TERNST & Associates

LEADING MANUFACTURERS, CUTTING-EDGE INSTALLATION, UNMATCHED RESULTS

Pneumatic Conveying
Liquid Handling
Explosion Control
Environmental Controls
Mechanical Conveying Systems
Food Grade Systems
Mixing Systems
Packaging Systems
Storage Silos

TRUSTED INSTALLER
Since 1976

Address: 3475 Burr St, Gary, IN 46406
Phone: +01 219-923-1221
E-mail: accounts@ternst.net
www.Ternst.net

Contents

T. Ernst & Associates - Your Trusted Installer

T. Ernst process systems provides advanced liquid and material handling solutions engineered for the world's most demanding operations. From food and beverage to energy, pharmaceutical, and industrial manufacturing, our systems optimize flow, safety, and productivity at every stage of production. Whether it's bulk storage, precision mixing, temperature control, or automated filling, T. Ernst integrates innovation with reliability to streamline complex processes and reduce downtime. Trusted by leading global brands, we deliver scalable solutions built for performance, compliance, and long-term value.

Executive Summary 3

History / Milestones 4

Industiral Design Build 5

- Infrastructure Foundation 5
- Mechanical Systems 6
- Production / Packaging 7

Liquid Handling 8

- Bulk Storage and Mixing

Environmental Controls 9

- Dust Collection
- Vaccume Systems

Explosion Control 10

- Chemical Suppression
- Explosion Vents, Spark Detection, Isolation Valves

Mechanical Conveying Systems 11

- Belt, Screw & Drag Conveyors, Bucket Elevator

Food Grade Systems 12

- Systems & Platforms, Modular Equipment, Sanitary Fabrication

Mixing Systems 13

- Dough Mixer, V Bender, Fluidized Plow Blender
- Plow Blender

Packaging Systems 14

- Air Screw & Bulk Bag Filling
- Robotic Packaging
- Vertical Seal & Form

Pneumatic Conveying Systems 15

- Dense Phase Pressure, Vacuum, & V-Control
- Pneumatic Piping Networks

Storage Silos 16

- Dust Collection, Pollution Controls, Vaccume, & Portable Units

Safety Equipment 17

- Platforms, rails, gates, etc.

Thermal Processing Systems 18

Robot & Control Automation 19

Rail & Truck Unload Systems 20

Particle Reducation & Sizing 21

Metal Detection & Magnet Installation 22

Repair Solutions 23

Dryers & Ovens 24

WITH INTEGRITY

Work with
150+
Fortune 500 Companies

Saved
$1B
In Cost Overages

Impressive
97.5%
Ontime & Onbudget

>3%
Over Bugdet Rate

<1500
Projects Completed

About us

Executive Summary

Since 1976, we have combined engineering expertise with real-world performance to help leading manufacturers streamline production and reduce operational costs - supported by full-service design, fabrication, installation, and lifecycle maintenance.

Building Trust Since 1976

At T. Ernst, our reputation is built on long-term partnerships, technical precision, and measurable value. Since 1976, we have completed more than 1,500 projects, serving Fortune 500 companies and industry leaders across food, chemical, energy, pharmaceutical, and manufacturing sectors. Through intelligent design-build integration, meticulous planning, and superior execution, we have delivered over $1 billion in operational savings to our clients.

Our expertise extends beyond installation—we support every stage of the process: from early-phase engineering and 3D modeling to parts supply, equipment fabrication, on-site construction, and post-commissioning maintenance. T. Ernst is a trusted national solutions partner offering complete systems for storage, transfer, heating, cooling, and automation. We stand for innovation, responsiveness, and quality workmanship that consistently transforms complex challenges into sustainable results.

Through decades of innovation, T. Ernst has evolved from a regional fabricator into a national process systems leader. Our approach blends advanced engineering with hands-on manufacturing insight, enabling us to deliver systems that don't just meet specifications—they redefine performance, reliability, and uptime. Each T. Ernst project is powered by data-driven design, strict quality control, and precise coordination between our design-build teams, ensuring every installation operates at peak efficiency.

