SOLUTIONS
for the
PLASTICS and RUBBER INDUSTRIES

We Make Your Work Flow
Carrier
Vibrating Equipment, Inc.
Since our origin in 1950, Carrier has been recognized as an industry leader in designing and supplying processing equipment. We continue to provide SOLUTIONS committed to the most efficient systems for processing a wide variety of products.

ONE-STEP PROCESSING
Carrier's unique applied technology gives you the power to perform varieties of processing functions while conveying, feeding or elevating bulk materials.

SOLUTIONS DESIGNED TO ORDER
Our engineers work with your team to tailor each piece of equipment for a precise fit into your processing operation. Research and development capabilities are available to set design parameters for new and unusual process requirements.

PRODUCT/PROCESS TESTING PROGRAMS
Comprehensive product testing allows the exploration of various processing methods and new technologies for equipment evaluations before investment. Our engineers are available for consultation throughout the project. Recorded data obtained during testing verifies factors for the system design to suit a specific application and production quota.

Our lab is equipped to test sample products. If required, complete field test packages are available for testing in your plant.

WE MAKE THE WORK FLOW FOR PLASTIC AND RUBBER PRODUCTS AROUND THE WORLD

American Synthetics
Exxon Chemical
ABS Plastics, Ltd.
Shin-etsu Chemical
Ube Sicon
Armstrong World
E. I. Dupont
Dow Chemical
Hercules
Interlake
Kumho Tire
Atlas Chemical
B. F. Goodrich
Hoechst-Celanese
Day Products
Texas Gulf Chemicals
Shell Chemical
Mobay Chemical
Custom Vinyl
Milliken
Chevron
Abbott Labs
Ethyl
National Poly Recyling
Inter-Plast
Packard Electric
Formosa Plastics
Mitsubishi
Arkansas Eastman
Standard Oil
Tarkett
Warner-Lambert
Grand Pacific Petro
Enichem
Fuji Film
Tennessee Eastman
Polymer
Moore Plastics
Aristech
Ciba-Geigy
Goodyear
Polyscience
Magnum Magnetics
Thiokol Chemical
Union Carbide
Borg-Warner Chemical
Rohm & Haas
Sumitomo Engineering
Kawasaki Organics
Chiyoda
Sun Arrow Chemical
Nippon Zeon
Thai Plastics
Denki Chemical
Ameripol/Synpol
Baymag-Canada
Cumberland Recycling
Eastman Kodak
Polysar
Nypel Chemical
Miles, Inc.
Romchim IV
Asahi Chemical
Gulf Chemical
Albis Canada
Springfield Plastics
Advanced Elastomers
Waste Alternatives
Copolymer Rubber &
Chemical
B.P. Polymers
Cooper Tire
Industrias-Negromex
Celanese Plastics
Shell, Netherlands
Uniroyal
Mitsui Petrochemical
Lucky, Ltd.
Hules Mexicanos
American Cyanamid
Colonial Rubber
Amoco
Phillips Petro
Texaco
General Electric
Delta Petro
Japan Syn. Rubber
A. Schulman
Occidental Chemical
General Tire
3-M
Firestone
Allied Chemical
Coperbo
Kureha Chemical
Crown Central Petro.
Kanaka Belgium
WTE Corp.
Canadian Polystyrene
Enviroplastics
Zeon Chemicals
Okonite
FLUID BED PROCESSING

The efficient way to process Plastics and Rubber

FLUID-FLOW™ VIBRATING FLUID BED SYSTEM
(Systems include: blowers, heating and/or cooling source, charging feeder, dust collection, duct work, air and temperature controls)

COMPONENTS:
1. Feed System
2. Distributor Plate
3. Plenum Chamber
4. Drying Chamber
5. Hot Air System
6. Dust Collection System
7. Product Discharge

D R Y, C O O L, C A L C I N E, S T E R I L I Z E

STATIONARY FLUIDIZED BED SYSTEM
(Continuous Type)
Available with or without Heat Exchanger Tubes

STATIONARY FLUIDIZED BED SYSTEM
(Batch Type)
Multi-Stage Reverse Turning Bed
**FLUID BED DRYING**

**Batch or Continuous — Stationary or Vibrating** (for processing small quantities)

**STATIONARY FLUIDIZED BED DRYING**
Advanced fluidization techniques for high thermal efficiencies. Proven successful in constant operation.
Ability to mix wet and dry feed provides uniform drying of highly moisturized products without preliminary drying.

