

# SALTCORE TECHNOLOGY

## Lost cores for aluminum casting



EMIL MÜLLER GMBH

### ADVANTAGES FOR THE CASTING PROCESS

- Residue-free removal of core after casting
- Increased surface quality ( $R_z=5-25 \mu\text{m}$ ) of cast parts
- Salt cores offer high mechanical strength ( $\sim 20 \text{ MPa}$ )
- State of the art and economic production techniques
- High dimensional stability of sintered cores during storage



### LOST CORES IN HIGH PRESSURE DIE CASTING

- Expanded design freedom
- Casting of under-cuts and inner cavities
- Elimination of elaborate slide constructions
- Reduction of post process machining
- Near net-shape casting

### RAW MATERIAL: SALT (SODIUM CHLORIDE)

- Unlimited availability
- Eco-friendly
- Applicable to well-proven production methods
- Good water solubility
- No corrosion



### EMIL MÜLLER GMBH – COMPANY PROFILE

- Worldwide market- and technology leader for salt cores
- > 40 Mio. cores annual production volume
- 250 employees
- Headquarter in Wilhermsdorf, Germany
- Production facilities in Poland, Mexico, Brazil, India
- 100% Subsidiary of CeramTec GmbH

### DESIGN GUIDELINES

- Design criteria analogue to technical ceramic parts
- No under-cuts in salt core
- Draft angles ( $1,5^\circ - 3^\circ$ ) required
- Salt core mass: 0,1 g to 3000 g, Maximum dimensions: 100 x 200 x 100 mm