Features and Application Notes
IRON is used as positive leg of the thermocouple types J and L. For extension leads, IRON is used for JPX and LPX. As compensating lead, IRON is used as positive leg for KCA. The thermoelectric voltages for LP(X) and KPCA differ from JP(X) materials depending on standards. The standardized temperature range of the different application possibilities of IRON is available in the tables of the glossary. The IRON supplied by Isabellenhütte mainly is copper coated and free of rust. All packaging units are protected with antirust substances.

Form of Delivery
IRON is supplied in the form of wires with dimensions from 0.12 to 4.75 mm Ø copper plated. Enamelled wires are available in dimensions between 0.12 and 1.50 mm Ø. IRON can also be supplied in form of stranded wire, ribbon, flat wire and rods. Please contact us for the range of dimensions.

Notes on Treatment
IRON is easy to process. The alloy can be soldered and brazed without difficulty. All known welding methods are applicable.

Special Remarks on the Alloy
IRON has a strong tendency to corrode/rust. The material should be stored and used in a dry environment. Please note that the copper coating does not act as a rust protection. It is only used for production and optical purposes.

1) The exact EMF values can be calculated with a “EMF-Software”, which can be downloaded from our homepage.
2) The mechanical values considerably depend on dimension. The indicated values refer to a dimension of 1.0 mm diameter.
* Depending on chemical position.