

# Copper Mold Tube-DHP Data Sheet

Copper mold tube is the most critical and high wearing part of the mold. In contact with liquid metal the copper mould forms a billet (or bloom or slab) by cooling a thin shell of metal and forming a solid crust. By extracting of the still-solidifying billet and continuous feeding of molten metal to the mold a continuous strand is formed, that format is determined by the mould shape.

## Chemical Composition:

SF-Cu = TP2 = DHP

Grade: DIN 1787

Cu > 99.96 %

P: 0.015% ~ 0.040 %

**Chorome Plating Thickness:** 0.10 ~ 0.12 mm

## Mechanical Propertise:

Hardness: 85 ~ 95 HB

Elongation (A5): 10 ~ 25 %

Tensile Strength: 240 ~ 310 Mpa (N/mm<sup>2</sup>)

Yield Strength: 190 ~ 250 Mpa (N/mm<sup>2</sup>)

## Physical Propertise:

Electrical Conductivity: 83% IACS<sup>1</sup>

Thermal Conductivity: 340 W/(m.K)

Modulus of Elasticity : 120 × 10<sup>3</sup> Mpa

Coefficient of Thermal Expansion: 17.1 × 10<sup>-6</sup>/K

Recrystallization Temperature: 345 Degrees Celsius.



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<sup>1</sup>. International Annealed Copper Standard