**MULTI-STAGE STATIONARY BED UNITS are available**

**TYPICAL PVC DRYING SYSTEM - Continuous Type**

1. Centrifugal Dehydrator
2. Air Filter
3. Blower
4. Air Heater
5. Fluidized Bed Dryer
6. Heat Transfer Tube Unit
7. Mechanical Scatter
8. Cyclone Collector
9. Exhauster
10. Wet Scrubber

**Immersed Heat Exchanger Tubes improve heat transfer co-efficient, decreasing air drying quantity by 50% to 70%.**

**DRYING SYSTEM - Batch Type**
Simple operation of the Reverse Turning Bed is automatically controlled by timer and temperature signals.

**CLEAN-IN-PLACE SYSTEMS - OPTIONAL**

Systems are Patented by NARA MACHINERY CO., LTD., Tokyo, Japan - Licensed to Carrier.
COOLING SYSTEMS
(synthetic resins, such as ABS, HDPE, PET, POLYPROPYLENE, PBT, PVC, PS, and PC)

Technology and Experience come together for unique equipment SOLUTIONS in PLASTICS PROCESSING

FLUID-FLOW™ TOTAL SYSTEM DESIGN
Patented drilled decks assure even air flow through product bed. Gentle vibration-aided fluidization provides:
- Maximum process efficiency
- Minimum energy consumption
- Quality finished product

CASE HISTORY: PRODUCTION OF TOP QUALITY PELLETS
PROBLEM: Inefficient drying, fines build-up, excessive maintenance and downtime in existing dryer.

SOLUTION: Carrier's system . . .
- Dewatered pellets from slurry
- Dries to specified moisture level
- Cools to required temperature
- Screens overs and fines
- Eliminates abrasive wear
- Provides easy cleaning access
- Fits into limited space

FLUID BED DRYER/COOLER CONVEYORS for Recycled Plastics
Cost-effective, prepackaged systems for PET, HDPE, LDPE and FILMS. PET DRYING AND CRYSTALLIZATION in a single unit.
ONE-STEP PLASTIC PELLET PROCESSING

- Gates control the discharge of processed pellets to 3 points
- Plastic Pellets dewater, dry and screen

DRYERS AND COOLERS FOR CRUMB RUBBER

Long stroke, adjustable angle vibration eliminates bed matting. No need for lumpbreaker.

QUENCHING, DEWATERING, COOLING SYSTEMS FOR RUBBER PELLETS

- High Capacities
- Cost-effective Solutions

Spray - Washing - Cooling conveyor with louvered decks and drains

Cooling conveyor and air auxiliaries for product temperatures exceeding 350° inlet - 90° or lower outlet

All product contact surfaces are stainless steel.
CONVEYOR FOR RUBBER PELLETS DEWATERS, DRIES AND COOLS

VIBRATING FEEDERS DEWATER CRUMB RUBBER FROM SLURRY

BALER FEEDER
Carrier's Ampli-Flex Variable Amplitude Conveyor. Push button control for maximum — dribble-off.

PVC PELLETS are distributed through air operated gates.

SPIRAL ELEVATORS
Vibrating spirals dry, cool and elevate to balers. Long stroke vibration minimizes sticking. DDSP drive eliminates overstroke.

Whether you need new equipment designs, process or methods, or improved efficiencies on existing lines - our engineering creativity combines with technology to MAKE YOUR WORK FLOW.