



WIELAND targets for solar technology

One of the most important technologies of our time and the most environmentally friendly form of energy generation is solar technology, in which sunlight is converted directly into electrical energy using photovoltaic power plants. Traditional solar cells are based on thin discs made of crystalline silicon, whereas in a new process the thin-film solar cells are vapour-deposited directly onto the base material.

WIELAND is a powerful partner in both key technologies. The extensive product range includes both semi-finished products made of silver, which protect the silicon from impurities during refining, and sputter targets, used to apply a compound consisting of copper, indium, gallium, sulphur and selenium onto the thin-film solar cells.

Key/essential factors of WIELAND targets are:

- High purity
- Fine grain structure
- Excellent homogeneity

THE ESSENTIAL PART OF YOUR SOLUTION

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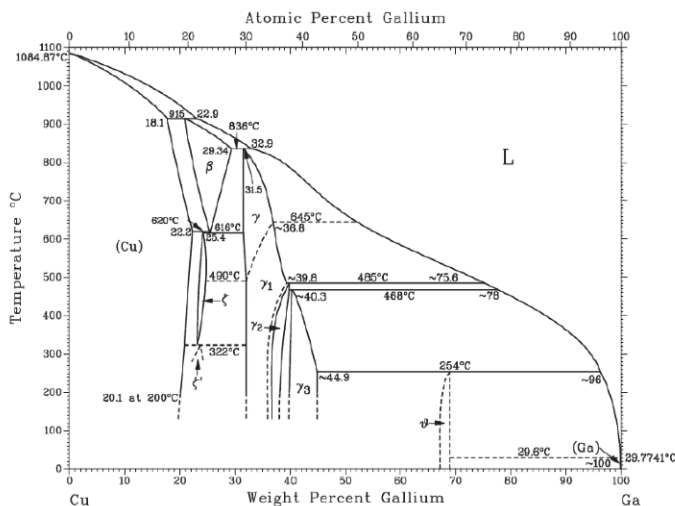
WIELAND targets made of CuGa in different compositions:

- Cu/Ga 95/5
- Cu/Ga 90/10
- Cu/Ga 85/25
- Cu/Ga 80/20
- Cu/Ga 75/25
- Cu/Ga 70/30

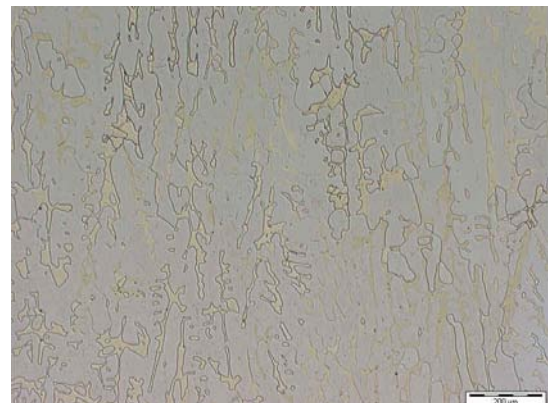
Technical data

Possible forms	planar, tubular segments
Target weights	segments of max. 30 Kg
Planar targets (L/W/T)	max. 1 m / 120 mm / 30 mm
Tubular targets (dia./WT/L)	200 mm / 20 mm / 250 mm
Purities	4N – 4N5
Density	99 % of theoretical density

Cu/Ga System



Microstructure of CuGa 80/20 targets



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