

# From refractories to hot gas filtration

Rath attaches great importance to continuous research and development – be it products for refractory linings or hot gas filter elements to filter particle-laden industrial flue gases. Rath recently developed a new, advanced feeder expendables series, presented at Glassman Europe in Istanbul.

The further development of refractory compositions is a challenge that Rath is taking on with great commitment. This is also proven by a new product series: The FOURATH 4xx feeder expendable series is based on an optimised formulation, exclusively developed and produced by Rath. The product has been put through its paces in the Rath laboratories and has successfully passed the first glass factory trials in the last two years.

## Improved crack and thermal shock resistance

While the previous 3xx mixes were produced using the slipcasting technique, the FOURATH 4xx mixes are produced using a so-called hybrid technology: Rath uses the same mould park, but a special vibrocasting technology. This

brings some advantages such as improved product quality, due to a more compact mix and better surface quality.

High quality raw materials were chosen to keep the impurity level to a minimum. Furthermore, the additional grinding, e.g. of the tube's outer surface can be avoided which in turn increases the service life of the tube.

In addition the drying time of the refractory has been reduced, which allows more flexibility in terms of lead times. Finally the thermal shock resistance has also improved and the risk of cracking is low.

## Second production line

The glass industry – like many other industries – faces a challenge: to filter and remove dust from flue gases and pollutants as efficiently as possible and to

reduce emissions.

For many years, Rath has been developing ceramic hot gas filter elements that make it possible to filter particle-laden industrial flue gases at temperatures up to 1000°C and reduce emissions of nitrogen oxides.

Recently, a second production line was put in operation at the Meißen plant, Germany. As Rath is committed to advancing environmental protection and helping its customers in the glass industry achieve their ambitious environmental goals, the company continuously develops and invests in hot gas filtration technology. ■

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