BALLOFFET

Back Relief

On wire drawing machines, dies are not tightly secured, and therefore are not perfectly aligned.

If the end of the bearing has a sharp edge, the wire could be shaved. This means that small metal particulates could be torn off the wire which in turn can:

- Contaminate the baths of the lubricant
- Accumulate on the next die

The friction against the sharp edge on the bearing's exit can also create vibrations for the wire which spread within the machine. This can:

- Increase die wear
- Increase breakages
- Decrease wire quality

To avoid this sharp edge, the exit angle between the cylindrical bearing and the exit of the die needs to be rounded off and smooth.

This Back Relief is more so critical with increased wire drawing performance (speed, multi-lines, etc..)