

## Inventure's heating system

### Increased productivity

Production of concrete during winter conditions can be costly and cumbersome. The Inventure Aggregate Heating system is a fully integrated, in-plant heating system using hot air, allowing your production to continue through the wettest and coldest part of the winter.

### Automatic and quality control

Low concrete temperatures and difficulty to maintain a low water-to-cement ratio are production problems associated with producing quality concrete using only hot water. That's why we designed the hot air heating system, drying and heating the aggregate at the same time, while maintaining concrete quality, temperature and slump control.

### Less corrosion

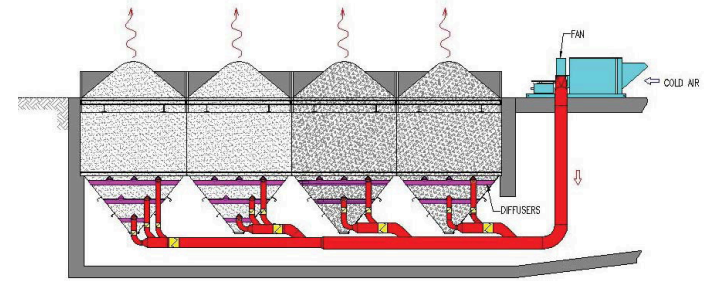
Using Inventure's hot air heating system does not introduce any more moisture into your bins creating less corrosion. We are drying not wetting your material; resulting in longer plant life.

### Reduced energy consumption

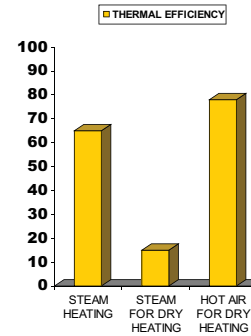
Our experience shows energy consumption can be reduced by up to 50%. Almost 100% of the heated air is uniformly distributed in to the aggregate making the system very efficient. No exhaust stack is required.

### Easy to retrofit

Inventure's heating system fits any existing concrete operation taking advantage of the existing gas line or boiler. The system is scalable to match any rate or size of concrete production.



Aggregate is heated with hot air in the overhead bins, or in the receiving hoppers. A high pressure, industrial fan distributes the heated air via pipes and diffusers into the material in the bins.



### HEATER SPECIFICATION

MODEL		150	225	300	450	600
NOMINAL CONCRETE PROD.	Y3/hr	25	35	55	70	95
FAN SIZE	BHP	11	16	25	32	42
MOTOR SIZE	HP	15	25	40	50	60
BURNER	MBTU/HR	0.7	1.0	1.5	2.0	2.6
LENGTH		9'-9"	11'-0"	12'-0"	13'-3"	14'-6"
WIDTH		6'-2"	6'-6"	6'-6"	6'-10"	7'-2"
HEIGHT		4'-6"	5'-0"	5'-5"	5'-5"	5'-5"

### ✓ HEATER

A high efficiency fan deliver hot air to bins through a series of diffusers. Heaters are available in a range of sizes. Motors are equipped with soft starts to reduce in-rush current.



### ✓ AGGREGATE BINS OR SILOS

Aggregate could be stored in bins on the ground or in silos designed as per heating requirement. Aggregates can be stored underground bins overhead silos, or even concrete packs at grade. Temperatures can be set and regulated by diffusers for different types and quantities of aggregate.



### ✓ SPIRAL DUCTING

Pipe sizes and lengths will be designed by heat and flow requirements.



### ✓ DAMPERS

The automatic control system regulates dampers, increasing or decreasing the airflow in each bin as required. The multi-level dampers are controlling each bin section to equalize temperature.



### ✓ CONTROL PANEL

The automatic control system is an option to control temperature of each bin automatically. Each bin is equipped with an adjustable thermostat, which regulates the temperature. As each aggregate reaches the desired temperature, the heater shuts off.