Our continued success is built on trust, craftsmanship, and a relentless dedication to our clients' success.

Milestones & History

Innovating solutions that empower businesses.

The future is now—American manufacturing is lagging, but we're in the midst of an automation revolution. With our expertise, we help companies modernize, improve safety, and thrive in this pivotal era.

The Beginning

Robert (Cadillac Bob) Stoffregen worked for Boris Erectors at the inception of automation processing bulk handling equipment.

1976

Installs first surgar rail unload system for Wrigley chewing gum Chicago, where he joins forces with MPG (Max, Paul, Gus) to begin installing process systems across the midwest.

1986

MPG grows with Chicago Industrial Contractors to rapidly secure midwest contracts with Turano & National Baking (Alpha Baking), helping them transitions from bag to bulk truck delivery systems.

First Milestone

Chicago Industrial Contractors becomes wholly owned by Robert Henry & Associates to form the beginings of what would become T. Ernst & Associates.

Rapid Growth

Theodore Ernst (T. Ernst) Stoffregen assumes full ownership and rapidly modernizes our processes for equipment installation with controls, automation, robotics, and 3D design.

1996

T. Ernst was a bold, eccentric visionary force whose direct, witty, and hard-edged humor reflected his unwavering values of trust, integrity, and hard work.

2006

T. Ernst begins full design-build production line installations for Fortune 500 companies across the United States and Mexico. The Stoffregen family continues the legacy of its founders.

National Reach

T. Ernst began tackling major manufacturing challenges—designing and building some of the world's most efficient, advanced production lines—quickly earning national recognition and growing demand.

New Horizons

T. Ernst has become the trusted partner of Fortune 500 manufacturers nationwide, delivering innovative design-build solutions that drive productivity, efficiency, and automation.

2016

In 2008, while many competitors folded during the financial crisis, we stayed strong—restructuring plants and installing process systems for clients like Jelly Belly and UPS to help them power through the downturn.

2026

Future is Now

Let's discuss how we can transform your manufacturing operations — contact us today to explore a customized automation solution: +1 (219) 923-1221.

INDUSTRIAL DESIGN BUILD

ESTABLISHING THE BACKBONE OF YOUR FACILITY

INFRASTRUCTURE & FOUNDATION

01 Laying The Foundation

Structure engineering for heavy process loads.

02 Building The Structure

Shell, structure, roof, insulation, clear span design

03 Clean Room Creation

Mezzanies, access catwalks, and service platforms

04 Finshing Services

Food-grade coatings, drainage, impact resistance, and hygienic surfaces

05 Service Platforms

Engineered access – safe, strong, and service-ready

06 Dock Doors

Insulated high-speed doors to heavy-duty levelers and seals

APPLICATIONS:

Food processing facilities, chemical manufacturing plants, pharmaceutical cleanrooms, cosmetic and personal care production, industrial fabrication spaces

INDUSTRIAL DESIGN BUILD

THE SYSTEMS THAT POWER PRODUCTION

MECHANICAL SYSTEMS & UTILITIES

07 Air Handling Install

Cleanroom balance, filtration integration, efficient airflow design, pressure control

08 HVAC Installation

Climate zoning, rooftop installs, automated control, high-efficiency systems

09 Industrial Boiler Systems

Steam systems, burner integration, condensate recovery, safety compliance

10 Compressor Install

Air receiver setup, loop piping, vibration isolation, pressure regulation

11 Mix Plant Install

Batching systems, process piping, ingredient feeds, sanitary design

12 Heating & Cooling

Heat exchangers, chilled water, insulated piping, energy optimization

APPLICATIONS:

Climate-controlled environments, process steam and air systems, manufacturing plants, energy management systems, temperature-regulated production zones

