

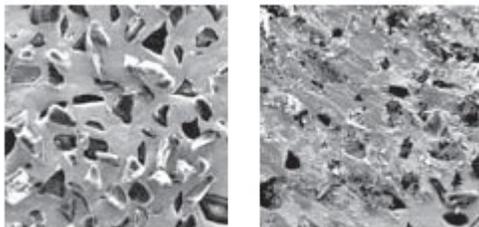


## PB Swiss Tools Nanotechnology vs. Standard Diamond Coatings:

There is an almost unlimited number of types and variations of bits. Examinations and tests however show that hard metal or diamond coatings quickly wear off and lose their function. The most important characteristic of qualitatively good bits are a distinctive tenacity with at the same time a high hardness and their exactness.

The PB Swiss Tools Precision Bits® assortment fulfills these requirements. Their universal bits for all applications simplify the storage and the overview. The colored nano-technological coating is an attractive protection against rust. Thanks to the color coding, you have the right bit at hand in a short time. The supplementary labeling of the sizes through the colored rings in addition makes your daily work easier.

### Why PB does not use any diamond coatings for their bits:

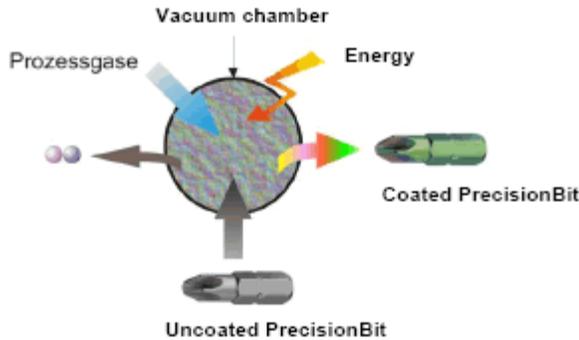


New condition after tightening one screw:  
Diamond particles are pushed away or torn out.

## The Nanotech Process:

The Precision Bits® are coated by plasma technology. By gas plasma, we mean gases in an ionized state, as they occur naturally, for example, in the northern lights or in lightning – this is also generally referred to as the “fourth state of aggregation”.

The parts undergoing coating enter a vacuum chamber. After evacuation, reactive gases are introduced and ionized by a high-frequency energy supply. The activated gases react with the surface of the work-piece and change the surface characteristics. Both the gases used and the reaction products are ecologically safe.



The thickness of the layers applied is within the range of the wavelength of visible light (violet 400 nm – red 700 nm). As a result of interferences from the ambient light within the layer, which in reality is colorless, the layer appears to be colored to the human eye. These are interference colors, as we know them, for example, from the film of oil on a rainwater puddle. The various colors of the rainbow can be adjusted by varying the coating thickness.



Despite the fact that it is extremely thin, the density of the coating guarantees reliable rust protection.