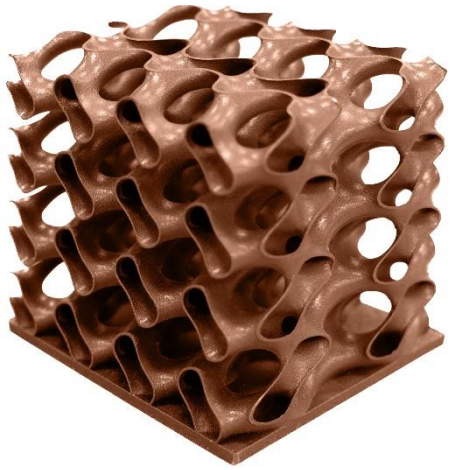
RS-Copper

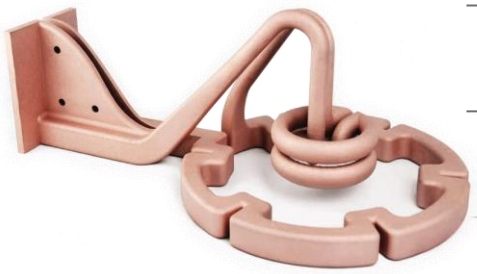
Material datasheet RS-Copper

general properties

properties	unit	value
density laser-melted	g/cm³	8,7 – 8,9
roughness after sandblasting (Ra/Rz)	µm	8 – 10 / 40 – 50
precision	mm	+/- 0,7 %, min. 0,1 mm
minimal wall thickness	mm	0,6
wall thickness for media-tight components	mm	min. 1 mm
leak test	bar	6 bar compressed air



mechanical properties



properties	state	unit	value
tensile strength	„after heat treatment“	MPa	220 ± 30
yield strength (Rp 0,2%)	„after heat treatment“	MPa	165 ± 20
elongation at break	„after heat treatment“	%	20 ± 5

electrical properties

properties	unit	value
electrical conductivity (edge/core)	MS/m	51/32



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RS-Copper

Material datasheet RS-Copper

thermal properties

properties	unit	value
thermal conductivity	W/(m*K)	265
specific heat capacity	J/kg*K	394

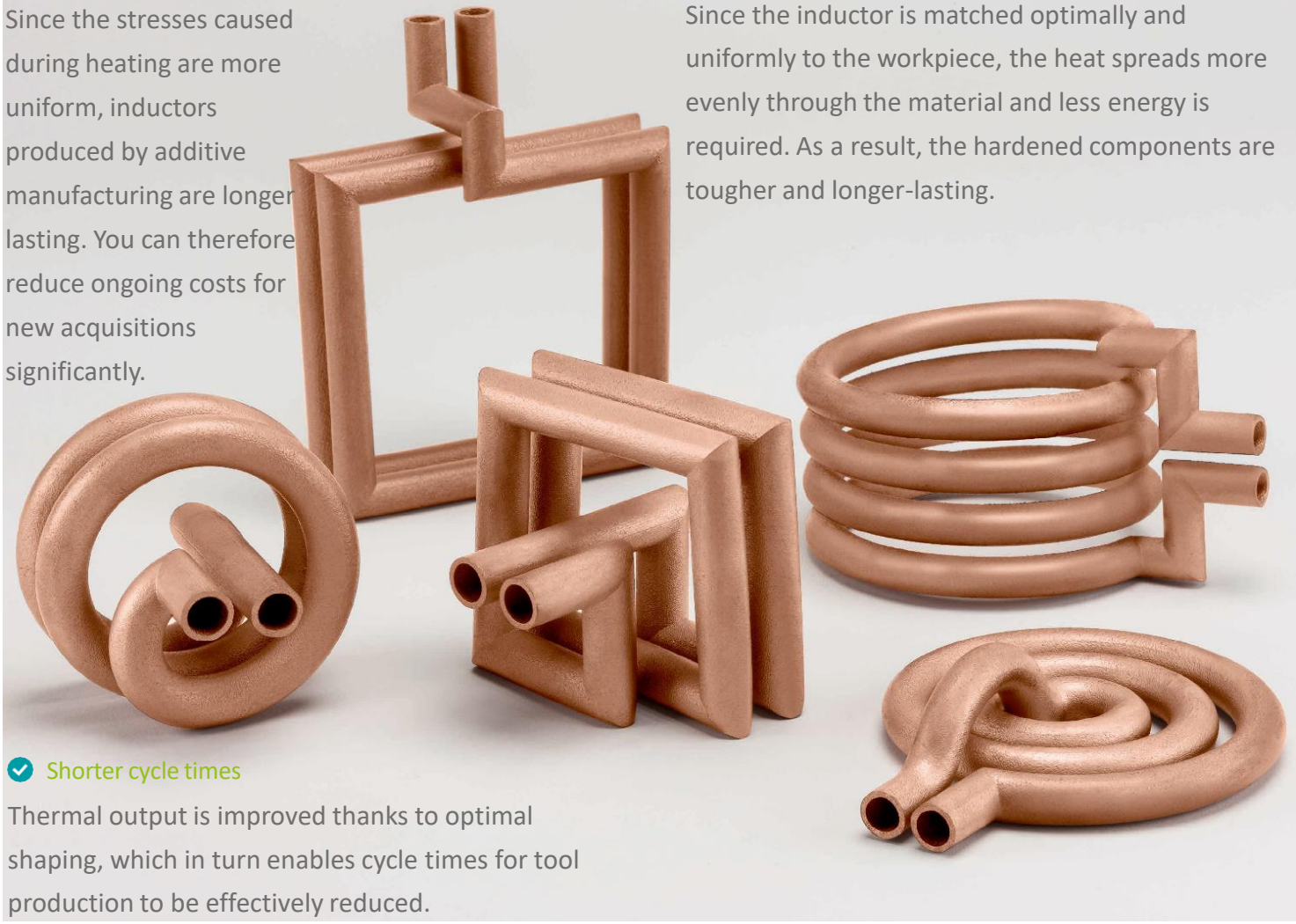
RS-Copper inductors:

Longer service life

Since the stresses caused during heating are more uniform, inductors produced by additive manufacturing are longer lasting. You can therefore reduce ongoing costs for new acquisitions significantly.

Better control of the induction process

Since the inductor is matched optimally and uniformly to the workpiece, the heat spreads more evenly through the material and less energy is required. As a result, the hardened components are tougher and longer-lasting.



Shorter cycle times

Thermal output is improved thanks to optimal shaping, which in turn enables cycle times for tool production to be effectively reduced.

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