Höganäs

Surfit® 53WHV for wear reduction

Significant reduction of sliding wear

Thermal surfacing is a cost effective method to extend the operating life of parts by applying an optimised layer that protects them from wear and corrosion.

For molten glass, temperature during the press and blow process is above 550°C. Surfit® 53WHV offers substantial improvements in sliding wear resistance at such elevated temperatures. The benefits are longer maintenance intervals which results in increased productivity.

Surfit® 53WHV is recommended for applications where sliding wear at high temperature is encountered. Plungers in the glass industry are one example.

For more information, please contact your local sales representative.

Main product features:

- Up to 50% reduced sliding wear
- Use existing process and equipment
- Increased productivity with less maintenance

Surfit® 53WHV helps reduce sliding wear on plungers.

Typical physical properties:

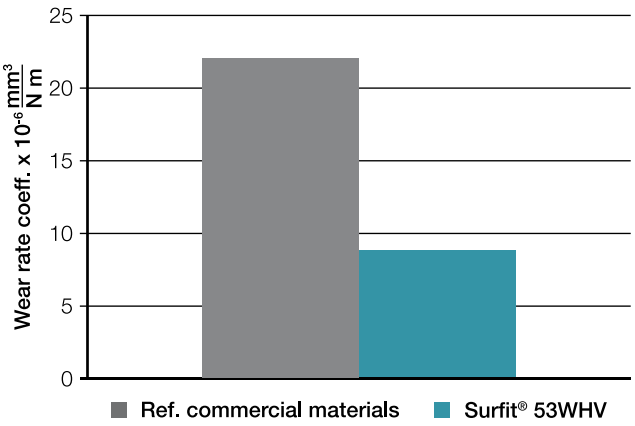
Sieve range (µm)	20-53
Matrix Hardness (HRC)	53
Hall flow (sec./50g)	14.0
Apparent density (g/cm^3)	4.5

Surfit® 53WHV is a NiCrBSi matrix material containing WCCO particles. The hardness value is 53HRC and reflects the metal matrix. Excellent high-density coating is achieved after HVOF deposition. Higher density is required, for plungers, thus fusing is used.

Wear test

Wear testing was conducted at the Höganäs Tribology laboratory using a Phoenix Tribology TE53 multi-purpose friction and wear tester. Surfit® 53WHV HVOF sprayed and fused test rings were in sliding contact with silicon nitride counter test balls for a total sliding distance of 1600 m. This achieved a contact flash temperature in the order of 500°C. The wear rate of the ring was calculated by a stylus profilometer.

Wear Resistance



Surfit® 53WHV offers up to 50% sliding wear reduction compared to other commercial products available on the market.