

Technology HEAT PLUS

Technology

HEAT SINK PLUS

This technology allows us to offer fully custom heat sinks, while still maintaining the characteristics and performance of a standard solution. It is achieved through the mechanical assembly of the base and fins, using exclusive and proprietary MG ITALY technologies.

This results in superior thermal performance and excellent mechanical properties.

New: An innovative product line—fully custom heat sinks, manufactured through the mechanical assembly of base and fins, using MG ITALY's proprietary technology. Mechanical properties are compatible with 6000-series alloys, with an aspect ratio coefficient of 96:1.

Performance: From raw material to finished product, the thermal performance of our solutions is enhanced and unique, outperforming current competitors on the market.

We guarantee an average reduction in thermal resistance between 8% and 15%.

Mechanical properties

	Tensile strength	0,2 Stress Test	Elongation	Hardness	Module of elasticity
Aluminum EN AW-1050A	80 N/mm ²	35 N/mm ²	38%	21 HB	65 kN/mm ²
Aluminum EN AW-6101B	120 N/mm ²	70 N/mm ²	9%	25 HB	69 kN/mm ²
Copper	210 N/mm ²	120 N/mm ²	45%	45 HV	110 kN/mm ²

Chemical Composition

	Si	Fe	Mn	Mg	Cu	Zn	Ti	Altri	Al
Aluminum EN AW-1050A	0,25	0,40	0,05	0,05	0,05	0,07	0,05	0,03 (uno)	99,5 (min)
Aluminum EN AW-6101B	0,30-0,60	0,10-0,30	0,05	0,35-0,60	0,05	0,1	-	0,03 (uno)	98,2 (max)
Copper	-	-	-	-	99,95 (min)	-	-	0,05 (tot)	

Physical properties

Density	Thermal conductivity	Electrical conductivity	Linear thermal expansion coeff.
2,70 Kg/dm ³	229 W/mK	35,4 m/Ωmm ²	23,6 10 ⁻⁶ 1/K
2,70 Kg/dm ³	219 W/mK	32,6 m/Ωmm ²	23,4 10 ⁻⁶ 1/K
8,93 Kg/dm ³	390 W/mK	57,0 m/Ωmm ²	16,8 10 ⁻⁶ 1/K

Application Properties

Machinability	Weldability	Corrosion Resistance	Formability	Surface Treatment
Average	Good	Excellent	Good	Good
Good	Excellent	Excellent	Average	Good
Average	Good	Good	Good	Good

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HeatPlus

Heatsink Width (W)	max 1000 mm (without welding)
Heatsink Length (L)	max 1300 mm
Base Thickness (BT)	8 ÷ 50 mm
Fin Height (FH)	max 190 mm
Fin Thickness (FT)	1 ÷ 3 mm
Fins Distance (FD)	min 2 mm
Aspect Ratio (FH/FD)	max 95:1
Tolerances on dim. & machining	ISO 2768-mk
Material	EN AW-1050A - EN AW-6101B - Copper



TECHNOLOGY

UltraHeat

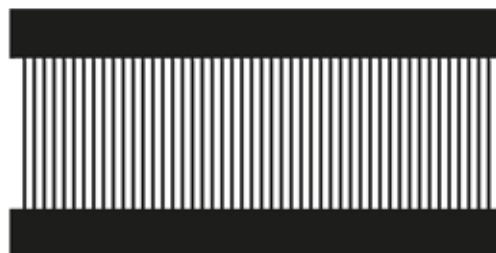
Heatsink Width (W)	max 1000 mm (without welding)
Heatsink Length (L)	max 1300 mm
Base Thickness (BT)	8 ÷ 50 mm
Fin Height (FH)	max 190 mm
Fin Thickness (FT)	0,8 / 4 mm
Fins Distance (FD)	min 1 mm
Aspect Ratio (FH/FD)	max 95:1
Tolerances on dim. & machining	ISO 2768-mk
Material	EN AW-1050A - EN AW-6101B - Copper



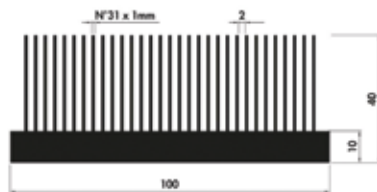
TECHNOLOGY

DoubleHeat

Heatsink Width (W)	max 1000 mm (without welding)
Heatsink Length (L)	max 1300 mm
Base Thickness (BT)	8 ÷ 50 mm
Fin Height (FH)	max 190 mm
Fin Thickness (FT)	0,8 / 4 mm
Fins Distance (FD)	min 2 mm
Aspect Ratio (FH/FD)	max 95:1
Tolerances on dim. & machining	ISO 2768-mk
Material	EN AW-1050A - EN AW-6101B - Copper

