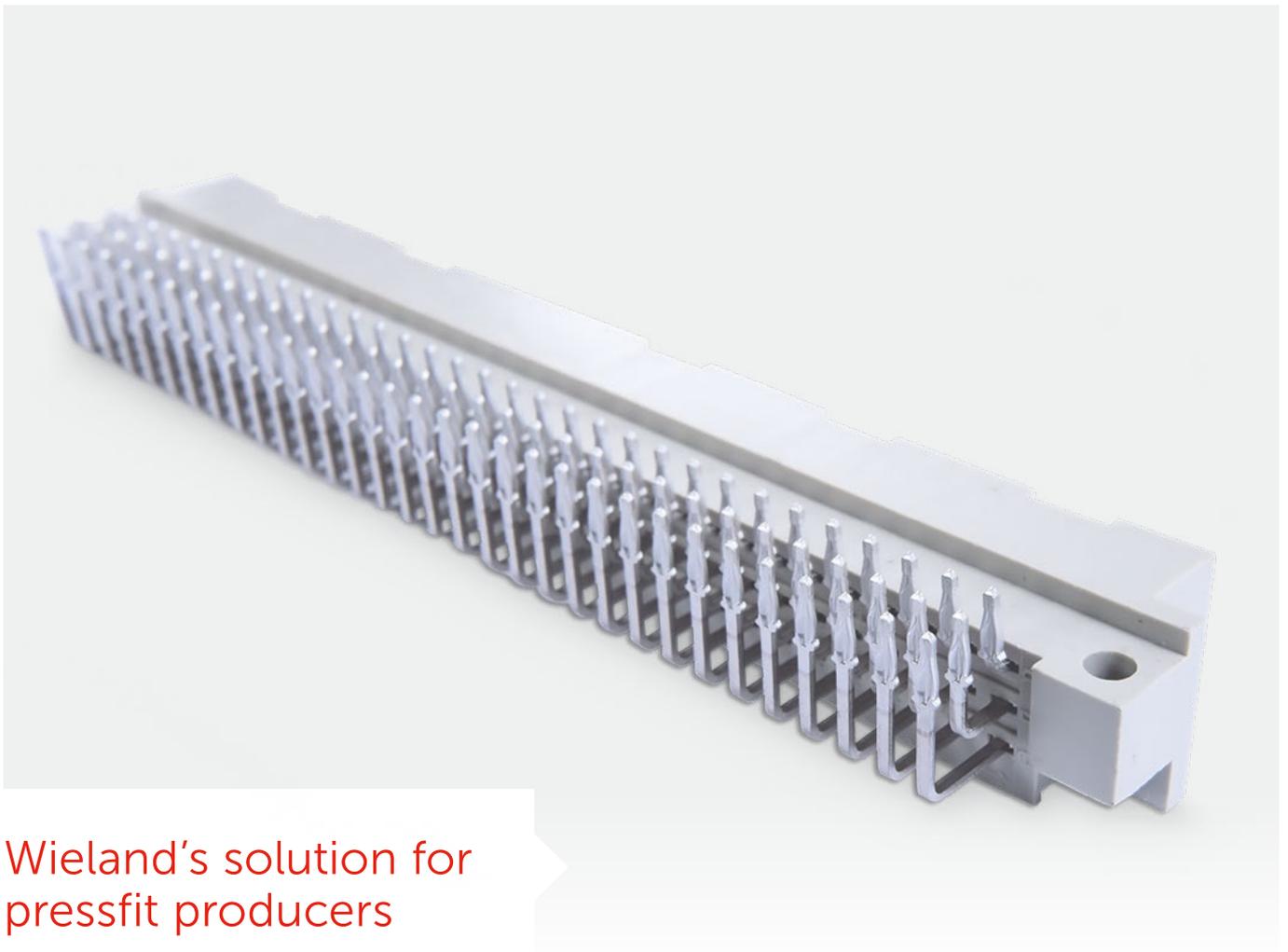


The perfect fit

B16 SUPRALLOY® fine grain bronze strip now available in press-fit-thickness up to 0.64 mm



Wieland's solution for pressfit producers

Strip made of B16 SUPRALLOY – CuSn6 – C51900

Press-fit has been gaining momentum for enabling new designs with consistent performance and higher reliability than traditional solder joints. To support manufacturers of connectors and electromechanical components Wieland is continuously optimizing its copper alloy portfolio. The proven B16 SUPRALLOY® (CuSn6) fine grain bronze is now available as strip in thickness up to 0.64 mm – perfect for your press-fit application.

A bronze with high-performance properties

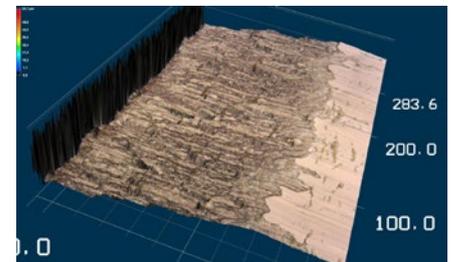
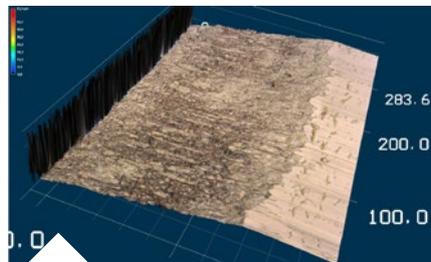
Utilizing Wieland SUPRALLOY® bronzes simplifies the significant cold forming required for certain applications – such as press-fits. B16 SUPRALLOY® is the fine grain version of standard bronze. With a grain size of maximum 3 µm the bending fatigue strength of B16 SUPRALLOY® is about 60 % of Rm. This is significantly higher than that of standard B16. As the chemical composition of Wieland B16 SUPRALLOY® is identical to standard B16 bronze it carries the same UNS number – C51900 – and has equally good electrical conductivity. B16 SUPRALLOY® temper R670 has an improved bendability compared to standard bronze temper R560. At the same time the utilizable yield strength of B16 SUPRALLOY® is 130 MPa higher.

Extra smooth stamping edges for perfect contact

A special thermo-mechanical treatment of B16 SUPRALLOY® generates the extremely fine-grained microstructure. As a result, substantially higher mechanical strength is achieved in addition to the very good bending properties. Because of its good formability, SUPRALLOY® bronzes exhibit smoother stamping edges resulting in low contact resistance after being electroplated and inserted as a press-fit connector into a PCB via.

B16 SUPRALLOY® Your benefits

- 0.64 mm is a typical press-fit dimension of strip. The material makes required cold forming safer.
- The high formability of the base material is optimal for flexible, heavily embossed press-fit zones.
- B16 SUPRALLOY® is characterized by very smooth stamping edges resulting in low contact resistance – ideal for a large contact area with many A-spots.
- Due to its fine grain structure B16 SUPRALLOY® exhibits an essentially improved bending fatigue strength.



Topography of stamping edges of B16 SUPRALLOY® R580 thickness 0.4 mm (left) compared to B16 R520 thickness 0.4 mm (right)

Do You Want to Learn More About our SUPRALLOY®, Tempers and Properties?

Please join our website and use our wieland-knowledge based program Alloywizard
www.wieland-alloywizard.com

Do you want to test SUPRALLOY® bronzes in your production?

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