

Casting material

ANTICORODAL[®] - 50

G-ALSi5Mg

Properties and application

ANTICORODAL[®] - 50 is a hardenable, low-iron aluminium-silicon casting alloy for use in sand and coquille casting. The casting properties of ANTICORODAL[®] - 50 sit midway between the particularly good castability of silicon-rich alloys and the difficult to cast AlCuTi and AlMg alloys. ANTICORODAL[®] - 50 has very good mechanical properties in the cast and hardened conditions.

ANTICORODAL[®] - 50 is highly weldable and very polishable and machinable, particularly after hardening. ANTICORODAL[®] - 50 is therefore suitable for such things as gauge and equipment construction, for the food industry, ship building, etc.

Composition in the block in % by mass:

Si	Fe	Cu	Mn	Mg	Zn	Ti	Other
5.0 – 6.0	0.15	0.02	0.10	0.4 – 0.8	0.10	0.05-0.20	0.02 each

Guiding values for the achievable mechanical properties

Process condition	0.2% Yield strength $R_{p0.2}$ [N/mm ²]	Tensile strength R_m [N/mm ²]	Ductile yield A 5 [%]	Brinell hardness HB 5/250
Sand / F	100 – 130 (90)	140 – 180 (130)	2 – 4 (1)	60 – 70 (55)
Sand / T4	150 – 180 (120)	200 – 270 (150)	4 – 10 (2)	75 – 90 (70)
Sand / T6	220 – 290 (160)	260 – 320 (180)	2 – 4 (1)	95 – 115 (85)
Coquille / F	120 – 160 (100)	160 – 200 (140)	2 – 5 (1)	60 – 75 (60)
Coquille / T4	160 – 190 (130)	210 – 270 (170)	5 – 10 (3)	75 – 90 (70)
Coquille / T6	140 – 290 (180)	260 – 320 (190)	2 – 7 (1)	100 – 115 (90)

Alloy ANTICORODAL[®]-50 is delivered exclusively in the form of pigs produced through horizontal continuous casting (HCC). In this way, we offer the following advantages:

- Less scrap through maximum metal purity and uniformity
- Clean pigs without oxide inclusions
- No hard non-metallic inclusions
- Low gas content in the pigs thanks to inline degassing during production
- Lower costs through
 - Reduced metal loss during melting
 - Good and safe stackability
 - Low space requirements thanks to compact pig bunches

Contact: