Datasheet Aluminum-/Zinc die-casting

In the die-casting procedure the aluminium- resp. zamak-melt is injected under high pressure and high velocity through a piston into a a one- or more-part permanent form. The die casting procedure offers a very good technical and economic solution for the utilization of aluminium or zamak-parts with complicated forms.

The procedure renders possible small wall-thickness, narrow tolerances, high surface quality, high savings of material and a continous course of production. This procedure is usually applied in series production, because the additional cost for form-building compared to other procedures become econmic only from a certain quantity on.

Our clients for die cast parts come from various branches of industry like automotive, drive technology, electronics, apparatus construction, machine-engineering and achieve also in this area a clear market-edge in technology and economic efficiency . We deliver your customer specific die-casting parts mostly machined and also on demand coated acc. to your specifications .

Aluminum alloys which we use:

Aluminum (5 Gr. - 13 Kg Partweight)
226D (EN AC 46000/EN AC - AlSi9Cu3(Fe)
230D (EN AC 44300/EN AC - AlSi12(Fe)
231D (EN AC 47100/EN AC - AlSi9Cu1(Fe)
239D (EN AC 43400/EN AC - AlSi10Mg(Fe)
Silafont 09 (AlSi9)
Silafont 36 (AlSi9Mg)

Advantages of aluminum are a high quality of surface, a good mechanical strength (depending on the alloy up to 120HB), good tensile strength of up to 310 N/ mm², very good compliance with tolerances, good machinability, and good corrosion properties, as well as the light weight of 1/3 compared to steel.

Zinc-alloys which we use

Zinc (5 Gr. - 20 Kg weight per piece)
ZL0400 (GD-ZnAl4)
ZL0410 (GD-ZnAl4Cu1)
ZL0430 (GD-ZnAl4Cu3)

Advantages of zinc are a high surface quality, high strength (at ZL 0430 up to 130 HB), a high tensile strength (depending on the alloy up to 380 N / mm ²), excellent compliance with tolerances, high shot number 600 / h, the excellent corrosion properties, suitable for all surface coatings. Therefore, this material is about 6, 7 kg / dm ³ almost 2.5 times heavier than aluminum.

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