INDUSTRIAL DESIGN BUILD

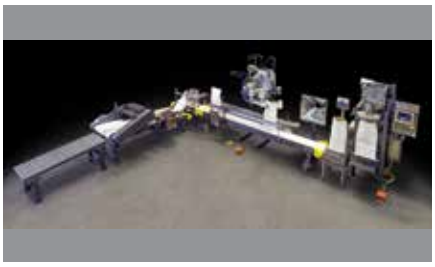
WHERE PROCESS TO PRODUCT & ENGINEERING MEETS OUTPUT

PRODUCTION, PACKAGING & PERFORMANCE

13 Production Line Equipment

Automated conveyors, material transfer, line integration, palletizing systems

14 Bagging Line



Sealing systems, labeling lines, robotic bag handling systems, product flow

15 Food Grade Manufacturing

USDA-compliant design, clean room systems, hygienic finishes, washdown areas

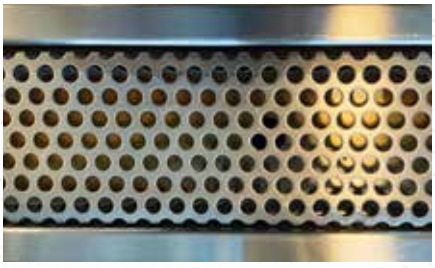
16 Mezzanine

Mezzanines, access platforms, load framing, OSHA compliance

17 Equipment Penthouse

Batching systems, process piping, ingredient feeds, sanitary design

18 Trench & Floor Drains



Sanitary channels, stainless grates, sloped flooring, easy maintenance

APPLICATIONS:

Packaging lines, automated processing facilities, food-grade manufacturing zones, heavy-load mezzanine systems, precision filling and sealing operations

PRODUCT CATEGORY

LIQUID HANDLING

- **BULK LIQUID TANKS**
- **LIQUID MIXING & MELTING**
- **CLEAN-IN-PLACE (CIP)**
- **HEATING COOLING SYSTEMS**

INSTALLATION EXAMPLES

01 Outdoor Tempature Controlled Tanks

02 Sanitary Welded Tanks

03 Polyresin Tanks

04 Liquid Mixing System

05 Clean-In-Place

06 Heating Cooling System

APPLICATIONS:

Beverage production, chemical blending, pharmaceutical solutions, food emulsions, temperature-sensitive liquid storage

PRODUCT CATEGORY

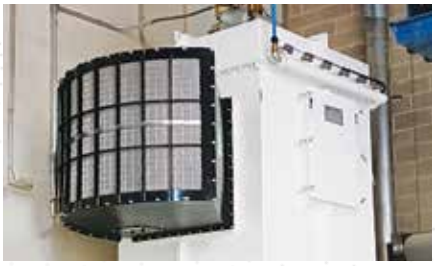
ENVIRONMENTAL CONTROLS

- **DUST COLLECTION**
- **VACUUM SYSTEMS**
- **POLLUTION CONTROLS**
- **PORTABLE UNITS**

INSTALLATION EXAMPLES

01 Safeguards Operators from Airborne Hazards

02 Meet OSHA, NFPA, EPA requirements



03 Cleaner Environments Reduce Downtime

04 Vaccum Systems

05 Pollution Controls

06 Portable Units

APPLICATIONS:

Air quality management, industrial filtration, dust control in food and grain handling, fume and particle removal, clean air compliance systems

PRODUCT CATEGORY

EXPLOSION PROTECTION SYSTEMS

- CHEMICAL SUPPRESSION
- EXPLOSION VENTS
- SPARK DETECTION
- ISOLATION VALVES

INSTALLATION EXAMPLES

01 Explosion Prevension Vents Inside

02 Chemical Suppression, Highly Reliable

03 Explosion Protection Outside

04 Explosion Vent

05 Spark Detection

06 Isolations Valves

APPLICATIONS:

Powder handling facilities, dust-prone production environments, combustible chemical plants, high-pressure pneumatic systems, industrial safety retrofits

