

# **CAUTION!**

Congratulations! You are about to discover the great benefits of tungsten carbide razor blades from Valsider. Tungsten carbide is a much different material than steel. Our razor blades shall be handled in a specific way considering the various points below. Please take a few minutes to read them.

### 1. Installation on a slitter scorer

- a) Tungsten carbide blades are more valuable and fragile than steel blades. To be handled with care!
- b) Avoid vibrations and/or wobbling while spinning. To do so, ensure that the contact surface between the blade and its support is free of dust or foreign material. Also, make sure the bolts will hold the blade tightly to avoid any game between the blade and its support. We recommend using new bolts.
- c) Any clash of the blade against a hard surface is likely to cause failure. In particular, please take all measures to ensure the blade will not hit any counter-parts such as anvils during service. (The opening of anvils is sometimes controlled through photoelectric cells that shall be free of dust to be efficient!).

#### d) IMPORTANT! DO NOT OVERTIGHT THE BOLTS!

Please do not use any automatic screwing tools to tight the bolts. A slight tightening torque applied by hand with a spanner or a torque wrench is enough. (Excessive tightening will initiate micro-cracks inside tungsten carbide that will expand during service and eventually cause failure).

## 2. Checking

Once they are installed, we recommend spinning the razor blades in blank conditions. In case vibrations or wobbling is detected, readjust the blades then check again.

# 3. Grinding

- a) Only diamond grinding stones shall be used to sharpen tungsten carbide razor blades.
- b) The pressure of the stones on the blade should be around 2.5 kg/cm<sup>2</sup>.
- c) Minimize the speed of advance of the stones onto the blade to avoid clashes.
- d) We suggest to divide the grinding frequency by 10 during the initial period of use. For instance, if steel blades were ground every 200 linear meters, then settle your machine to grind the tungsten carbide blades every 2000 linear meters. Then, adjust this frequency during service according to the need.
- e) Grind during 5-6 seconds initially, then adjust according to the need (this parameter is linked to the grinding frequency and the abrasive power of the cardboard).
- f) Make sure the blades are sharpened symmetrically on each side to avoid lateral force that may cause failure.

Thanks to their very high resistance to abrasion and understood that the few above points are respected, expect to enjoy your tungsten carbide razor blades for a long time!