



TECHNOLOGY BRIEF #3

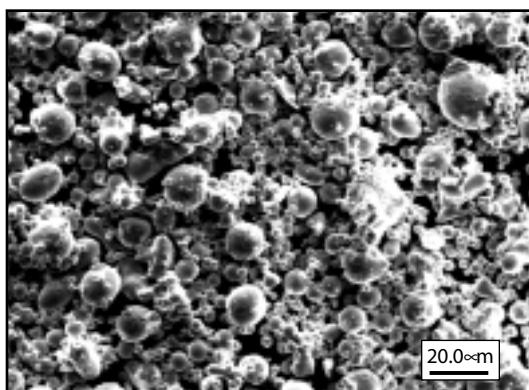
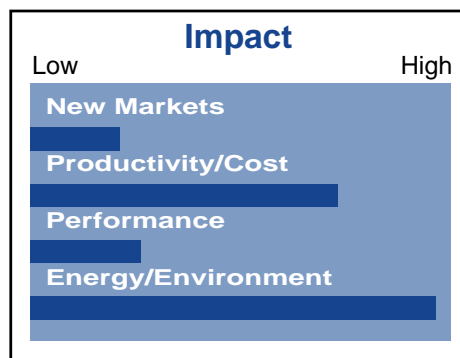
Water Soluble Binder System for Power Injection Molding

The Process

A water soluble binder has been developed for use with metal or ceramic powders during injection molding. This binder system mixture does not contaminate the powder during thermal processing and burns out cleanly.

Benefits

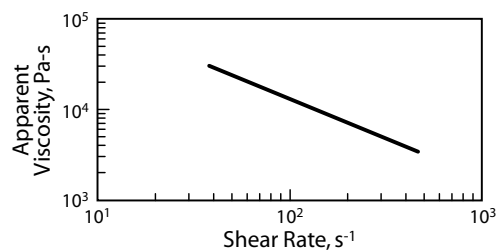
- Eliminates the use of flammable or toxic solvents
- Commercially viable approach
- No solvent recovery required
- No special equipment required



17-4 PH stainless steel powder used at 69 vol.% in the feedstock.

Possible Applications

- Any application of metal or ceramic powders in injection molding



Shear thinning behavior of 17-4 PH stainless steel feedstock.

Where CISP Technology Is Headed

- Demonstration projects have been completed at lab scale
- Testbed applications are invited from members
- Compositions are being optimized

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