PRODUCT CATEGORY

MECHANICAL CONVEYING SYSTEMS

- **BELT CONVEYOR**
- **BUCKET ELEVATOR**
- **SCREW CONVEYOR**
- **TUBULAR DRAG CONVEYOR**

INSTALLATION EXAMPLES

01 Robust, Enclosed, or Semi-Enclosed Frames

02 Belt Conveyor

03 Equipment Support Design

04 Bucket Elevator

05 Screw Conveyor

06 Tubular Drag Conveyor

APPLICATIONS:

Grain transfer, powder handling, ingredient feed systems, packaging line supply, material recirculation systems

PRODUCT CATEGORY

FOOD GRADE PROCESSING SYSTEMS

- FOOD GRADE SYSTEM
- FOOD GRADE PLATFORM
- MODULAR EQUIPMENT
- SANITARY FABRICATION

INSTALLATION EXAMPLES

01 High-Grade Stainless Steel Construction

02 Built to Meet Sanitary Codes

03 Modular, Scalable Configurations

04 Food Grade Platform

05 Modular Equipment

06 Sanitary Fabrication

APPLICATIONS:

Bakery and confectionary plants, dairy processing, nutraceutical facilities, pet food manufacturing, sanitary ingredient mixing areas

PRODUCT CATEGORY

MIXING SYSTEM INSTALLATION

- **DOUGH MIXER**
- **FLUIDIZING PLOW BLENDER**
- **V BLENDER**
- **PLOW BLENDER REACTOR SKID**

INSTALLATION EXAMPLES

01 Operator Safety

02 Built to Meet Sanitary Codes

03 Modular, Scalable Configurations

04 Fluidizing Paddle Blender

05 Plow Blender and Reactor Skid

06 V Blender

APPLICATIONS:

Food and dough mixing, chemical blending, pharmaceutical formulation, powder dispersion, emulsification and suspension systems

PRODUCT CATEGORY

PACKAGING SYSTEMS INSTALLATION

- **AIR/AUGER BAG FILLING**
- **BULK BAG FILLING**
- **ROBOT PACKAGING**
- **VERTICAL FORM & SEAL**

INSTALLATION EXAMPLES

01 Air/Auger Bagging Systems

02 Robot Arm, Labor Reduction

03 Bag-in-Box Packaging Systems

04 Bulk Bag Filling

05 Robot Packaging

06 Vertical Form & Seals

APPLICATIONS:

Automated packaging lines, bulk and retail bagging, robotic palletizing, vertical form-fill-seal operations, distribution-ready systems

PRODUCT CATEGORY

PNEUMATIC CONVEYING SYSTEMS

- **DILUTE PHASE PRESSURE**
- **DILUTE PHASE VACUUM**
- **DENSE PHASE CONVEY**
- **PNEUMATIC PIPING**

INSTALLATION EXAMPLES

01 Pneumatic Piping Installation

02 Process Batching Systems

03 Pneumatic Blowers

04 Dilute Phase Convey Systems

05 Dense Phase Pressue

06 Dense Phase Vacuum

APPLICATIONS:

Dry bulk material transfer, ingredient dosing, air-powered conveying systems, closed-loop vacuum transfer, dust-free pneumatic distribution

PRODUCT CATEGORY

STORAGE SILO SYSTEMS BULK MATERIAL HANDLING

- **WELDED SILOS**
- **BOLTED SILOS**
- **INDOOR FABRIC**
- **POLYRESIN SILOS**

INSTALLATION EXAMPLES

01 Bulk Systems Insallation

02 Dry and Liquid Bulk Storage

03 Crane and Rigging Services

04 Bolted Silos

05 Indoor Fabric Silos

06 Polyresin Silos

APPLICATIONS:

Bulk ingredient storage, polymer handling, grain and feed storage, powder containment, temperature-controlled silos

PRODUCT CATEGORY

SAFETY EQUIPMENT SYSTEMS FOR SECURE INDUSTRIAL ACCESS

- **FALL PROTECTION**
- **MOBILE ACCESS PLATFORM**
- **PLATFORM SAFETY GATE**
- **GUARD RAIL & WALKWAY**

INSTALLATION EXAMPLES

01 Fall Protection

02 Mobile Acces Platform

03 Platform Safety Gate

04 Guard Rail & Walkway

05 Safety Operator Platforms

06 Safety Grates

APPLICATIONS:

