

# SIMPSON PRO-CLAIM®

Foundries all over the world are using the Simpson Pro-Claim® to inexpensively reclaim large volumes of bentonite or chemically bonded sand for reuse in the molding systems resulting in significant savings in raw material and disposal costs as well as increasing casting quality. This is the most energy efficient method of reclamation with a small environmental footprint and high throughput.

## Description

Continuous sand reclaimer working on the principle of pneumatic scrubbing.

## Application

For reclaiming green sand for reuse in green sand or chemically bonded sand for reuse in chemically bonded sand systems.

## Features

- Continuous operation requires no operator
- No moving parts in contact with sand requires minimal maintenance
- Simple yet versatile operation effectively reclaims sand at a very low cost

# EFFECTIVE

Sand enters the machine and is propelled up a blast tube with air provided by a turbo blower. As the sand accelerates up the tube to impact a conical target intensive sand scrubbing is achieved to remove layers of binder material. Removed binder and unwanted fines are exhausted to the dust collection system. Sand can be recirculated within the same cell or passed to successive cells. After the desired amount of cleaning has been achieved the sand is discharged over a final screening operation before being returned to the sand system.



## SIMPSON PRO-CLAIM TECHNICAL DATA

MODEL		EVEN-FLO 2-CELL	PRO-CLAIM 2-CELL	PRO-CLAIM 4-CELL
CAPACITY	tph	1-2	3-5	6-10
HEIGHT	in	181	150	161
WIDTH	in	70.5	117	148
LENGTH	in	195	188	264.5
SUPPLY FAN	hp/rpm/cfm	40/3,600/1,350	75/3,600/2,700	150/3,600/5,500
SHIPPING WEIGHT	lbs	7,300	9,900	15,500

All figures are approximate and are subject to change depending upon your application.

# SAND RECLAMATION

SAVE UP TO 75 TO 90% OF THE COST OF NEW SAND BY RECLAIMING WITH THE SIMPSON PRO-CLAIM® SAND RECLAIMER

**In today's competitive market you can't afford to miss the savings and technical advantages available from reclamation.**

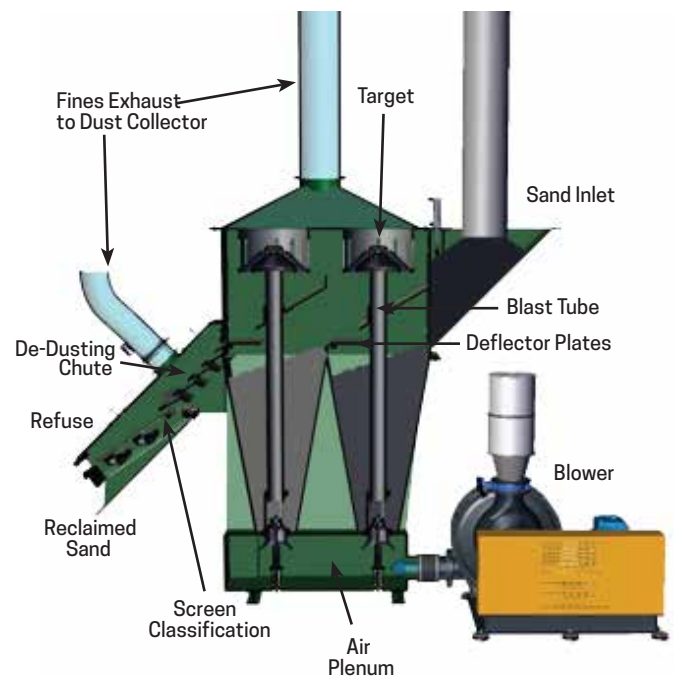
Sand is the largest foundry process waste, typically constituting about 70% of total waste volume. Fortunately, most foundry sands are reclaimable and can be effectively reused.

## THE BASIC REASONS FOR RECLAIMING SAND

**It's Cost Saving.** The costs of molding and core sand continue to increase significantly and cut into foundry profitability. To lower the cost of producing a casting foundries desire to reduce total sand cost which includes the purchase cost, delivery cost, unloading, storing, handling and disposal costs including, in some instances, ever more expensive landfill fees.

**It's Environmentally Responsible.** Environmentally it's becoming increasingly more difficult to dispose of great quantities of waste sand into a landfill. Environmental agencies of the local, state and federal governments want to know what chemicals are in all refuse and what amounts might be leached from the sand.

**It Has Technical Advantages.** Technically, reclamation is of interest because many foundries report that better castings can be made, at lower costs, from reclaimed sand.



## COST IMPROVEMENT OPPORTUNITY

### WITH NOBAKE AND COLDBOX RESINS

- REUSE UP TO 90% OF RECLAIMED SAND
- REDUCE ADV/PH OF RECLAIMED SAND
- REDUCE LOI OF RECLAIMED SAND
- REDUCE AGGLOMERATIONS

### WITH GREEN SAND SYSTEMS

- REUSE UP TO 90% OF RECLAIMED SAND
- REDUCE AFS CLAY WHILE SAVING MB CLAY
- REDUCE LOI OF RECLAIMED SAND
- REDUCE AGGLOMERATIONS