



Rugged, reliable, resourceful solutions for industrial mixing and separation.



 **B&P PROCESS  
EQUIPMENT**



# Over a century of mixing and separation processing power

B&P Process Equipment traces its heritage to the 1889 founding of Baker Perkins – a leader in batch mixers and other specialized industrial equipment. In 1937, Baker Perkins began production of pusher centrifuges for separation of coarse solids from free-draining crystalline slurries. This design was quickly recognized by the industry as the optimal configuration for efficiency and a long operating life.

Since those early days, B&P has continued to add to its line of batch and continuous mixing systems, as well as separation systems in a wide range of configurations. In 1996, B&P Process Equipment was created from Baker Perkins and the APV Chemical division.

In 2000, our Houston facility began rebuilding a wide range of separation systems for municipal wastewater and other applications. Since that time, we've performed rebuilds on virtually every competitive system – and we've put that knowledge to use in the design of our own systems.

The hallmark of the B&P name is core expertise in the design, manufacture, and delivery of large-scale mixing and separation systems that meet the industry's most rigorous demands. For over 100 years, that's been our focus.



## **B&P Process Equipment**

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# STRONG

ONE WORD SAYS IT ALL

At B&P Process, everything we do revolves around it. Strong support. Strong products. Strong testing and R&D. A strong heritage. And most importantly, strong solutions that help today's companies compete more efficiently.

## **Strong business benefits.**

With a B&P Process mixing or separation system, you get tremendous competitive advantages, including:

### **Minimal downstream processing for reduced costs**

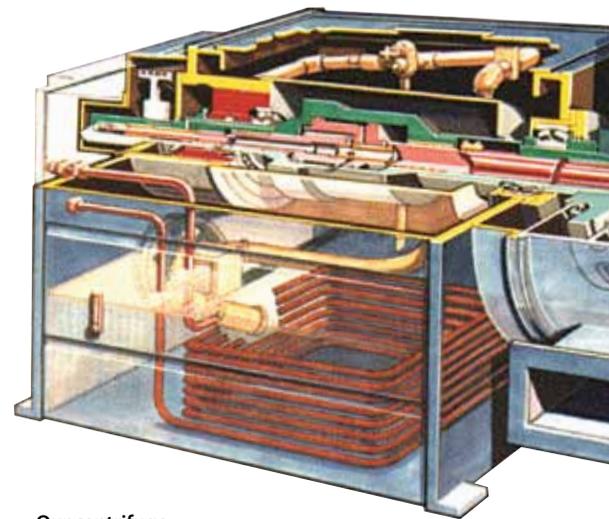
– B&P's products are designed for maximum efficiency and minimizing downstream processing and/or waste disposal needs.

**Designed for uptime** – industrial equipment that isn't running is costing you money; B&P systems deliver tremendous uptime and when service is required they are designed for rapid repair and a speedy return to production.

**Flexibility to meet your processing demands** – we build what your application needs, not what's in-stock; our standard systems are readily configured to meet your physical, process stream, space, and utility needs precisely.



B&P twin-screws are designed for maximum throughput without material degradation



Our centrifuge dewatering systems efficiently and reliably separate the maximum mother liquor for a drier cake.

**B&P PROCESS  
& P EQUIPMENT**



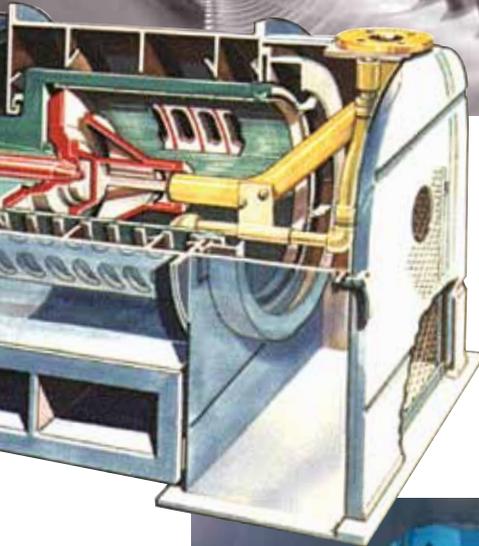
## Strong medicine

*Did you know that over 85% of the world's penicillin supply is extracted in a Pod liquid-liquid centrifuge. The unique design of the Pod is hermetically sealed for a constantly clean environment that eliminates potential contamination.*

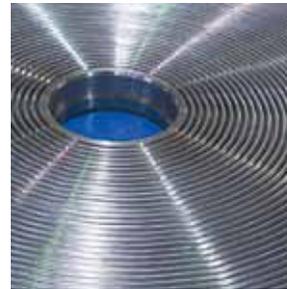
*Just another example of how B&P's Strong solutions are making today's manufacturer more efficient and more profitable.*



All components are precision manufactured to the industry's tightest tolerances.



