ROSSWAG engineering

Aheadd® CP1

Metal Alloys

for Additive Manufacturing

ALTERNATIVE NAMES:

Al-Zr-Fe
Alloy AA8A61.50

Properties	Unit	Heat-treated [2]
Tensile Strength R_m	MPa	355 ±10
Yield Strength $R_{p0,2}$	MPa	325 ±10
Elongation at Break A_5	%	14 ±2
Young's Modulus E	GPa	68 ±5
Charpy Notch Toughness A_v	J	15 ±2
Hardness	HBW	60 ±5

Rosswag Engineering offers a holistic and fully integrated process chain for Additive Manufacturing services. Our portfolio ranges from manufacturing of your prototypes, tools and small serial products to an individual consulting and engineering process for the choice of material,parameters and process chain.

ENGINEERING

SIMULATION

SPECIAL METAL POWDERS

SLM® PROCESS

HEAT TREATMENT

CNC FINISHING

MATERIAL ANALYTICS

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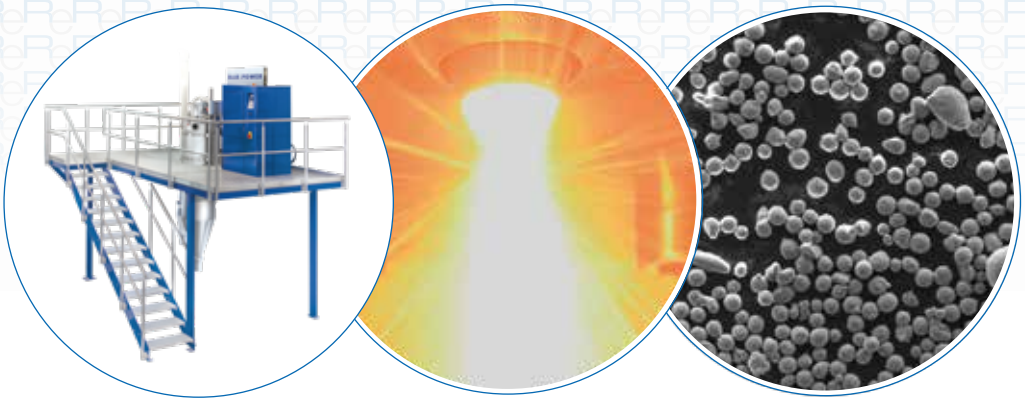


Material
characteristics

The Aluminium alloy AHEADD® CP1 from Constellium brings multiple advantages including high strength, high ductility, excellent thermal and electrical conductivity, high productivity and various possibilities for anodizing.

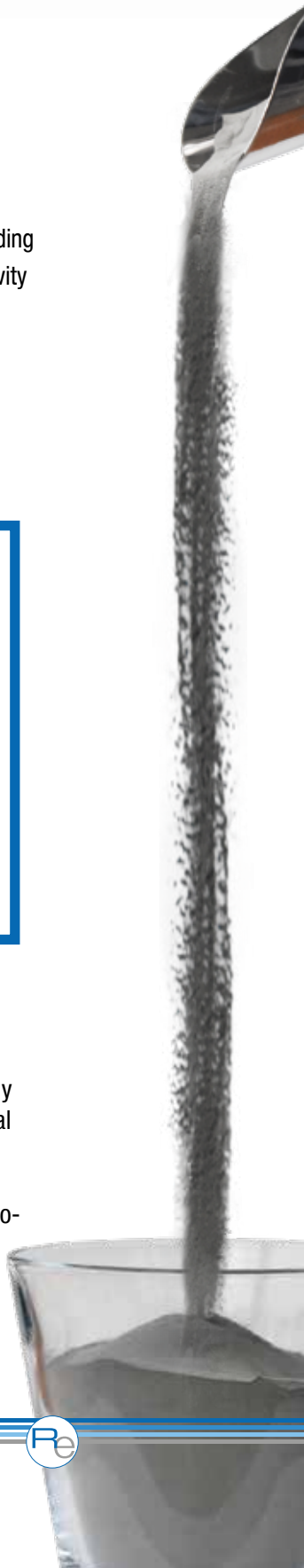
CHEMICAL COMPOSITION

Element	Mass Fraction [%]
Fe	0.8 - 1.4
Zr	0.9 - 1.4
Al	Balance

MICROSECTION

1) The specified material properties were determined at room temperature. They are multi-dimensionally dependent on many different machine and process parameters. Without further investigation, the material properties do not constitute a sufficient basis for component dimensioning.

2) Specific heat treatment processes lead to optimized mechanical-technological properties to meet the component requirements.



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