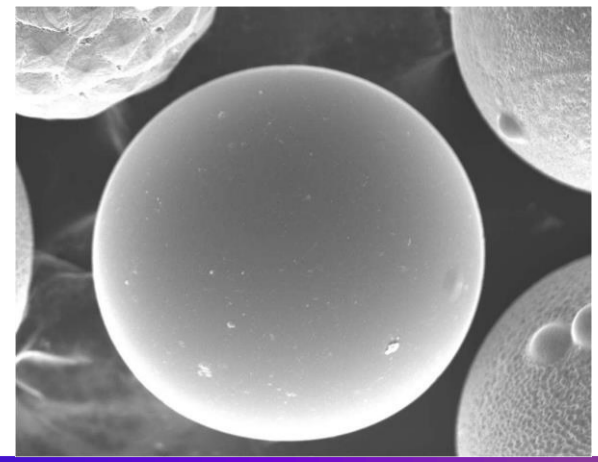


Fine-Bz 【High Purity Spherical Molding Sand】



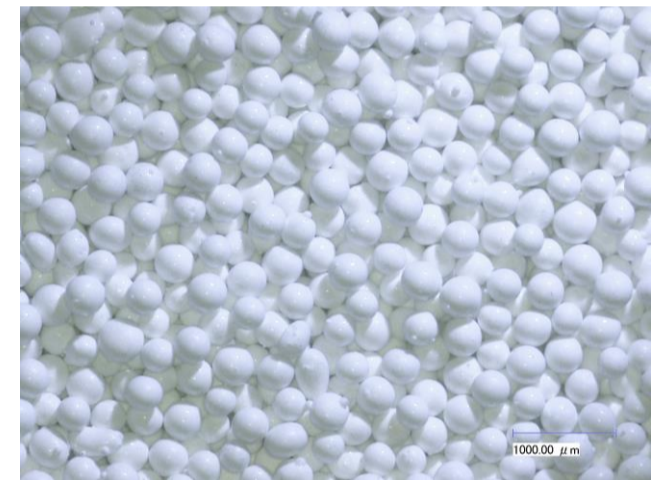
- Able to be alternative to chromite/zircon-sand with zirconia-containing/less-impurity fused beads.
 - Minute and high in cooling power, burns and collapsibility will be materially improved.
- Enhances casting quality and working property.

Benefit

- **High Intensity** ... Exerts high intensity with less resin.
- **High Cooling Power** ... Thoroughly cools the casting with its high thermal conductivity.
- **High Heat Resistance** ... Does not burn even in core of 1600°C casting.
- **High Collapsibility** ... Simplifies core removal with its excellent collapsibility.
- **Low Environmental Impact** ... Less dust and reduces waste with cyclic use.

Applications

- Cast steels, mold-core of high temperature melting casting
- Cast iron, complex shaped core of aluminum
- Alternative to chromite/zircon
- Application for RCS sand
- The best sand for 3D Printer molding

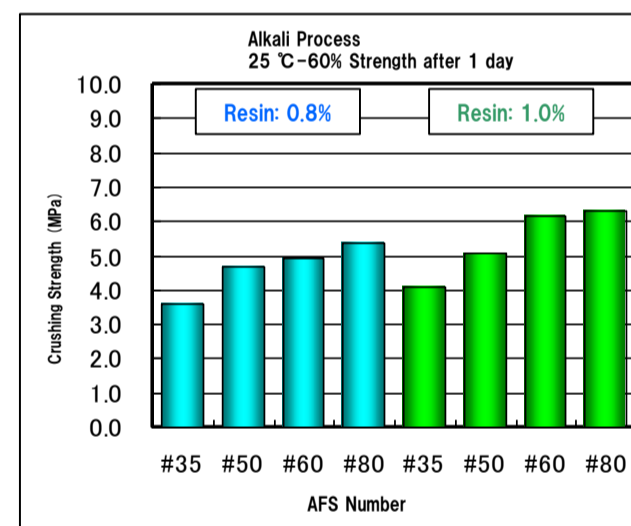
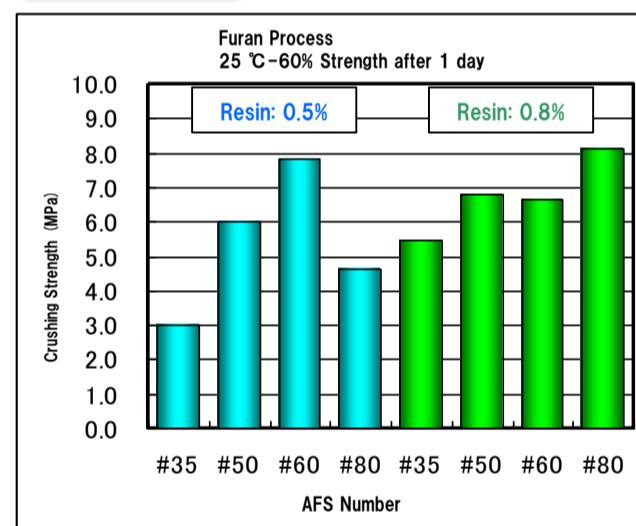


Characteristics

Chemical Composition

Al ₂ O ₃	80.5
ZrO ₂	9.5
SiO ₂	8.5
Fe ₂ O ₃	0.12
TiO ₂	0.08
Others	1.3

Strength



Sand Characteristics

Moisture Content (%)	0
Ignition Loss (%)	0
PH	6.6
Acid Consumption ml/50g	0.1
Bulk Density (AFS 35)	2.2
Bulk Density (AFS 80)	2.1

Characteristics Comparison

Characteristic Item	FINE-Bz	Natural Sand		
	AZ10 #60	Chromite	Silica Sand	Zincon Sand
Refractoriness	SK41	SK37	SK37	SK37
Sintering Resistance	◎	△	×	○
Thermal Conductivity (400 °C) W/mK	0.710	0.38	0.3	0.38
Specific Heat (400 °C) J/kg·K	1080	892	1128	1000
Thermal Diffusivity (400 °C) J/(m ² s ^{1/2} K)	1,302	891	732	1057

【 Burning Test of Cast Steel Mold-Core 】



【 Removal Condition of Large Casting Mold-Core 】



【 RCS Mold-Core 】

