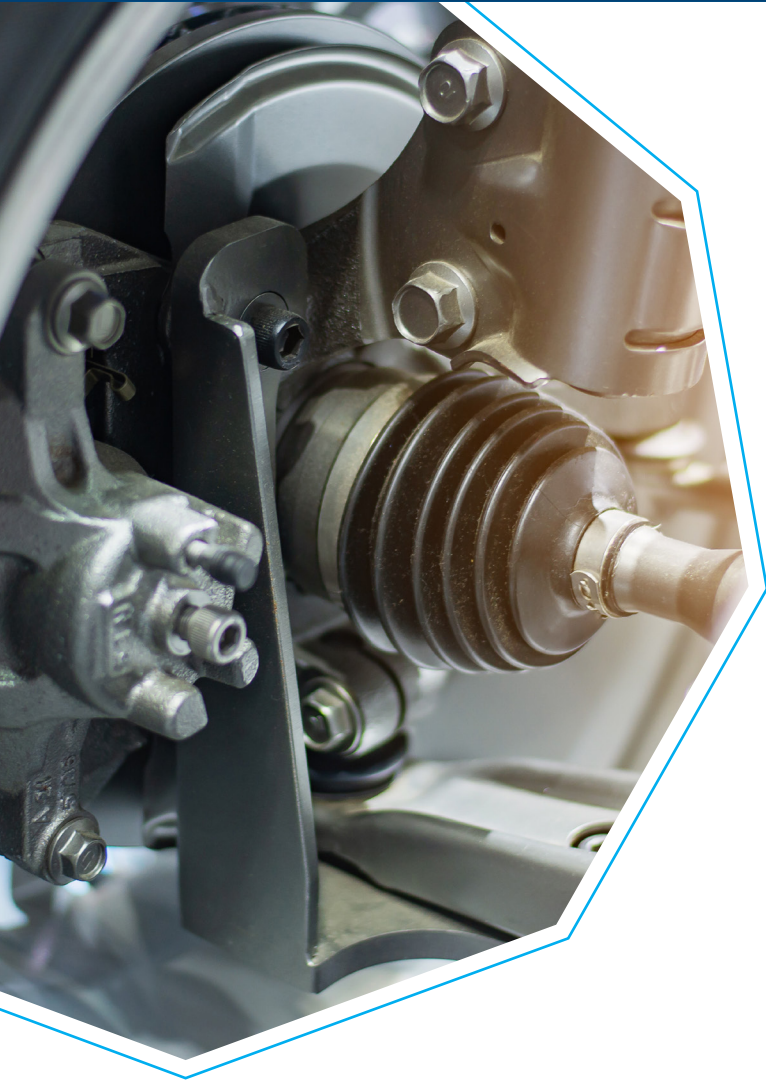




# EXACTCAST™ OPTIMA VARIO



## MULTIPLE FUNCTIONS THANKS TO EXACTCAST™ OPTIMA VARIO MULTIFUNCTIONAL RISER COVER LID

When using risers, there is a high risk of exothermic particles falling into the mold. This leads to surface defects and the need to rework. The modular EXACTCAST™ OPTIMA riser system was developed to counteract this, as it allows components such as the volume, metal neck or even the cover lid itself to be customized. However, various foundries are facing further challenges, such as metallurgical treatment of the metal in the riser, or the need for more efficient riser systems.

To address this, the experts at ASK Chemicals have further developed the modular OPTIMA system. The patented, multifunctional EXACTCAST™ OPTIMA Vario riser follows the OPTIMA principle in all its features and expands it with additional technological benefits. What's more, it can be used in vertical molding lines.

### TECHNOLOGICAL ADVANTAGES

- Highly flexible cover lid
- Freely configurable and designable
- Allows extensions like Williams wedge, inoculants, etc.
- Allows vertical application
- Variable riser volume
- No casting defects due to riser particles in the mold
- Available fluorine-free



**EXACTCAST™**  
Vario

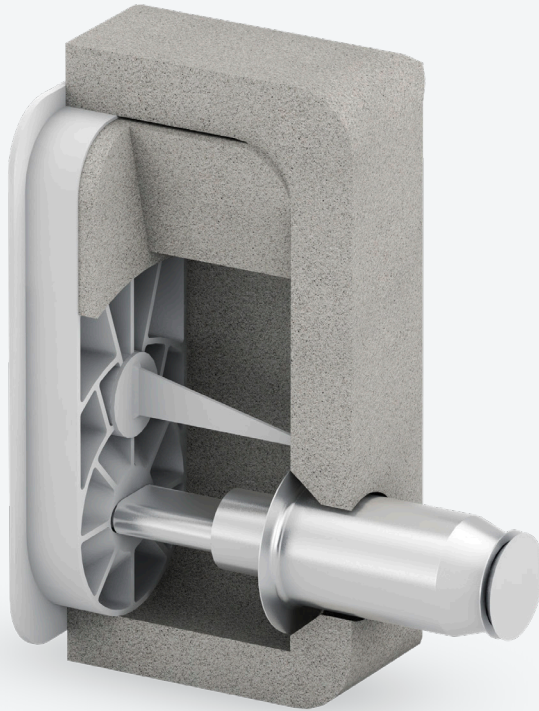


Figure 1: EXACTCAST™ OPTIMA Vario with multifunctional cover lid incl. insertable Williams wedge and lid guide

### EXACTCAST™ OPTIMA modular system

EXACTCAST™ OPTIMA is a modular system with numerous innovative components that can be flexibly combined to create individual solutions.

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 risers achieve a precisely defined breaking edge, thus reducing fettling as well as production costs. Another advantage of the EXACTCAST™ OPTIMA is the avoidance of casting defects and impurities. Foundries can reduce rework and save costs while increasing efficiency and product quality.

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

### Multifunctional cover lid of EXACTCAST™ OPTIMA Vario

The development of the innovative, multifunctional EXACTCAST™ OPTIMA Vario riser cover lid makes it possible to extend the application of the EXACTCAST™ OPTIMA riser to many areas.

The riser cover lid is equipped with various struts. It is therefore highly durable, can better withstand pressure in the mold, and is able to accommodate other elements for better riser performance. The crumb-free plastic cover lid prevents contamination in the mold, which can occur during penetration. Casting errors are thus avoided and cycle times remain unaffected.

Another benefit is the ability to introduce exothermic or insulating Williams element, which increases the performance of the riser.

In addition, it offers completely new options, such as the placement of inoculants for metallurgical treatment of the metal in the riser in order to achieve best properties even with long solidification times, additional vents, rigid/spring pin and/or metal neck guides, as well as many conceivable measures for perfecting the riser system. Thanks to its multifunctionality, another significant advantage is its application in vertically parted molding lines.

EXACTCAST™ OPTIMA Vario expands the applications of the EXACTCAST™ OPTIMA riser many times over while retaining all its positive features.

### YOUR SUSTAINABILITYPLUS

#### Profitability

- Efficiency increase
  - Customizable riser performance
  - Multi-functions for added performance
  
- New applications
  - Vertically parted molding lines
  - Metallurgical treatment

#### Environment & Social

- Available in fluorine-free formulation