silicone-based coatings. A new coating using NewPro SPG is nevertheless possible.
- Final wiping with ethyl alcohol or other alcohol removes remains of the cleanser and water, which might impact the quality of the coating material.
- Take care that the rim and rubber gaskets are completely dry.
- Some glass cleaners contain partly silicone oils and other greasy ingredients. These might impact the result of the coating because they create a film on the glass surface which impacts the chemical reaction between glass and NewPro SPG. Do not use cleaners which e.g. emphasize the following properties:
 - 'with Active Shine/ Active Protection'
 - 'Anti Fogging/ Prevents Glass Fogging'
 - 'Cleans and Reduces Soiling'

Pre-treatment with NewPro Precleaner 103 (cleanser with abrasivum) is inoffensive and allows best adhesive coating, because the surface is then free of all remains, especially silicone remains, which are often used during the production process as cutting oil.

2. Coating with NewPro Nano Glass SPG

- Aerosols of the coating material are a health hazard requiring an exhaust fan.
- If an existing sprayer is used, make sure that it is free of silicone, because silicone could limit the adhesion of the coating material to glass.
- The adjustment of an existing sprayer can be accompanied by NewPro.

Special Note:

Before applying NewPro SPG observe the information and advice on the data safety sheet at all times.

NewPro Nano Handling Instructions Automatic Spray Coating for Glass

The coating material creates a water and oil repellent glass surface. It facilitates the removal of dirt and lime residue und protects the glass against permanent damage through the inclusion of insoluble remains.

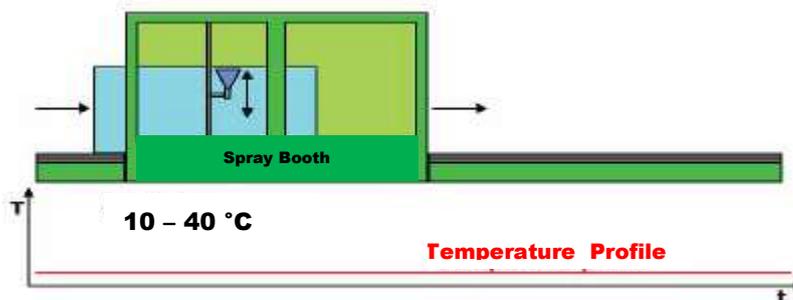
The following procedure gives best results:

1. Cleaning the glass pane

- The glass must be completely dry and free of dirt, grease, silicone, etc. (e.g. fingerprints).
- If the coating is applied directly after the production, after the Heatsoak-Process or the curing, then an extensive cleaning is not necessary.
- If the glass has been stored for a longer period of time, then it has to be cleaned e.g. by a glass washer system. In case of manual cleaning, only use a NewPro recommended cleaner such as NewPro Polishing Plus or NewPro ComboCleaner.
- NewPro SPG allows best cleaning of glass which has been stored for a longer period of time of which is highly soiled (see separate handling instructions).
- The glass has to be completely dry and clean, wipe with ethyl alcohol if needed.

2. Coating with NewPro SPG

- Ensure good ventilation and EXprotection.
- Advice: The sprayer can be delivered by NewPro Spray Booth Partner. Existing production facilities must be adjusted to the NewPro SPG system.



- Only a very thin layer of NewPro SPG needs to be applied.
- Advice: Do not use more than 20 - 50 g NewPro SPG per m²!
- Air and object temperature: + 10 °C to + 40 °C, Humidity: Max. 60%. Different environmental conditions might affect the desired result.
- The ideal coating technique leaves a light gray film, no drops!
- If too much material was applied, it can be removed after one hour using a moist cloth.
- Glass cleaner should only be used one hour after application.

3. Drop test for efficacy

Water should create drops on the whole surface, but no all-over film.

4. Environmental influence

In case of high humidity, the creation of the effect might be delayed.

