

Advice on the use of HVLP sprayguns

Fundamentals

HVLP is short for high volume low pressure. The limit values for some technical properties of HVLP sprayguns were fixed as follows based on the applicable regulations:

- a.) transfer efficiency > 65%
- b.) pressure at air cap/nozzle < 0.7 bar

Standard HVLP guns are designed for an air cap/nozzle pressure of 0.7 bar because the transfer efficiency largely depends on the user.

Advantages

Depending on the Glasurit® product used, application with an HVLP spraygun can help reduce product usage by 10 to 30%.

Instructions for use

- | | |
|--------------------------------|--|
| 1. Viscosity setting | Same as for conventional sprayguns.
Be sure to maintain a material temperature of about 18-22°C. |
| 2. Paint feed | Must be adjusted individually at the spraygun depending on gun-to-object distance and working speed. |
| 3. Air connectors | Air hose diameter: 9 mm
Connections, couplings, nipples: 9 mm |
| 4. Air pressure setting | As recommended by the gun manufacturer. |
| 5. Distance to object | 10-15 cm |
| 6. Working speed | Depending on:
(a) paint feed
(b) distance |
| 7. Spraying angle | 90 degrees to the object being painted. |
| 8. Overlaps | Spray overlaps for flow and in a staggered way. |

Safety advice:

The products are suitable for professional use only.

It cannot be ruled out that this product contains particles < 0.1 µm.

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Possible operating defects – cause and corrective actions

Optimum spray pattern



In order to achieve an even spray pattern, make sure that all bore holes are absolutely clean. It may impair the spray jet if you use objects for cleaning that are too hard. It may impair the spray jet if you use objects for cleaning that are too hard. An imprecisely centred needle will also lead to an uneven spray pattern.

Sickle-shaped spray pattern



Cause:

The full compressed air jet of a clean horn bore presses the flat jet to the clogged sides.

Pearl-like or oval spray pattern



Cause:

Contamination of spray nozzle or air outlet.

Turn the air nozzle by 180 degrees. Clean the air cap and the nozzle if the uneven spray pattern remains unchanged. Clean the air cap if the spray defect keeps moving around.

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Split spray pattern (resembling a swallow's tail)



Possible causes:

1. atomising pressure is too high
2. product is too thin
3. product feed is insufficient

Correct the defects by adjusting the air volume.

Jet flutters



Possible causes:

1. product feed is insufficient
2. paint nozzle is not tight
3. paint nozzle seating is damaged at the paint nozzle or inside the nozzle set

Product bubbles or boils in the cup

Cause:

The atomising air gets into the cup via the paint channel. The paint nozzle is not tight enough. The air nozzle was not fastened completely. Tighten, clean or replace parts accordingly.

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