

STAMPING

ELOPIN®
FOR INNOVATIVE
PRESS-FIT TECHNOLOGY

KME Germany GmbH
COPPER DIVISION
[EN]



KME EloPin®

At our KME site in Osnabrück we manufacture premium progressive die tools, in addition to sophisticated stamped, contact and bent parts and sub-assemblies in close cooperation with our customers.

We offer you all steps involved in the entire process chain as a cooperative partnership: Consultation regarding optimum material selection, production process best suited to the material, surface finishing, packaging, automation, all embedded into your internal downstream processes, as well as material recycling and metal handling. This “single-source” philosophy, closes the production cycle, saves interfaces, effort, and above all costs, all major factors in an increasingly demanding and competitive market.

As a licensee of press-fit technology using **EloPin®**, KME offers this connection technology for high-quality solder-free and gas-tight electrical connections in the field of PCB contacting with connectors. Stamped parts with press-fit zones are then usually further processed into hybrid parts or electromechanical assemblies.

KME EloPin® FOR INNOVATIVE PRESS-FIT TECHNOLOGY

In press-fit technology with EloPin® connectors can be inserted into circuit boards and printed circuit boards without additional soldering, in order to subsequently guarantee a smooth energy and data transport in practice by means of simple plugging. No damage whatsoever occurs during assembly and high flexibility is guaranteed during use.

KME's high-performance materials for press-fit technology also come into play where high-pole plug connections are produced quickly and cost-effectively. KME copper alloy materials are reliable for use in highly stressed components such as in the automotive and electronics industries.

KME materials in the alloy groups CuSn, CuNiSi, and CuCr meet special requirements when used in press-fit zones and show their best side when used in a wide range of temperature ranges:

- If the operating temperature is max. 105 °C, CuSn6 (C51900) offers an excellent combination of strength, cold formability and hardness. It is wear resistant, has good corrosion resistance and good soldering properties.
- At operating temperatures of max. 135 °C CuNiSi - STOL® 76M (C19005) is the ideal material for applications in electro-mechanical components. The material is characterised by medium conductivity, good bending properties and good relaxation resistance.
- If the application temperature is ≥ 135 °C, the material C70250 comes into play. The higher alloy CuNiSi has excellent bending properties, high strength and good relaxation properties.
- An excellent alternative if used ≥ 135 °C for applications in electrical engineering is the material CuCrSiTi - STOL® 75 (C18070) with high conductivity and good relaxation resistance.
- If the operating temperature can reach values of up to 200°C, CuCrZr - STOL® 95 (C18160) is excellently suited for applications including electromobility, as this is the material that offers an unbeatable combination of maximum conductivity, good bending properties and very good relaxation resistance.

Thanks to its versatile and attractive properties such as high mechanical strength, good forming behaviour and high electrical conductivity, copper is one of the most widely used utility metals today. It goes without saying that KME materials are RoHS compliant and can be electroplated.

Copper is not only a classic material, but is also used in innovative applications, e.g. in electric mobility. The KME product range includes a wide range of high-tech copper alloys for your applications.



Weitere Informationen

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