5. Cleaning of coating glass-

- Dirt and lime will not stick to the coated surface making aggressive cleaners obsolete (extremely acidic, extremely alkaline, scouring agents).
- When the roll-off effect decreases, clean glass with sponge and mild cleaner (vinegar or neutral cleaner).
- The coating requires periodic cleaning of the glass using a mild cleaner and in sanitary facilities the periodic removal of remaining water with a rubber squeegee.
- Microfiber cloth might impair the coating result. Their good cleaning results are based on their very rough structure. Especially not completely cured coatings can be damaged with microfiber cloths. For exceptions see cleaning instructions.

Advice:

This application recommendation is based on extensive research. Nevertheless, the user is obliged to test if the product and procedure are suitable for his specific purposes. We are not liable for application and usages which we have not approved in writing.

Spray Nano Protection Glass SPG Handling Instructions manual NewPro SPG Spray Coating for Glass

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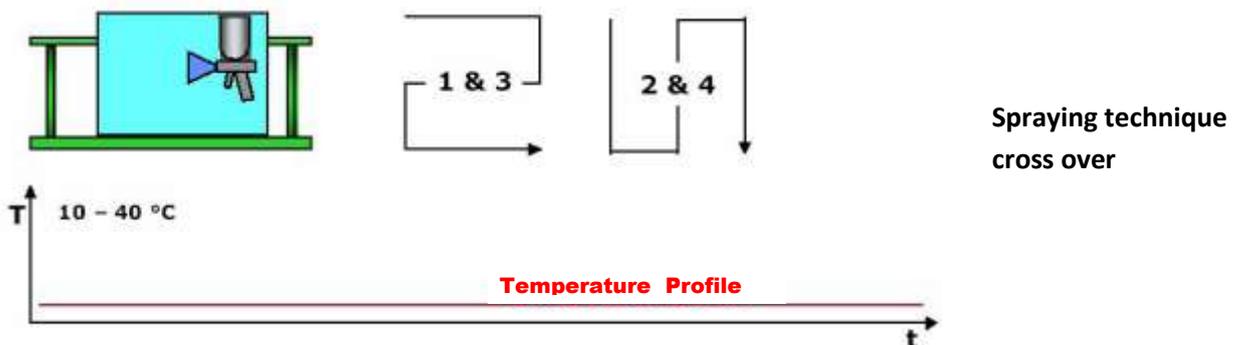
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- The glass must be completely dry and free of dirt (e.g. fingerprints).
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- NewPro Precleaner 103 (cleanser with abrasivum) allows best cleaning of glass which has been stored for a longer period of time of which is highly soiled (see separate handling instructions).
- The glass has to be completely dry and clean, wipe with ethyl alcohol if needed.

2. Calibration of spray gun (here SATAjet RP, nozzle type MSB 1.3)



Attention: Wear breathing equipment when spraying because of the creation of aerosols. Ensure sufficient aspiration.



3. Coating with NewPro Nano for Glass SPG

- Recommended: Spray gun Sata Jet (see prior page), the calibration of other types needs to be determined prior to use.
- Speed 20 cm/s, 20 cm Spray width, approx. 25 – 30 cm distance to glass.
- Apply thin layers twice in cross over technique (vertically and horizontally).
- A slight, even gray film will appear –
- Avoid drops or wet surface! Apply rather less a couple of times than too much a tone time.
- Advice: Do not use more than 50 g NewPro nano Glass SPG per m²!
- Air and object temperature: + 10 °C to + 40 °C, Humidity: Max. 60%. Different environmental conditions might affect the desired result.
- Clean the glass at the earliest 10 minutes after coating using moist cloth. Glass cleaner, solvents or glass washer should not be used one or better two hours after coating.

4. Drop test for efficacy

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6. Cleaning of coating glass

- Dirt and lime will not stick to the coated surface making aggressive cleaners obsolete (extremely acidic, extremely alkaline, scouring agents).
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