

# Compacting Copper / Aluminum Wires



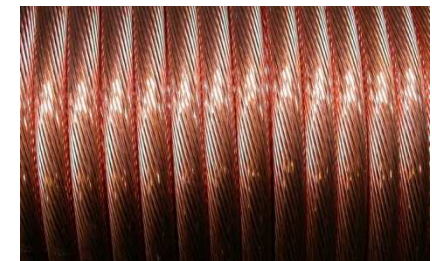
- The lifetime of Nano-Dies is **10-20 times greater** than uncoated WC-Co (TC) compacting dies;
- **Large Raw Material Savings (2.0%-2.7%) (Nano-Dies hold +0 tolerance)**
- Improving the surface quality of produced electric cables
  - No burs or edges on the surface of electric cables, which is beneficial for increasing the insulation level, especially the local discharge level, of the electric cables;
  - Oxidation phenomenon decreases significantly, which improves the performance of the produced electric cables;
  - The diameter of the cross-section of produced electric cables is nearly constant, which is beneficial for controlling the thickness of the semiconductor shielding layer and the insulation layer, and also for increasing the withstand voltage level of the produced electric cables;

## Die Lifetime

| cross-section (mm <sup>2</sup> ) | Nano-Die (km) | WC-Co (km) |
|----------------------------------|---------------|------------|
| 240                              | <b>250</b>    | 34         |
| 400                              | <b>558</b>    | 45         |



Application of Nano-Dies (Compacting)



Compacting Nano-Dies and finished electric cable