Worker access points, elevated workstations, process mezzanines, maintenance walkways, fall protection systems

PRODUCT CATEGORY

THERMAL PROCESSING SYSTEMS

- **FOOD PRODUCTION**
- **STAINLESS EQUIPMENT**
- **SANITARY WELDING**
- **FDA COMPLIANT PROCESS**

INSTALLATION EXAMPLES

01 Thermal Batching Systems

02 Thermal Heat Exchangers

03 Heating and Cooling Tanks

04 Thermal Processing Unit Piping & Pumps

05 Full Production Systems

APPLICATIONS:

Batch heating and cooling, kettle systems, liquid blending operations, thermal control in process lines, high-precision heat management

PRODUCT CATEGORY

ROBOT AND CONTROL AUTOMATION

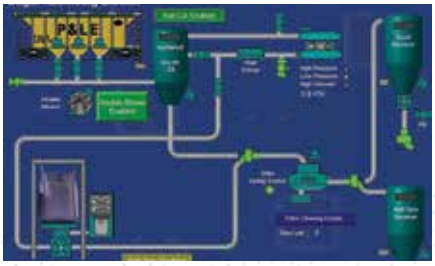
- ROBOTIC ASSEMBLY
- VISION INSPECT / SORT
- PLC CONTROL & AUTOMATION
- AI DRIVEN ROBOTICS

INSTALLATION EXAMPLES

01 Bakery Robotics

02 Robot Arm Installation

03 HMI Design and Programing



04 Control Panels

05 Case Palletizing

06 Motor Controls

APPLICATIONS:

Automated assembly, product packaging, quality inspection, palletizing and depalletizing, process automation systems

PRODUCT CATEGORY

RAIL & TRUCK UNLOAD SYSTEMS

- **TRUCK UNLOADING**
- **VACCUM TRANSFER**
- **PNEUMATIC RAILCAR**
- **RAIL/BELT MECHANICAL UNLOAD**

INSTALLATION EXAMPLES

01 Rail Unload Enclosure

02 Automatic Bulk Unloading Terminals

03 Pneumatic Truck Unloading

04 Dense Phase Vaccum System

05 Rail Belt Mechanical Unload

06 Pneumatic PD Railcar System

APPLICATIONS:

Bulk unloading terminals, pneumatic material transfer, railcar unloading, automated truck discharge, raw material intake stations

PRODUCT CATEGORY

PARTICLE REDUCTION & SIZING

- FINE GRINDERS
- LUMP BREAKERS
- AIR CLASSIFIER UNIT
- SIFTERS & SCREENERS

INSTALLATION EXAMPLES

01 Powder Sugar Grinding System

02 Particle Classifier

03 Classifier Mill

04 Centrifugal Sifter

05 Lump Crusher

APPLICATIONS:

Powder milling, sugar grinding, ingredient classification, material sifting, precision screening and crushing

PRODUCT CATEGORY

METAL DETECTION & MAGNET INSTALLATIONS

- GRAVITY-FED DETECTION
- BULK MATERIAL DETECT
- CONVEYOR BELT DETECT
- MAGNET INSTALLATIONS

INSTALLATION EXAMPLES

01 Inline Conveyor Metal Detector

02 Liquid Product Metal Detection

03 Drawer In-housing Magnet

04 Low Profile Units

05 Bullet Magnet on Custom Rack

06 Gravity-Fed Detection

APPLICATIONS:

Food packaging QA systems, pipeline inspection, conveyor product scanning, contamination control, bulk metal detection

PRODUCT CATEGORY

COMPREHENSIVE COMPONENT & REPAIR SOLUTIONS

- **REPAIR AND SERVICE**
- **EXTENDED SERVICE LIFE**
- **ONSITE TROUBLESHOOTING**
- **LEGACY COMPATIBILITY**

INSTALLATION EXAMPLES

01 Pneumatic Convey Parts

02 Valve Connections

03 Suspension Industrial Scales

04 Shaft Replacement

05 Load Cell Kit & Mounts

06 Fans / Turbines

APPLICATIONS:

