# Metalcasting (Metalcasting)

### **TECHNICAL DATA**

## Flo-Carb®

Flo-Carb® is a naturally occurring, high-quality organic material specially processed to improve the properties of green sand systems.

Flo-Carb® improves the flowability of green sand, resulting in a lower energy requirement for forming dense molds with uniform hardness. Mechanical penetration and oversized castings resulting from soft molds can be reduced. The tendency for sand to stick and bridge in sand hoppers and bucket elevators can be alleviated.

With Flo-Carb® included in the system sand, shakeout is improved compared to most carbonaceous additives. Sand loss is reduced when spent molds readily break down.

### Features and Benefits

Flo-Carb® is an alternative sand additive that may offer considerable process improvement and cost savings potential. Listed below are some of the benefits we have seen with this product.

- Lowers clay viscosity
- Improves sand flowability
- Increases mold permeability
- Reduces free water defects
- Improves shakeout
- Can allow for the use of more western bentonite
- Reduces smoke on cooling lines and at shakeout
- A low emission alternative to large coal additions
- Reduces sand carry-out Lowers mulling energy required for clay development
- Improves sand system performance during hot sand conditions
- Improves clay efficiency thereby lowering clay consumption, often significantly
- Increases green compression strength, relative to compatibility
- Reduces moisture loss due to evaporation in green sand

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### **Physical Properties**

Property	Value
Color	Brown/Black
Bulk Density	40 - 45 lbs./ft <sup>3</sup>
Fineness	Less than 10%on U.S. #40 sieve
Solubility	85% average
Ash Content	15 – 20%
VCM	45 – 50% as received

