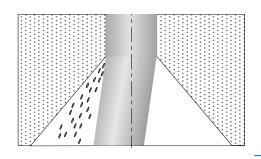


## **Back Relief - Exit taper**

Blending between the lower end of the bearing and the exit

Avoids the shaving of the wire and the creation of particles

Needed to keep a clean lubricant bath



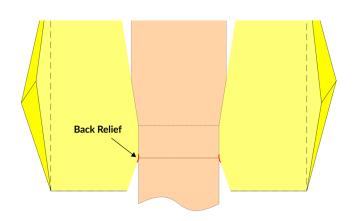


Friction against a sharp angle at the end of the bearing also causes small vibrations to the wire, which propagate inside the machine.

Consequences are:

- abnormal wear of the die
- unexpected wire breaks
- poor wire quality

To avoid this sharp edge, a smooth well blended transition between the cylindrical bearing and the die exit is required. This blended area called «BACK RELIEF» executed at the very end of the bearing is even more crucial considering the high performances of the modern wire drawing machines (speed, multiline ...) and the more and more demanding characteristics of the wires (surface finish, tolerances...).



On multiline drawing machines, the dies are not entirely blocked on the die-holder and so, not perfectly aligned.

If the junction bearing-exit is sharp, the wire can be «shaved».

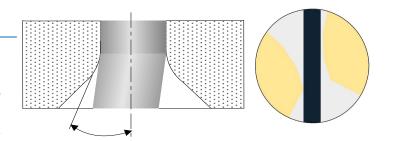
Metal particles can be created, contaminating the drawing bath and accumulating at the entrance of the next die.

## BALLOFFET T

Made on all BALLOFFET dies

Specific back relief according to application (coated wires, etc.)

- Made on new and refurbished dies
- Back Relief Measurement/Mould on request





Diamond dies and tools