Plant maintenance, legacy system retrofits, component upgrades, equipment reliability programs, on-site repair operations

PRODUCT CATEGORY

DRYERS AND OVEN

- **CIRCULAR FLUID BED PROCESSOR**
- **DEHUMIDIFICATION SYSTEMS**
- **FLUID BED DRYER**
- **BAKERY OVENS AND DRYERS**

INSTALLATION EXAMPLES

01 Fluid Bed Dryer (Horizontal)

02 Dehumidifier

03 Duct Work Install

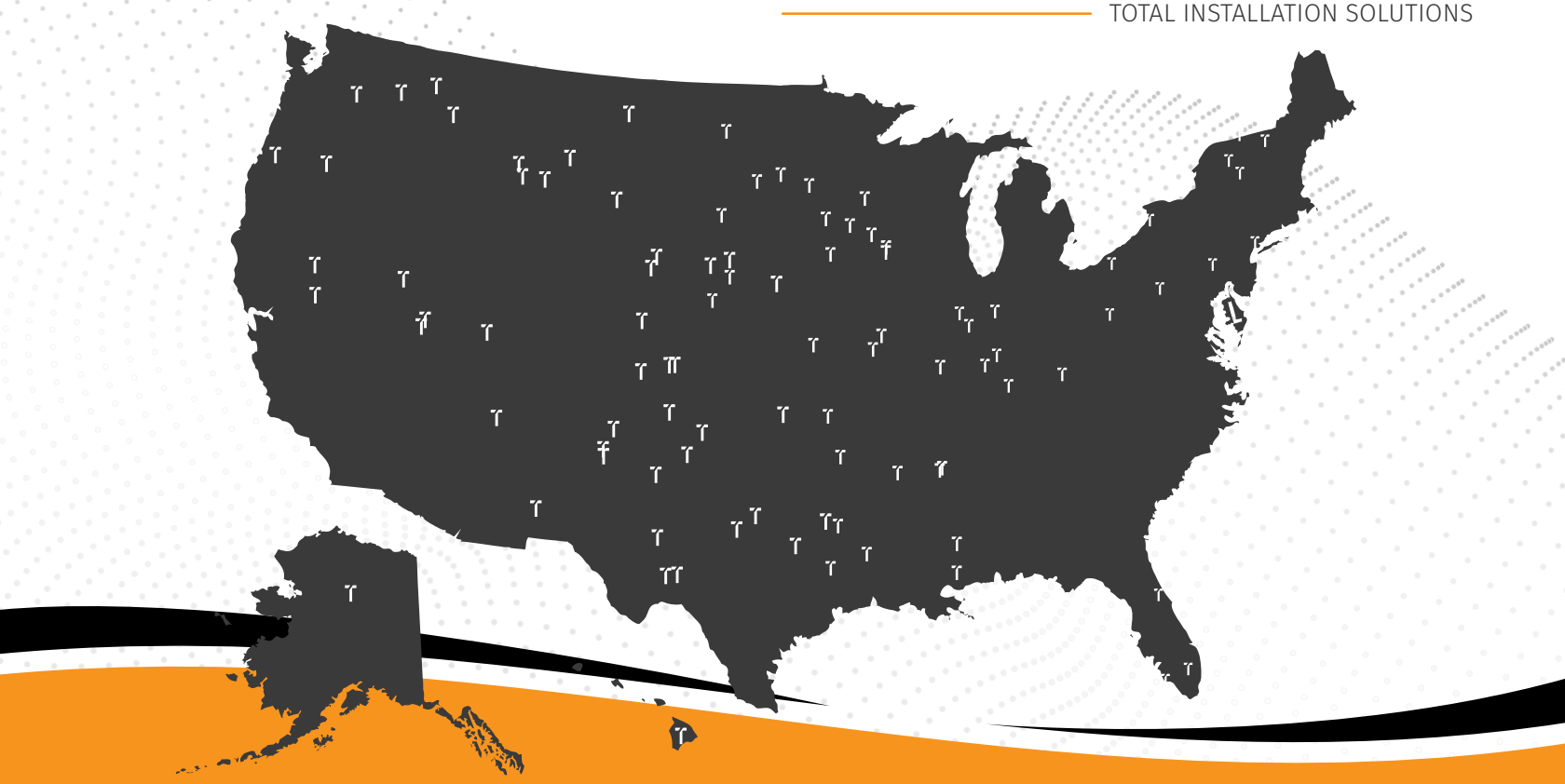
04 Exhaust Fan & Stack

05 Tunnel Dryer

APPLICATIONS:

Industiral baking, food dehydration, pharmaceutical drying, chemical process heating, continuous tunnel drying, batch oven applications

TERNST & Associates
TOTAL INSTALLATION SOLUTIONS



NORTH AMERICAN PARTNERS

- AFB INTERNATIONAL
- AISIN CHEMICAL
- AJINOMOTO
- ALBANESE CONFECTIONERY
- ALCOA
- AMERICAN FOODS GROUP
- ANHEUSER-BUSCH INBEV
- APCO PACKAGING
- BAKEMARK
- BARRY CALLEBAUT
- BATORY FOODS
- BIMBO BAKERIES
- BLOMMER CHOCOLATES
- BUNGEE
- CAMPBELL SOUP
- CAPITAL FOODS
- CARGILL
- COCA-COLA
- COLGATE PALMOLIVE
- CONAGRA BRANDS
- DAKOTA MILLS
- DOLE FOODS
- DOUMAK
- DOW CORNING
- DUNBAR SYSTEMS
- ELIZABETH FOODS
- EQUICHEM
- FERRARA CANDY
- FERRERO NORTH AMERICA
- FLOWERS FOODS
