

EXACTCAST™ OPTIMA PLUS



CLEAN SURFACE AND PRECISE BREAKING EDGE WITH INNOVATIVE EXACTCAST™ OPTIMA PLUS

A common difficulty in using risers is proper placement in the mold and compaction. Mold breakages may occur during compaction. In addition, small riser particles can get into the mold, resulting in unclean casting surfaces. Out-of-round or irregular riser necks can cause material to break unintentionally from the casting during knock-off.

EXACTCAST™ OPTIMA Plus offers a comprehensive solution to these foundry challenges. The modular OPTIMA system has been refined and expanded with further technical advantages.

TECHNOLOGICAL ADVANTAGES

- Prevents the metal neck from falling back into the riser body
- Increases mold stability
 - Stable riser neck mold edge
- Clean and defined breaking edge
 - Low friction pre-assembled metal neck
- Easy application with rigid pins or spring pins
- Variable riser volume
- No casting defects due to riser particles in the mold
- Available fluorine-free



EXACTCAST™
Plus



Riser behavior during mold compaction

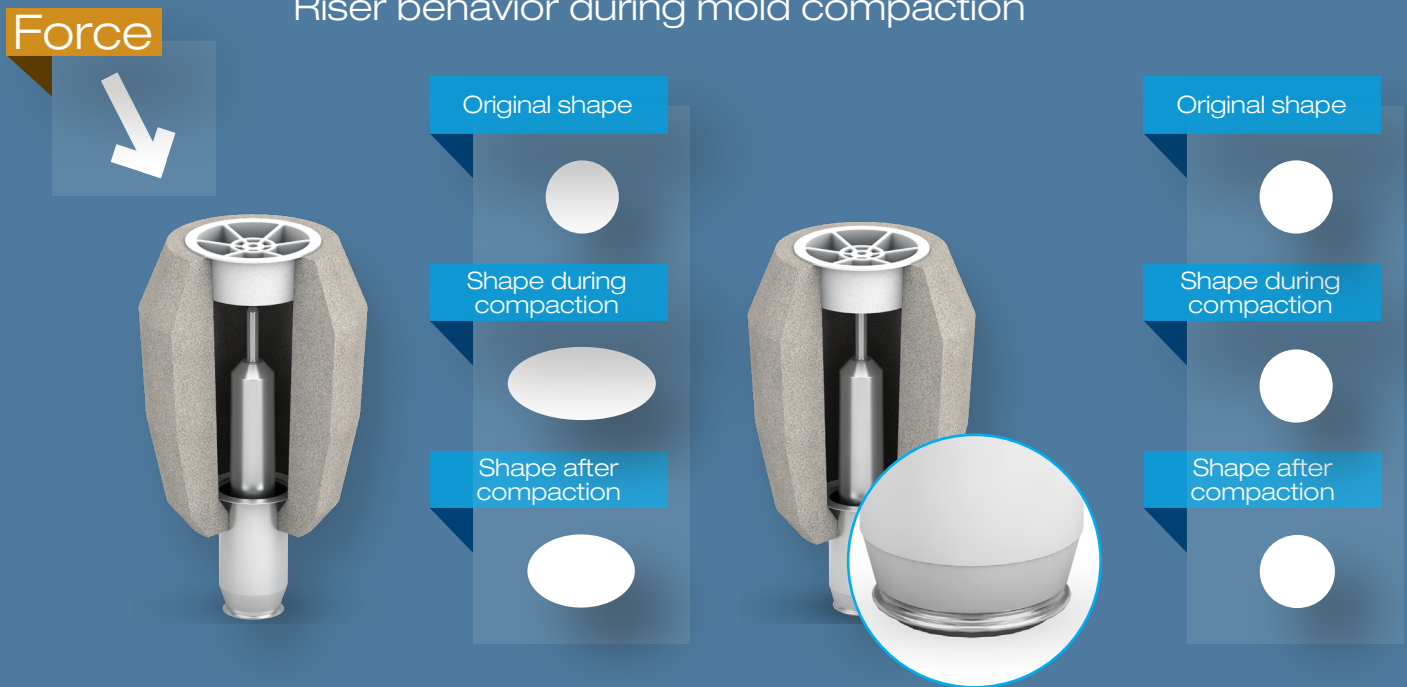


Figure 1: Comparison of the behavior of EXACTCAST™ OPTIMA standard tube and EXACTCAST™ OPTIMA Plus during mold compaction

EXACTCAST™ OPTIMA

EXACTCAST™ OPTIMA is a modular system with numerous innovative components that can be flexibly combined to create individual solutions. With the OPTIMA mini riser family, efficiency and flexibility can be increased. EXACTCAST™ OPTIMA enables the use of risers in the smallest possible space with maximum yield. Thanks to their small contact surface, OPTIMA mini riser solutions can be easily arranged, even with complicated casting geometries. The integrated riser cover lid prevents the detachment of particles during the compaction process.

Innovative components from OPTIMA are the exothermic or insulating riser cover lids with a rigid pin guide made of plastic that does not crumble when penetrating. They help to avoid contamination in the mold and associated casting defects, and to shorten the cycle times of molding plants. The reinforced riser cover lid with integrated rib structure withstands high pressure in the mold.

For users who want to reduce landfill costs and avoid fluorine-related casting defects, a fluorine-free OPTIMA variant is recommended. Foundries that prefer an inorganic feeding solution can also obtain all compounds and variants from ASK Chemicals as water glass-bonded variants.

EXACTCAST™ OPTIMA Plus

The latest development of the EXACTCAST™ OPTIMA Plus metal neck expands the portfolio of Optima risers. The specially shaped metal neck avoids deformation of the riser neck during the compaction process of the mold (Figure 1).

By better withstanding compaction forces, the metal neck prevents molding sand from breaking out below the riser. Thanks to the special metal neck shape, the risers achieve a precisely defined breaking edge. This clean breaking edge minimizes the risk of errors during knocking off, thus reducing fettling, scrap and production costs.

Another advantage is increased safety when handling the risers due to fewer sharp edges.

YOUR SUSTAINABILITYPLUS

Profitability

- Less cleaning effort thanks to cleaner surfaces
- Increased efficiency due to no risk of mold sand breaking during compaction

Environment & Social

- Increased worker safety
 - Less risk of injury due to no sharp edges
- Available in fluorine-free formulation