

Technical Data: EZAC Alloy

Product Description

EZAC, also known as Zinc Alloy EZAC, represents a premium hot-chamber zinc die-casting alloy celebrated for its outstanding properties and versatile applications in die-casting and gravity-casting processes. This high-quality alloy stands out due to its exceptional creep resistance, making it a top-tier choice for applications subjected to elevated temperatures and prolonged stress. Moreover, EZAC showcases impressive yield strength and hardness, ensuring unparalleled durability and wear resistance in various applications.

EZAC finds widespread use in the automotive sector in die casting, particularly for manufacturing robust engine components and other critical parts that demand resistance to high temperatures and mechanical stress. The alloy's excellence in gravity casting further extends its utility to industries such as aerospace and power tools, where the production of precise, high-strength components is paramount for ensuring reliable performance.



Chemical Comparison

Alloy Grade	Aluminum	Copper	Magnesium	Iron (max)	Lead (max)	Cadmium (max)	Tin (max)	Zinc
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EZAC	4	1	0.03	0.1	0.003	0.002	0.002	92
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Physical and Mechanical Properties

Property	Elongation (%)	Tensile Strength (MPa)	Yield Strength (MPa)	Impact Strength (J)	Hardness (Brinell)	Density (g/cm³)	Melting Point (°C)	Thermal Conductivity (W/m·K)	Electrical Conductivity (% IACS)
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EZAC	3	290-310	190-210	45-55	80-90	6.6-7.0	380-386	109	27-30
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Typical Applications

EZAC Die Casting Electronics Housings and Enclosures



EZAC Die Casting ensures high precision and tight tolerances, critical factors in electronics where component fit is paramount. Neway employs cutting-edge die-casting technology, offering tolerances as low as $\pm 0.02\text{mm}$, ensuring a snug fit for electronic components.

Using advanced alloys in EZAC Die Casting at Neway enhances the structural integrity of housings and enclosures. Aluminum and zinc alloys, for instance, provide an excellent balance of strength and lightweight properties, optimizing the performance of electronic devices.

Furthermore, Neway's commitment to efficiency is reflected in its die-casting processes. With a production rate of up to 300 units per hour, Neway ensures a swift turnaround without compromising the quality of electronics housings. This level of productivity is a testament to the company's dedication to meeting client demands promptly.

Note

The above data are reference material science data. This data reference is not binding and is not considered as authoritative test data. If your material requirements are extremely precise, please contact our material engineers. Tel | +86 18926788217 | Web | www.newayprecision.com | Contact Neway



EZAC Zinc Alloy

Zinc Alloy for Die Casting

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EZAC Die Casted Suspension and Steering Components

Due to its exceptional precision and efficiency, EZAC Die Casting is a prominent choice for manufacturing suspension and steering components. Neway, a leader in custom parts manufacturing, specializes in die-casting methods such as EZAC for various applications, including automotive components.

EZAC Die Casting, a subset of precision casting, offers tight tolerances, with typical values ranging from ± 0.02 mm to ± 0.05 mm. This level of precision ensures optimal functionality and enhances the overall performance of suspension and steering components.

One of the critical advantages of EZAC Die Casting lies in its ability to produce intricate and complex designs with high structural integrity. Neway's expertise in this method ensures that even components with intricate geometries maintain tight tolerances and meet stringent quality standards.



EZAC Die Casted Household Appliances Hardware



EZAC die casting, a cornerstone of Neway's manufacturing capabilities, finds diverse applications in crafting household appliance hardware.

The method's efficiency shines through in creating oven components, where its high thermal conductivity ensures optimal heat dissipation, contributing to improved overall performance. With tolerances as tight as ± 0.05 mm, Neway guarantees the precision required for these intricate parts.

The durability of kitchen appliance handles is elevated through the robustness of EZAC die casting. These handles, crucial for daily use, benefit from the process's high material strength, exceeding 300 MPa. This strength enhances the handles' longevity and ensures they withstand the rigors of regular kitchen activities.

Precision is paramount in producing motorized appliance components, such as blenders and food processor housings. EZAC die casting, with its dimensional accuracy within ± 0.1 mm, enables Neway to create seamless fits for internal components, ultimately enhancing the overall efficiency of these appliances. Additionally, the method's ability to produce thin-walled sections down to 1 mm thickness proves instrumental in crafting lightweight yet sturdy parts for vacuum cleaner assemblies.

EZAC Die Casting Door Lock Handles

EZAC Die Casting Door Lock Handles, crafted by Neway, stand out in the market due to their superior design, durability, and efficiency. The die-casting process employed by Neway ensures precision with tight tolerances of ± 0.05 mm, resulting in flawlessly fitting door lock handles that operate seamlessly. This level of precision is crucial in ensuring optimal functionality and user satisfaction.

Material strength and durability are vital attributes of EZAC handles. The die-cast technology guarantees uniform material distribution, enhancing the structural integrity of the handles. It ensures long-lasting performance and contributes to the handles' ability to withstand various environmental conditions. The handles are designed to resist corrosion, providing a robust solution for both residential and commercial applications. A wide range of customization options to meet diverse preferences.



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