- FRICK SERVICES
- GELNEX
- GENERAL MILLS
- GONNELLA BAKING
- GORTONS
- GREAT KITCHENS
- HARLAN BAKERIES
- HEARTHSIDE MAKERS PRIDE
- HEARTLAND FOODS
- HENRY COMPANY
- HERSHEY
- HIGHLAND BAKING
- HILLS PET FOOD
- HOME RUN INN
- HORMEL FOODS
- HOSTESS
- HOUSE AUTRY MILLS
- INDIANA PACKERS
- INDIANA SUGARS
- INGREDION
- INTERNATIONAL BAKERS SERVICES
- J&J SNACKS
- J M SMUCKER
- JELLY BELLY
- KEEBLER
- KEURIG DR PEPPER
- KERRY INGREDIENTS
- KELLANOVA
- KIKKOMAN
- KINGMAKER FOODS
- KRISPY KREME
- KRAFT HEINZ
- LACTALIS AMERICAN GROUP
- LAMB WESTON HOLDINGS
- MAPLE LEAF FOODS
- MARIGOLD
- MARS
- MARUCHAN
- MCCAIN FOODS
- MCCORMICK AND COMPANY
- MCKEE FOODS
- MIRACOPA
- MONDELEZ INTERNATIONAL
- NANO PHASE
- NESTLE
- NEWLY WEDS FOODS
- OLDS PRODUCTS
- OSI GROUP
- PACKMOORE PRODUCTS
- PEPSICO
- PEPPRIDGE FARMS
- POST HOLDINGS
- PREMIUM BRANDS HOLDINGS
- PURE FOODS
- RICH PRODUCTS
- SAVR FOODS
- SCHWAN'S
- SERVAAS LABORATORIES
- SWEETENER PRODUCTS
- TATE & LYLE
- TREEHOUSE FOODS
- TURANO BAKERIES
- TYSON FOODS
- UNILEVER
- UNITED SUGARS
- US AGGREGATES
- WK KELLOGG
- WORLD'S FINEST CHOCOLATE
- WYNN'S GRAIN & SPICE

WWW.TERNST.NET || +1 219-923-1221