



A large number of cables and conductors in many different types and designs are used to connect electrical and electronic components. The cables and wires must be accurately prepared for the various types of connection. The quality of the cutting process is therefore of critical importance.

Weidmüller is a specialist in the cutting of copper or aluminium cables. The product selection ranges from cutting tools for small cross-sections (with direct transmission of force) to cutting tools for large diameters. Mechanical efficiency together with the special cutting pattern reduces the manual force required to a minimum.

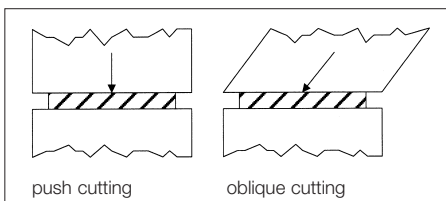
With its wide range of cutting tools, Weidmüller fulfils all the criteria for professional cable preparation. The demands Weidmüller makes of its products can be summarised simply: smooth, straight cut without deforming the conductor. Users profit directly from this philosophy, whilst maintaining ease of use.

## Cutting tools

Weidmüller uses the term “cutting” to refer to severing cables, wires and conductors of copper or aluminium with a tool appropriate for this application.

The requirement for all cutting tools is to perform a smooth, straight cut without deforming the conductor.

### Movement of the blades



Cutting is differentiated by the cutting process. Basically there are two cutting processes:

- **push cutting,**
- **oblique cutting.**

In push cutting, the cutting movement is perpendicular between tool and workpiece. In oblique cutting, the cutting movement is oblique to the tool.

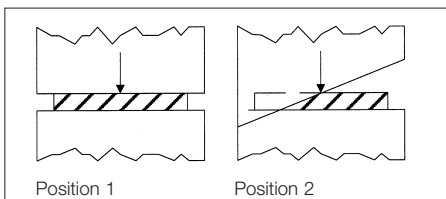
According to **DIN 8588**, experts differentiate between shear cutting, wedge-action cutting, tearing and breaking.

Shear cutting is employed particularly in the cutting of cables, wires and conductors. Cutting tools with cross blades should perform an oblique cut and operate without play.

The essential quality characteristics for professional cutting tools are a cutting edge shape which is suited to, and optimised for, the corresponding application, so that the manual forces required for cutting remain low. This allows single-handed operation.

Tools by Weidmüller comply with all requirements imposed on professional cutting tools.

### Position of the blades



In position 1, the blades act directly and along the whole length, i.e., much force is required.

In position 2, the blades cross as in a pair of scissors, the cut is therefore “offset” and requires less force.

