

POLIGRAT-PRODUCTINFORMATION

ZinChem

Chemical Polishing and Deburring Process for Zamak alloys



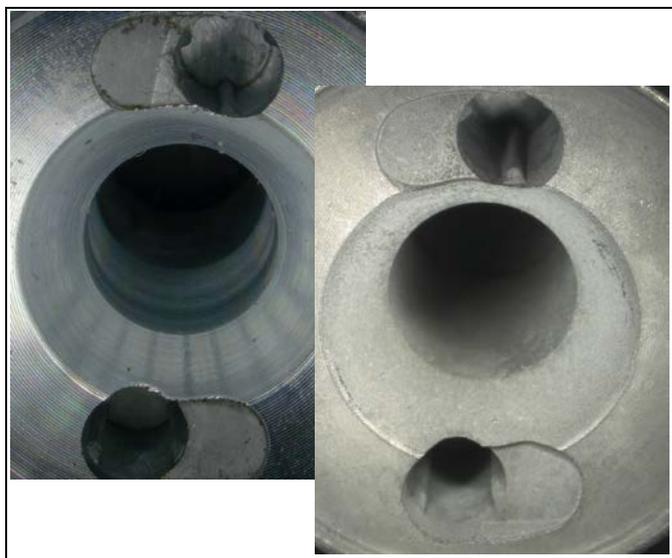
Properties and Effect

ZinChem is an innovative and highly efficient industrial immersion process for the deburring and smoothening of Zamak and zinc die-casting alloys.

In just one process step burrs are removed or rounded, lakes are dissolved and the surface is smoothened. All exposed surfaces, especially at the inside too, are completely treated.

Compared to conventional processes ZinChem does not contain any toxic acids or additives. During the process no toxic gases, i.e. NO_x, are generated.

The rapid and economically efficient deburring favours the application especially in combination of chemical deburring and chemical coating (wet-to-wet processes).



Economics

- Low process temperature: 35-45 °C
- Rapid material removal: 1-2 µm/min
- Short process times: 2-10 min
- Long life time of process bath: > 200 g Zn / l

Application

ZinChem will be applied as one step immersion bath process. The deburring goods can be treated either on jigs, in baskets or as mass products in rotary barrels.

Due to the high degree of metallization property of the process bath only drag out losses are replenished. A separate dosing due to activity changes is not necessary. The chemical consumption is related to the surface of goods and jigs rather than material removal. In most applications the drag-out losses define the chemical consumption only.

Particles which are not dissolvable can be removed from the process bath by closed loop filter systems. This minimizes the efforts for cleaning and servicing.

ZinChem and the rinse water from the process are acidic and contain the dissolved metal. They need to be treated and disposed of according to the statutory provisions and regulations.

Supply

Ready to use electrolyte

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|-------------------|----------------------|
| ▪ Single-use cans | 40 kg (27,2 l) |
| ▪ Barrel | 284 kg (200 l) |
| ▪ IBC | 1.420 kg (1.000 l) |

Your Advantages

- high efficiency
- rapid deburring
- low process temperature
- no generation of toxic process gases
- easy handling