



## Starmix<sup>®</sup>

The powder mix family for part precision and improved productivity

# Improving your part precision, meeting your precise needs

## The Starmix® family

Starmix provides a better alternative to a standard premix in component production by improving your part precision and process robustness. Choosing a Starmix product can help you improve operational excellence in many ways such as benefitting from excellent fillability to improving part quality, boosting productivity as well as reducing scrap rates, total costs and even the environmental impact of your manufacturing process.

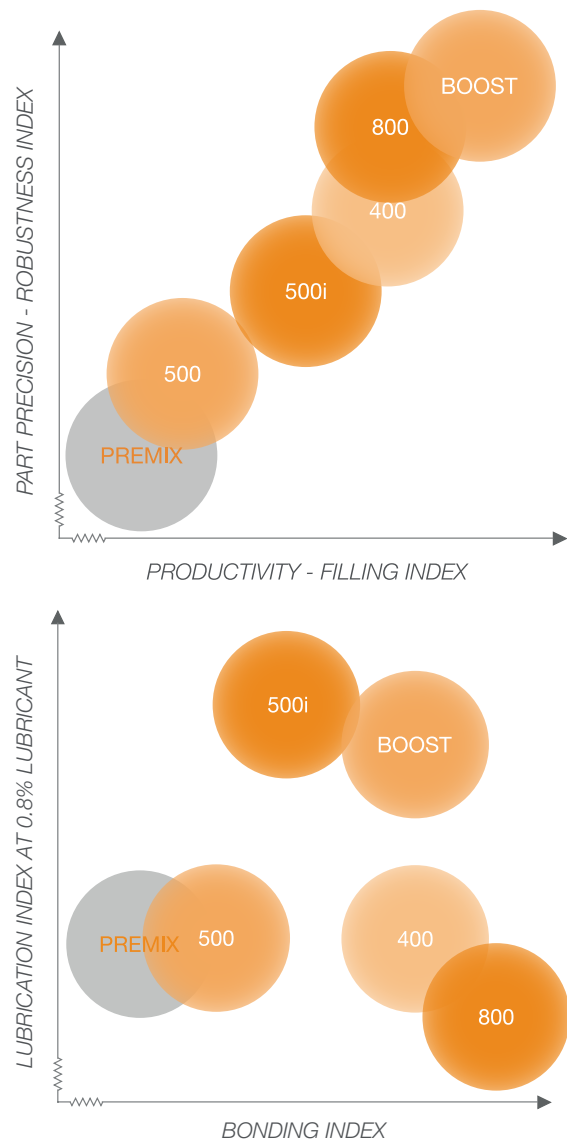
Every product in the Starmix portfolio offers special benefits stemming from the distinctive powder formulations developed for each family member. This means the Starmix family can meet your precise needs: from unrivalled low-cost solutions and tailored mixes for specific applications to unique compositions for complex parts.

## Starmix concept

Starmix products offer improved dimensional stability by introducing organic binders that "glue" the finer particles to the coarser particles in order to prevent segregation.

The additives and processes used for a material will give it a specific set of properties. This makes the bonding degree of fine additives an important quality factor that can be used to select the proper material for the specific application.

## Relative product positioning in two dimensions



Note: Premix and Starmix 500 with Amide wax



## Our Starmix powders

### Starmix 500

The standard Starmix for improved tolerances offers unrivalled low-cost solutions.

- Reduced dusting and segregation of graphite and lubricants
- A cost-effective solution for better tolerances in less demanding applications



### Starmix 500i

A cost-efficient product with advanced filling and excellent lubrication characteristics.

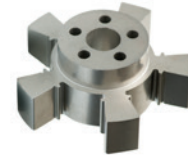
- Outstanding lubrication enables higher densities with smaller additions of lubricant
- Excellent lubrication for high parts and complicated shapes
- Mix type for high green strength
- An optimal price/performance ratio for more demanding applications
- Low staining tendency



### Starmix 400

A Starmix with high bonding degree and efficient filling for high productivity.

- Improved bonding of fine particles
- Good fillability for faster filling help increase productivity
- More even filling for improved part precision



### Starmix 800

The Starmix for tighter tolerances in components with high graphite contents.

- Excellent graphite bonding and flowability, making it ideal for complex mixes
- Good fillability at high graphite levels (>1%) - optimal for valve guide applications



### Starmix BOOST

The top of the line Starmix combining high lubricity with excellent filling characteristics.

- Mix for very demanding applications requiring high consistency and part precision
- Unique solution for parts with highly complex shapes
- Excellent filling rate for highest possible productivity
- High green strength for complicated shapes and easier part handling
- Zn-free lubrication system that ensures a stain-free finished component



We can help you choose the optimal product for your specific application. Our family of Starmix powders is a good start for improving your process and product performance.

# Power of Powder®

Metal powder technology has the power to open up a world of opportunities. The inherent properties of metal powders provide unique possibilities to tailor solutions to match your exact requirements. Our ambition is to constantly widen and grow the range of metal powder applications. That's what we call Power of Powder®. With our leading position in metal powder technology, Höganäs is perfectly placed to help you explore these opportunities.

To find out how you can benefit from the Power of Powder®, please contact your nearest Höganäs office.



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