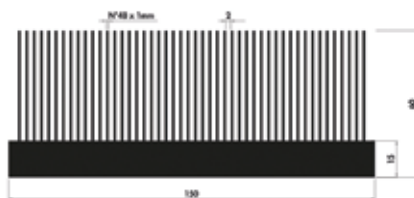


CODE HA100_40



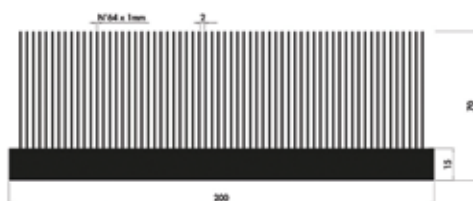
Kg/mt	5.21 Kg/mt
L	100 mm
H	40 mm
Alloy	6061

CODE HA150_60



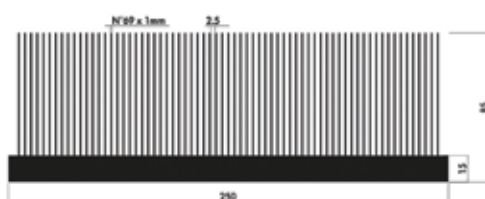
Kg/mt	11.18 Kg/mt
L	150 mm
H	60 mm
Alloy	6061

CODE HA200_70



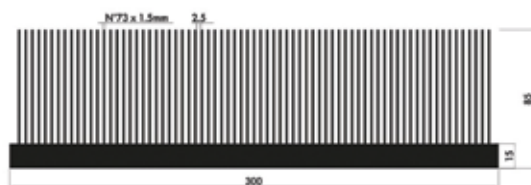
Kg/mt	17.60 Kg/mt
L	200 mm
H	70 mm
Alloy	6061

CODE HA250_85



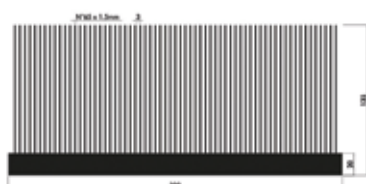
L	250 mm
H	85 mm
Alloy	6061

CODE HA300_85



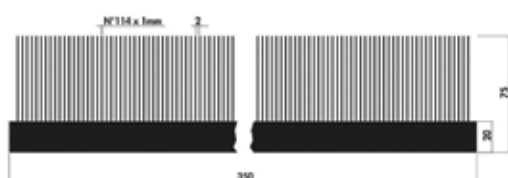
Kg/mt	32.85 Kg/mt
L	300 mm
H	85 mm
Alloy	6061

CODE HA300_135



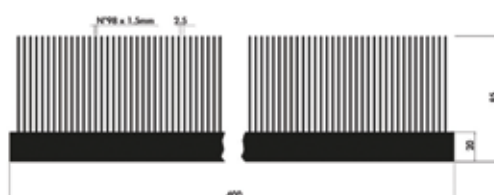
Kg/mt	46.47 Kg/mt
L	300 mm
H	135 mm
Alloy	6061

CODE HA350_75



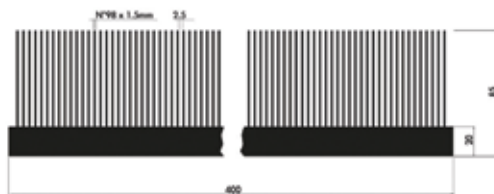
L	350 mm
H	75 mm
Alloy	6061

CODE HA400_85



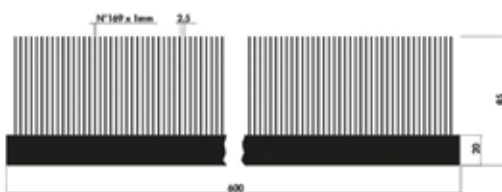
L	400 mm
H	85 mm
Alloy	6061

CODE HA500_100



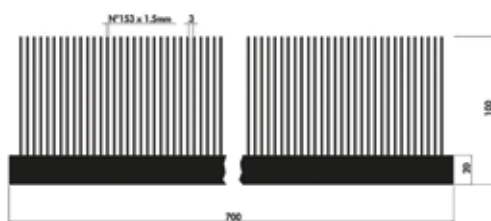
L	500 mm
H	100 mm
Alloy	6061

CODE HA600_85



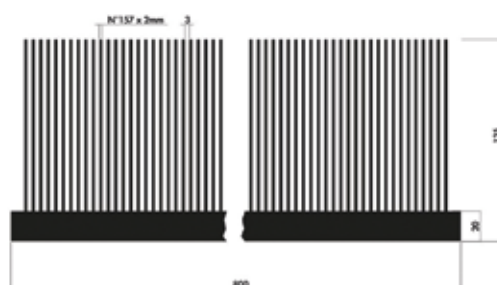
Kg/mt	62.02 Kg/mt
L	600 mm
H	85 mm
Alloy	6061

CODE HA700_100



Kg/mt	87.37 Kg/mt
L	700 mm
H	100 mm
Alloy	6061

CODE HA800_135



Kg/mt	140.70 Kg/mt
L	800 mm
H	135 mm
Alloy	6061