B&P mixers feature a unique clamshell design in their barrel housings for easy service access and maximum uptime.



B&P's long history of experience with the largest scale systems, means even the toughest challenges are no problem.

# STRONG

HERITAGE – STRONGER FUTURE

Lots of companies make industrial equipment, but few have been doing it for over a century. We have. That experience translates into an understanding of manufacturing processes and how to make them better, more efficient, and more profitable.

But we're not just resting on our history; B&P is continually pushing to find better products, better ways to build the products we already manufacture, and better approaches to the challenges our customers face.

## Strong applications

B&P systems are at work in some truly amazing applications. Key markets we serve include:

- Plastics
- Energetics
- Fine & Bulk Chemicals
- Pharmaceuticals
- Consumer products
- Powder coating



From stand alone processing equipment to installations requiring multiple lines, B&P is ready to help with your needs.



## Strong from start to finish

At B&P Process, we don't sell industrial processing equipment; we sell solutions. We can support you with all phases from project analysis and engineering through fabrication, start-up, and operator training. If you've got outdated systems in your plant, our Houston, TX rebuild facility can bring them up to current production and automation standards – whether they're B&P or competitive systems.



# B&P PROCESS EQUIPMENT

## Strong fashion

*Did you know that the majority of the pellets for those cool rubber sandals you see EVERYWHERE is compounded on a B&P Process KoKneader Extruder mixing system? Continuous extrusion, coupled with the innovative KoKneader technology, plays a large role in the durability, quality, and unique feel of the finished product.*

*Just another example of how B&P's Strong solutions are making today's manufacturer more efficient and more profitable.*



Saginaw, Michigan

Houston, Texas

United Kingdom

Germany

Italy

India

China

## Strong around the world

Although we trace our roots to North America, B&P has a truly global outlook. Our systems are designed to meet local code, utility, and manufacturing process standards. And we're continually seeking ways to build, commission, and service systems around the globe better.



**B&P mixers and separation systems are sold, run, and supported through locations worldwide.**

# STRONG

SOLUTIONS FOR A WIDE RANGE OF MARKETS

Whether you're combining elements into a homogeneous mix, or removing an element from a process stream, B&P has a mixing or separation solution to meet your process and application needs. In addition to standard systems that meet a wide range of needs, we also have extensive custom fabrication capabilities that enable us to deliver almost any solution you can imagine.



## Plastics

Our family of single- and twin-screw extruders are suitable for a wide range of plastics applications, including:

- Thermoplastics
- PVC
- Master Batch
- Hot melt adhesives



## Fine & Bulk Chemicals

B&P Pusher Centrifuges provide high-tonnage liquid/solid separation for a full spectrum of products, including:

- Caustic salt
- Soda ash
- Paraxylene
- Ammonium Sulfate



## Consumer Products

B&P batch and continuous mixers produce a wide range of consumer products, including:

- Baking soda
- Fabric softener
- Chewing gum



## Energetics

A full line of intrinsically safe dual planetary mixers are at work in the leading plants worldwide in applications like:

- Propellants
- Explosives
- Flares
- Air bag gas generators



## Pharmaceuticals

The B&P Pod contactor features multi-stage extraction for efficient liquid-liquid separation in applications like:

- Solvent extraction of fermented antibiotics
- Chemical and polymer washing
- Liquid ion exchange
- Phase separation



## Eco-friendly

B&P mixers, extruders, and dewatering centrifuges are producing a number of eco-friendly products like:

- Plastic-wood deck boards
- Pyrolysis of municipal waste
- Ethanol production

## Mixing Systems

From small-scale lab systems up to the largest volume production machinery, we offer the industry's broadest line-up. Key products include:

- **Twin Screw continuous extruders** for a broad range of mixing/extrusion applications
- **Ko-Kneader extruders/mixers** for heat- and shear-sensitive materials
- **Donghui powder coating mixers** designed specifically for the challenges of mixing powder coating pigments
- **Batch mixers** a full range of vertical and horizontal batch mixers for the most challenging applications

## Separation Systems

No one knows more about taking liquids and solids out of process streams than B&P. Our family of Strong solutions for separation includes:

- **Podbielniak® (Pod) Centrifugal Contactors** for cost-effective liquid/liquid extraction, separation, and washing
- **Centrifuge Dewatering Systems** for efficient liquid/solid separation in applications such as wastewater treatment, ethanol manufacture, and other processes that benefit from an extremely dry cake
- **Pusher Centrifuge Systems** for productive separation of coarse solids from free-draining crystalline slurries



## Strong protection

*Did you know that a custom B&P mixing system is the only approved system for the production of DuPont's revolutionary Kevlar® material? This system is an excellent example of B&P's rugged, large-scale experience. With 24" screws on an 800mm centerline, it's been in continuous operation since 1975.*

*Just another example of how B&P's Strong solutions are making today's manufacturer more efficient and more profitable.*