EXTRUSION DIES

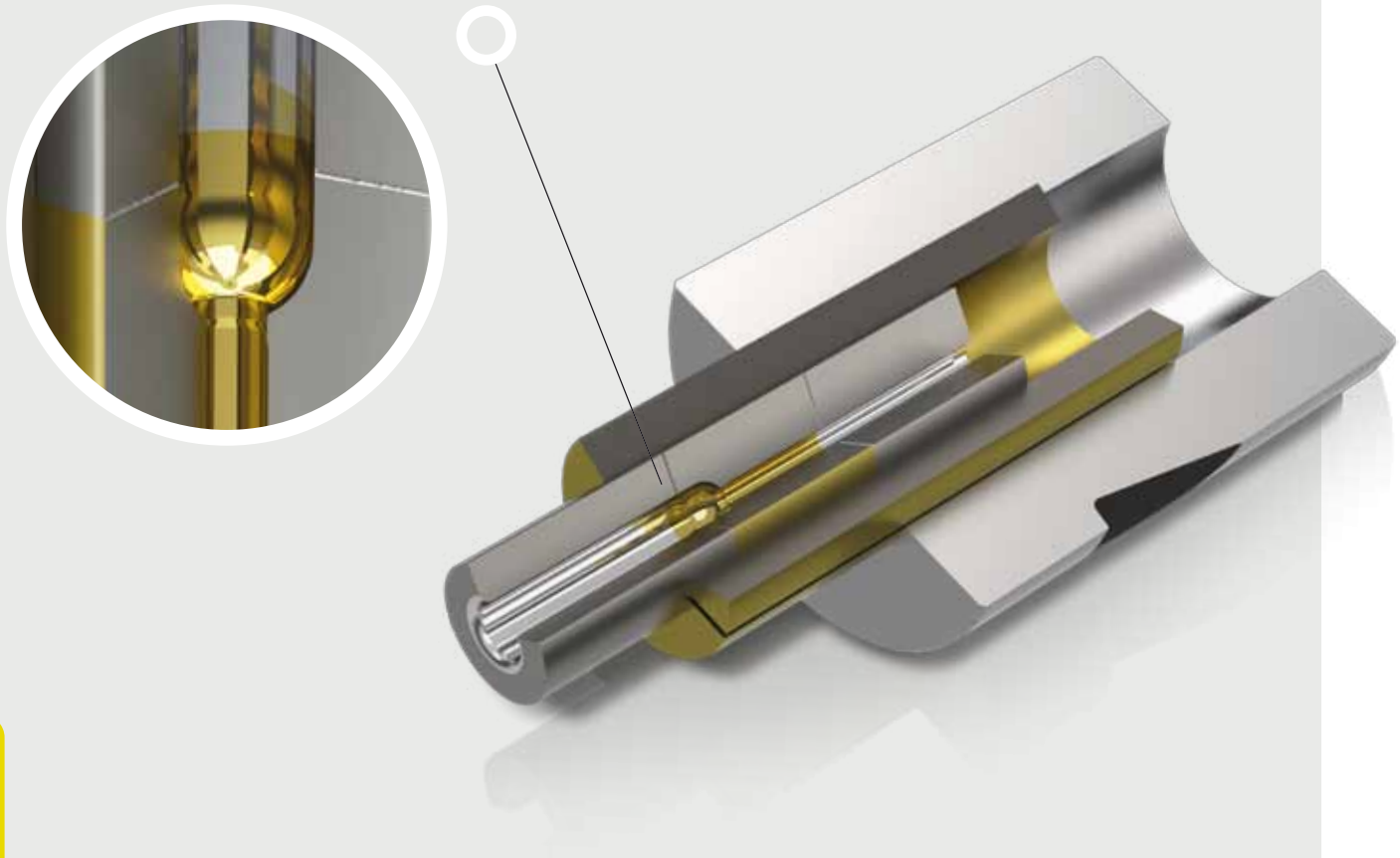
TEMSA

25 YEARS
FIXING
THE FUTURE

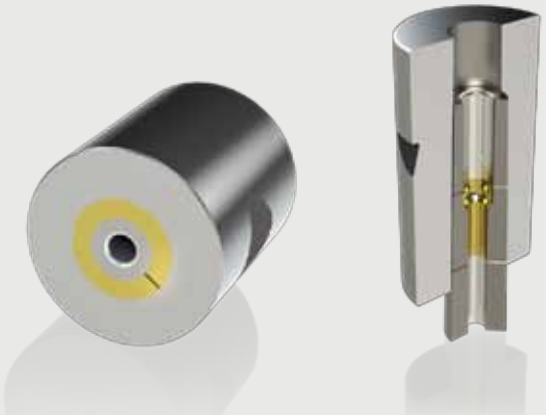
Over the past 25 years **TEMSA** has developed its **own state-of-the-art technology in order to improve tools' lifespan** whilst keeping costs down. This die design technology allows the use of interchangeable carbide nibs and a PVD-TiN coating on the working area.
On extrusion dies, a well-polished surface is essential: At TEMSA, the mirror polishing is done before and after PVD coating. This grants a better flow of the material, extending the tool's lifespan and preventing the die from seizing-up.

Closed extrusion dies are used when more than 30% cross-section reduction is needed

Depending on the design of the extrusion zone, it is possible achieving an area reduction up to 85%. With specific designs, it is possible to replace worn out carbide nibs with substantial cost savings.



1. **TEMSA's split nib technology.** Air vents designed to reduce pressure. PVD coating can be applied in the reduction area. Different carbide grades in order to improve tool performance. The coating improves the flow and prevents material to adhere on the tool.



2. **Conical nib** for easy removal and replacement of nibs using the same casing.
3. **Double high-speed steel hoop** to fasten the nib and to hold radial tension. Outer conical shape and PVD TiN coating for easy removal and replacement of nibs using the same casing.
4. **Open hoop** for easy replacement of nibs and to increase interference.
5. **Carbide grades:** different carbide grades for an optimum performance, G30, G20, G10 and submicron grain size.
6. **PVD,** different coatings to be applied depending on the extruded material.
7. **Polishing** before and after coating.

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