

Casting alloys

SILAFONT® - 09

EN AB-AISi9 / EN AB-44400

SILAFONT®- 09 is a near-eutectic aluminium-silicon casting alloy with very good mould filling properties and excellent casting properties. There is no need for concern about the tendency to stick, due to the iron content and the balanced addition of manganese, so that even complicated die cast pieces can be easily removed from the moulds.

SILAFONT® – 09 is preferably used for top-grade die cast products for which high ductility at high strengths are demanded. Due to the high elongation, die cast parts made from SILAFONT® – 09 can be exposed to high dynamic loads.

SILAFONT® – 09 is noted for very good corrosion resistance against weather and water. SILAFONT® – 09 can be processed well with removal of chips and is also highly polishable. Cast parts made from this alloy can also be technically anodised.

Composition in the block in % by mass:

Si	Fe	Cu	Mn	Mg	Zn	Ti
10.0 – 10.6	0.4	0.01	0.3 – 0.4	0.05	0.10	0.05

Mechanical properties

Casting 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
Die casting	140 - 180	240 - 280	5 – 10	60 - 80

Alloy SILAFONT®-09 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:



Materials Group
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