

Starmix®

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.

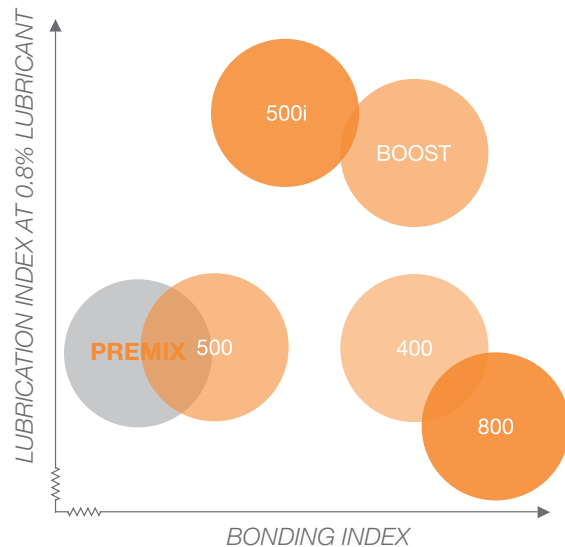
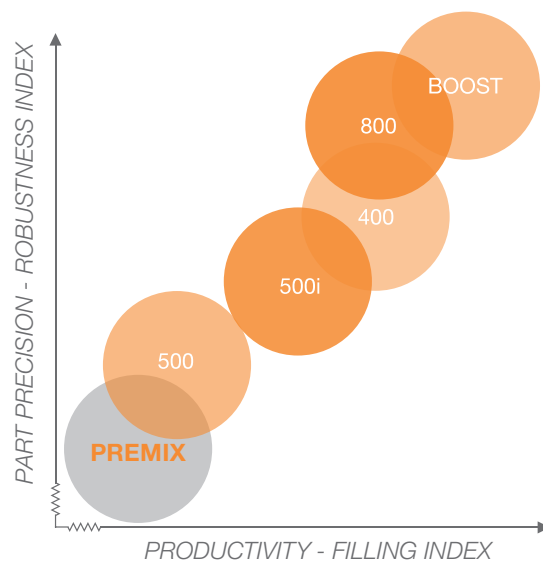
Every product in the Starmix portfolio offers special benefits stemming from the distinctive powder formulations developed for each family member. This means the Starmix family can meet your precise needs: from unrivalled low-cost solutions and tailored mixes for specific applications to unique compositions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

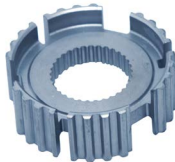
- Reduced dusting and segregation of graphite and lubricants
- A cost-effective solution for better tolerances in less demanding applications



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.

Inspire industry to make more with less

Höganäs' vision is to inspire industry to make more with less. Metal powder technology provides endless opportunities; not only does it enable our customers to reduce their material and energy consumption, but it also helps them use new and better techniques that make final products more efficient and less expensive. In short, metal powders are a resource-efficient alternative, suitable for many industries – that's one of our contributions to a more sustainable world.

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



Sweden Höganäs AB
Höganäs
Phone: +46 42 33 80 00
info@hoganäs.com

Brazil Höganäs Brasil Ltda
Mogi das Cruzes
Phone: +55 11 4793 7729
brazil@hoganäs.com

China Höganäs (China) Co. Ltd
Shanghai
Phone: +86 21 670 010 00
china@hoganäs.com

France Höganäs France S.A.S.
Limas
Phone: +33 474 02 97 50
france@hoganäs.com

Germany Höganäs GmbH
Düsseldorf
Phone: +49 211 99 17 80
germany@hoganäs.com
Höganäs Germany GmbH
Goslar: +49 532 175 10
Laufenburg: +49 776 38 20
germany@hoganäs.com

India Höganäs India Pvt Ltd
Pune
Phone: +91 20 66 03 01 71
india@hoganäs.com

Italy Höganäs Italia S.r.l.
Rapallo (Genoa)
Phone: +39 0185 23 00 33
italy@hoganäs.com

Japan Höganäs Japan K.K.
Tokyo
Phone: +81 3 3582 8280
japan@hoganäs.com

Rep. of Korea Höganäs Korea Ltd
Seoul
Phone: +82 2 511 43 44
korea@hoganäs.com

Russia Höganäs East Europe LLC
Saint Petersburg
Phone: +7 812 334 25 42
russia@hoganäs.com

Spain Höganäs Ibérica S.A.
Madrid
Phone: +34 91 708 05 95
spain@hoganäs.com

Taiwan Höganäs Taiwan Ltd
Taipei
Phone: +886 2 2543 1618
taiwan@hoganäs.com

United Kingdom Höganäs (Great Britain) Ltd
Tonbridge, Kent
Phone: +44 1732 377 726
uk@hoganäs.com

United States North American Höganäs Co.
Hollsopple, PA
Phone: +1 814 479 3500
usa@hoganäs.com