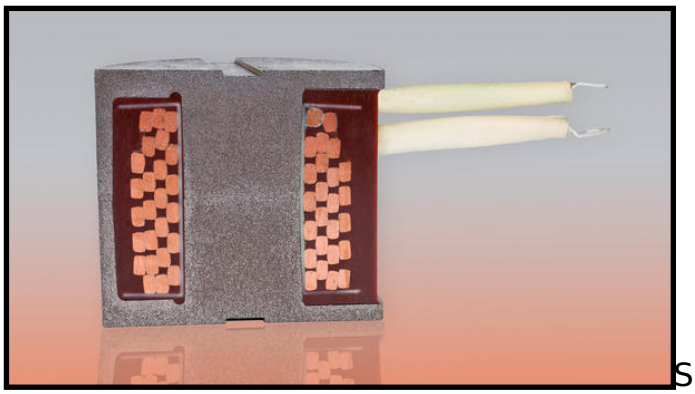
Inductive Components Designed for Industrial Applications



SMP Sintermetalle Prometheus GmbH & Co KG (SMP) introduces inductive components for industrial applications, for example frequency converters. The components are low-loss, have good EMC characteristics and a space-efficient design.

The inductive components are installed both at the frequency converter's input, where they provide power recovery, and at the converter's output, where they act as filter chokes. Because of their space-saving design and low-noise operation, SMP's chokes are also used in frequency converters' internal DC links, as both single and common-mode chokes.
The components' cores consist of powder composites with low magnetostriction, which SMP specifically engineers for each application. With their low eddy current and hysteresis losses, the materials contribute to the components' exceptional efficiency. Their encapsulated design ensures that the components emit only low-intensity stray fields – another requirement in frequency converters – which allows other components to be placed in close proximity to the choke without running a risk of magnetic interaction with the choke. With their compact design, SMP's chokes occupy 25 percent less space than conventional components, according to the company.

The chokes can be produced for frequencies of up to 200 kHz and currents of up to 1000 amperes. Their sizes range from 36 mm to 300 mm diameter and their weight from 50 g to 130 kg. Depending on the application, degrees of protection from IP00 to IP66 are available. The chokes can be used in a temperature range up to 180 degrees Celsius. All components are RoHS- and REACH-compliant and the materials used are UL-listed. Beside industrial applications, SMP's inductive components are used in wind turbines, in photovoltaic installations, in railway and medical engineering as well as in drives and power electronics.

Westendorf Associates, Inc.
www.westendorfassoc.com [1]

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