

WSR COATING

Datasheet

What is WSR (Weld Spatter Resistant)?

WSR is a coating that is resistant to weld spatter and has been specially tested for the requirements in a weld spatter environment. It is also highly wear resistant and therefore has a long life cycle.

The AlCrN-coating can be applied to a pure steel pin:

- Extreme hardness,
- Abrasion resistance,
- Low coefficient of friction,
- Anthracite colored
- Chemical resistance,
- Weld spatter resistant
- Coated on steel pin = full steel pin advantages

Coating process:

The AlCrN layer is coated by PVD (engl. Physical Vapor Deposition; Physical vapor deposition for example by evaporation or sputtering) at the locating pin.



Advantages

- Increase process reliability based on high wear and welding spatter resistance
- Longer lifecycle = cost reduction for spare parts
- Increasing product quality, based on very smooth surface
- Prevented welding spatter adhesion / welding spatter can be removed with a simple cloth
- Due to full steel pin, great advantage over previous ceramic pins (no breaking, no detachment of the ceramic sleeve, no internal steel core, longer running time)

| Properties | WSR |
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| Composition | AlCrN-based |
| Color | Grey |
| Hardness [HV] | 4000 |
| Thickness [µm] | 4±2 |
| Coefficient of friction against steel, dry | 0.15 - 2 |
| Surface roughness Rz [µm] | <1 |
| Architecture | Two layer |
| Coated material | EN 1.2379 |
| Coating process | PVD |
| Area of application | locating / positioning of steel parts, welding spatter environment, high wear on positioning pins everywhere where process reliability and long life cycles are important |