

Zentallium[®]

Zentallium[®] Z21

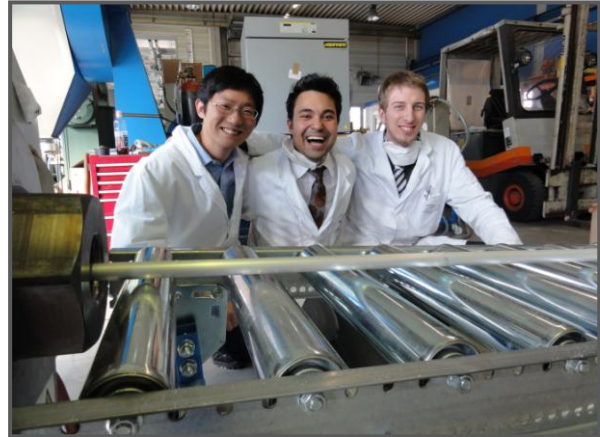
Technical data sheet

description

High performance semi-finished products and component parts of mechanically alloyed Al-based materials with sustainable grain-size reduction and strengthening utilizing Carbon Nanotubes (CNTs) for commercial applications

advantages

- superlative specific strength (ratio strength / density)
- superlative temperature resistance
- high stiffness
- conductivity properties coming soon
- corrosion resistance data coming soon



annual manufacturing capability in pilot scale accounts to 3,2 km

technical data & cost for Zentallium[®] Z21 · dimension Ø 15 mm only

specification	Al 1060	Al 5083 (H321)	Al 7075 (T651)	Al-Li 8090	Zentallium [®] Z21	Ti 6Al-4V	Stainless steel A2
tensile strength [MPa]	83	345	572	720	700	950	700
specific strength [MPa/(g/cm ³)]	31	130	204	267	266	214	87,5
modulus of elasticity [GPa]	70	70,3	71,7	80	80	113,8	210
elongation [%]	16	10	11	4	1	14	8
density [g/cm ³]	2,7	2,66	2,81	2,7	2,63	4,43	8
net cost [€/m]	(7)	(15)	(37)	(100)	60*	(75)	(9)

*: minima 30m per order, value 2011-05

dimension only Ø 15 mm available · other coming soon

#	geometry	achievable length
	Ø 10 mm	2,3 m
	Ø 15 mm	1,0 m
	Ø 20 mm	0,6 m
	Ø 30 / 3 mm	0,7 m
	Ø 20 x 5 mm	1,8 m



sample material available
(dimensions: Ø=15mm, length=150mm)

Technical data & dimensions are subject to alteration.
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