

# PINS



The tools that appear to be the simplest are not always the easiest to manufacture. This is precisely the case with the pins which work together with the lower and upper punches. **The high accuracy and uniformity of both planes and radiuses** all along the surface make this tooling a very challenging product. **CNC grinding, milling and EDM machines, all standardized and robotized with EROWA**, allow **TEMSA** to achieve the required shapes in a single operation. This permits TEMSA to keep the necessary uniformity **along the contour** and avoid the risky accumulation of deviations in such long parts.

TEMSA controls all processes of wire EDM and CNC through a EROWA system to achieve accurate and uniform tools.

TEMSA, through a robotized and standardized process, achieves the required uniformity and regularity both in radiuses and planes and the perfect tangency between them.



- 1 **Advice** in steel and tungsten carbide qualities for several applications.
- 2 Standardized and robotized **EDM and Wire EDM processes**.
- 3 **Conicity** obtained through **Wire EDM** if geometrically possible.
- 4 The entire **contour achieved in one single operation**.
- 5 Possibility of **very complex geometrical shapes**.
- 6 **Mirror polish** with ultrasonic equipment.
- 7 CAD-CAM con simulator.
- 8  $\pm 0.003$  mm **tolerances**.