



## News Release

October 15<sup>th</sup> 2014

H.C. Starck Ceramics GmbH and GNP Ceramics have entered into a supply agreement on October 1<sup>st</sup>, 2014 to distribute HCST's Silicon Carbide and Silicon Nitride Ultra-fine and ready-to-press powders. Please contact us for further information.

[Sales@GNPCeramics.com](mailto:Sales@GNPCeramics.com)



**Powders from  
H.C. Starck Ceramics**

# Carbides | Product Portfolio

Product Type	Short Description	Granulate properties size (after seaving) $\mu\text{m}$	Apparent density $\text{g}/\text{cm}^3$	Granulate properties $d_{50} \mu\text{m}$
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## STARCERAM® S ready to press powder (rtp)

typical reachable density:  $3,14 \text{ g}/\text{cm}^3$   
 specific surface area of the raw material:  $15 \text{ (BET) m}^2/\text{g}$   
 green density ( $10^3 \text{ Kg}/\text{cm}^3$ )  $1,8 \text{ g}/\text{cm}^3$

Grade RQ	Resin based rtp powder for excellent green machining	< 200	0,9	70
Grade SQ	PVA/PEG based rtp powder for green machining and dry pressing	< 200	0,8	62
Grade CQ	Like SQ but better flowability for dry pressing	< 400	0,8	100
Grade HQ	Like SQ but smaller tolerance in granule distribution	< 150	0,8	60
Grade HQ-F	Like HQ but smaller granule sizes for highest strength	< 75	0,7	27

Product Type	Powder Particle Size $d_{50} \mu\text{m}$	Specific Surface Area (BET) $\text{m}^2/\text{g}$	Green density ( $10^3 \text{ Kg}/\text{cm}^3$ ) $\text{g}/\text{cm}^3$
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## STARCERAM® S raw ceramic powder

Grade UF 5	2,0	4 - 6	1,8
Grade UF 10	0,7	9 - 11	1,7
Grade UF 15	0,55	14 - 16	1,7
Grade UF 25	0,45	23 - 26	1,6

- Typical Applications**
- Sealing and bearing rings
  - Mill coatings
  - Screws for conveying and extruding
  - Engineering parts
  - Nozzles
  - Rotors



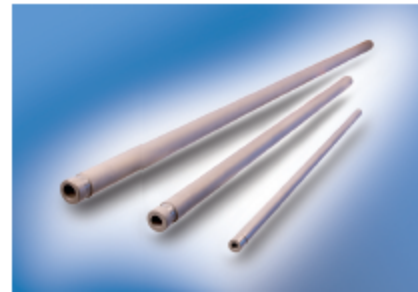
# Nitrides | Product Portfolio

Product Type	Short Description	Granulate properties size (after sieving) $\mu\text{m}$	Apparent density $\text{g}/\text{cm}^3$	Granulate properties $d_{50}$ $\mu\text{m}$
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## STARCERAM® N ready to press powder (rtp)

typical reachable density:  $3,2 \text{ g}/\text{cm}^3$   
 specific surface area of the raw material:  $11 \text{ (BET) m}^2/\text{g}$   
 green density ( $10^3 \text{ Kg}/\text{cm}^3$ )  $2,0 \text{ g}/\text{cm}^3$

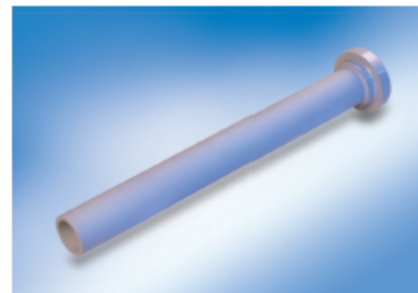
Grade M.A	Ready for pressing and sintering, optimized for green machining	< 150	0,9	32
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- Typical Applications**
- Thermo couple protection tubes
  - Thermo protection tubes
  - Welding rolls/ welding nozzles
  - Forming rolls
  - Valves
  - Centerings



The values in this publication are typical values and do not constitute a specification.



**Hazards identification in Advertising (Directive 67/548/EEC Article 26 and Directive 1999/45/EC Article 13):** none.