Since our origin in 1950, Carrier has been recognized as the industry leader in designing and building foundry equipment. Our unique capabilities have served metalcasters around the world longer than any other full line vibrating equipment manufacturer. We're innovators, holding multiple patents and we specialize in modern applied technology for the most efficient and reliable foundry equipment.

Carrier's application experience in the processing of sand and castings combines with uncommon engineering skills to offer QUALITY & PERFORMANCE IN COST-EFFECTIVE EQUIPMENT.

We work with our customers to interpret specific requirements for the installation. Whether the need is for one unit or a complete system — Carrier engineers can get PRECISION PROCESSING for the job you want to do.

SAND COOLING & CONDITIONING

- CARRIER'S PATENTED FLUIDIZING DRILLED DECKS evenly distribute air into sand bed, preventing hole pluggage and maximizing thermal efficiency.

- AIR VOLUME CONTROLS regulate and maintain supply and exhaust air volumes at a constant pre-set level to prevent fines entrainment and sand weepage.

- CONTINUOUS PLENUM DISCHARGE incorporates a double seal to discharge weepage sand if loss of supply air should occur.

- SPECIAL HOOD DESIGN minimizes dusting and produces more uniform exhaust velocities.

THE RESULT IS CONSISTENT RETURN SAND TEMPERATURE & MOISTURE CONTENT

From small to large capacities — we can get you the • PROPER SIZE • VIBRATORY ACTION • DECK TYPE you need FOR YOUR SPECIFIC APPLICATION.

OPTIONAL SCALPING, HOT AIR DRYING & CLASSIFYING FEATURES CAN BE BUILT IN THE SYSTEMS . . . OR YOU TELL US WHAT YOU WANT TO DO!
VIBRATING FLUID-BED SAND COOLER

SAND PROCESS CONTROL FOR PRODUCTIVITY

REDUCE casting defects and scrap . . .
PRODUCE A SUPERIOR MOLD . . .

SYSTEM CAPACITIES
UP TO 850 TPH

COOL and DRY WHILE CONVEYING
Sand temperature and moisture content are lowered through the evaporative cooling process.

CARRIER FLUID-BED SAND COOLER

UNIFORM DISCHARGE TEMPERATURE
Fluidization with vibration mixes and turns the sand bed, eliminating hot spots, while cooling.

Let Carrier's innovative engineering staff review your foundry's specific requirements to recommend the most efficient system in the marketplace with features to PROCESS YOUR SAND WITH PRECISION.
Carrier VIBRATING FLUID-BED SAND COOLERS

Reliable rubber compression drives

Dynamically balanced cooler with screen deck processes 500 TPH of sand

350 TPH cooler custom designed for low

Maximum thermal efficiencies are achieved with correct fluidizing decks for the specific application

Screening and lumpbreaking combined with cooling and conveying

Adjustable air flow controls
ALL THE FEATURES FOR THE RESULTS YOU WANT

headroom installation

5' x 40' cooler conveyor controls cooling of 200 TPH return sand

Dynamically isolated unit, engineered to absorb reactions, cools no-bake sand to specs

Insulated hood minimizes condensation

Designed for small capacity, this unit cools, screens and feeds 20 TPH return sand
Combined with a belt mixer and a Carrier vibrating fluid-bed, this is the 'state of the art' method of cooling return sand. It CONTROLS THE MOISTURE AND MONITORS THE PROCESS for a complete evaporative sand cooling system.

Signals from sensors mounted on the return sand belt are relayed to a micro-processor controller which instantly and continuously determines the amount of water required for cooling hot sand to user's desired temperature. From this data, spray assembly solenoid valves are sequenced in correct order to discharge the precise amount of water on the sand. A second infrared sensor upstream checks total system performance to match user's setpoint range. Feedback from this sensor is monitored by the micro-processor and used to correct any deviations from setpoint.

THE RESULT IS CONSISTENT RETURN SAND TEMPERATURE AND MOISTURE CONTENT

CUSTOM CONTROL CONSOLE

DURABLE DIGITAL DISPLAYS FOR:
- Hot sand temperature
- Sand tonnage
- Cool sand temperature

CUSTOM BARGRAPH METER READS WATER GPM USAGE

SPASH-PROOF KEYPAD REGISTER ACCESS PANEL:
- Eliminates need for hook-up of industrial terminal to micro-processor
- Features setpoint entries and system status keys
- Displays messages in plain language to indicate source of any system fault

EASY INSTALLATION to new or existing equipment, the system interfaces to a communication link or host PC via data networking for remote process control or information exchange.

PRE-ASSEMBLED COMPONENTS are bolt-on adjustable spray assembly, two infrared temperature sensors, weigh cell idler assembly, and process control panel.

COOLtech™, developed, implemented, and tested by foundrymen in 1979, features copyrighted software that is precise and field proven to maintain foundry return sand temperatures automatically.
SAND COOLING

We'll assist in layouts and matchups to on-line equipment.

Users report proven advantages of CARRIER'S SAND COOLING SYSTEM:
- IMPROVED MULLING
- INCREASED PRODUCTION RATES OF HIGH QUALITY CASTINGS
- BINDER SAVINGS
- LESS CLEANING ROOM COSTS

INSTALLATION OF CARRIER'S SAND COOLING SYSTEM WITH COOLtech™ AND FLUID BED SAND COOLER

IT ALL ADDS UP TO PROFIT FOR YOU
Our engineering ingenuity can assist you in solving material handling and processing problems. We study each application and work with you to get equipment performance you operation needs for greater productivity and profit.

WE'RE GOOD AT IT!
Ask about CARRIER's:
- MOLD DUMP, TRANSFER, AND SORTING CONVEYORS
- EXTENDED SHAKEOUT CONVEYOR SYSTEMS
- CONVENTIONAL OR TUBULAR SHAKEOUTS
- CASTING ACCUMULATORS/COOLERS
- RADIAL TRANSFER, SORTING CONVEYORS
- FLUID BED SAND COOLERS
- ATTRITION MILLS
- CLEANING ROOM SYSTEMS
- SCRAP CONVEYORS AND FEEDERS
- FURNACE AND CUPOLA FEEDERS

STARTUP SERVICE is provided by trained area field representatives.

FACTORY SERVICE ENGINEERS and STOCK PARTS are readily available from our headquarters.

Test In Our Lab or Your Plant!

OUR CAPABILITIES STRETCH ALL OVER THE WORLD.
Carrier
Vibrating Equipment, Inc.

The Standard of Excellence in Bulk Material Handling and Processing Equipment

Fluid Bed Dryer/Cooler Systems, Conveyors, Spiral Elevators, Feeders, Shakeouts
Screens, Bin Activators, Pile Dischargers

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