

#### **OVERVIEW**

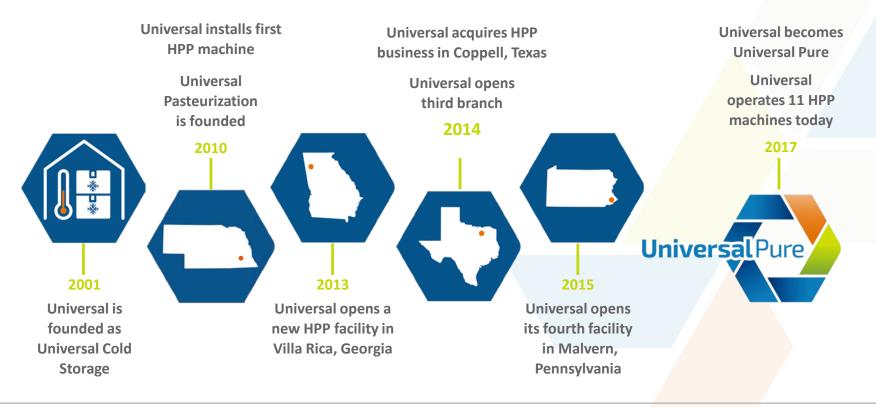
- COMPANY OVERVIEW
- WHAT IS HIGH PRESSURE PROCESSING (HPP)?
- HPP RELEVANCY ON THE RISE
- VALUE CREATION THROUGH HPP
- THE BENEFITS OF OUTSOURCING HPP



## UNIVERSAL PURE OVERVIEW

#### **COMPANY HISTORY**

Headquartered in Villa Rica, GA, Universal Pure is dedicated to ensuring the safety and quality of foods and beverages. As a customer-centric service provider of high pressure processing (HPP), Universal's four U.S. locations and 11 HPP machines in operation make it the largest service provider of HPP services in North America. Companies also outsource with Universal for Cold Storage and related value-added services (kitting, pre-pricing, code dating, inventory control), and to leverage our technical, quality assurance, engineering and cold-chain expert resources in order to bring fresh, natural, organic and cleaner-label products to market.



#### **OUR MANIFESTO**

#### Our work is bigger than a process or a procedure.

Because what we do affects families.

#### Here, we're universally committed to a greater cause:

Making sure every bit and every sip is not only fresh and delicious, but, most importantly, safe.

#### We have zero tolerance for uncertainty.

We eliminate the "what ifs" with action that earns trust. We're always on the forefront of what's next,

Giving our food and beverage partners the freedom to pursue and reach their business goals.

This is absolute confidence.

This is peach of mind.

This is Universal Pure.

Where each one of us is purely driven to be our very best.

#### **COMPANY VALUES**



#### WE CARE ABOUT YOU

Universal Pure is built on care. You can see it in our safety programs, employee training, recognitions, rewards and our relationships with employees, customers, suppliers, business partners and community members



#### RELIABLE SERVICE IS OUR RESPONSIBILITY

We stay flexible to meet the changing marketplace conditions and keep the customer at the center of everything we do – earning trust through reliable service, over time



#### WE COLLABORATE TO GET BETTER

At Universal Pure, we advance by working together, collaborating and cooperating through teamwork and partnerships to drive continuous improvement



#### WE DO WHAT WE SAY WITH INTEGRITY

Universal Pure is dedicated to integrity, trust and open communications. We accept responsibility and follow through on our commitments



#### **RESULTS MATTER**

Proven and re-proven each day, our focus on results shines bright in terms of the value we create for our customers – operations efficiencies, sales, sustainability efforts and more

## **SERVICE OFFERINGS**



#### **Pre-HPP Services**

- Cold Storage
  - Air Tempering Water
    - Tempering Blast Freezing
- Static Freezing
  - Dry Aging



## **High Pressure Processing**



#### **Post-HPP Services**

- Kitting
  - Assembly
  - Labeling
  - Netting

- Code Dating
  - Ink Jetting
    - Order Selection
      - Export / Shipping

#### **FACILITY NETWORK**



Lincoln, NE

#### Universal Pure operates two facilities in Lincoln, Nebraska

- High Pressure Processing, Cold Storage and value-added services
- Four 350L HPP presses
- 670,000 sq. ft. of space on 42 acres
- Full time USDA inspection
- Four USDA production/processing rooms
- Air & water tempering services
- 88 dock doors & XX pallet positions
- OSSID weigh-price-labelers for code dating and pre-pricing



Coppell, TX

## Universal Pure acquired a HPP service provider in 2014

- Two 350L HPP presses
- 24,000 sq. ft. facility
- HPP toll processing and value-added services



Malvern, PA

#### Universal Pure's 4th facility opened in July 2015

- Two 525L HPP presses
- 170,000 Sq. ft. facility
- 2,500 refrigerated pallet positions
- High Pressure Processing and value-added services







400-

mile

radius



Villa Rica, GA

## Universal Pure opened a dedicated HPP facility in 2013

- Three 350L HPP presses
- 90,000 sq. ft. facility
- High Pressure Processing and value-added services











## **FACILITY NETWORK**









Locations	Lincoln, NE	Villa Rica, GA	Coppell, TX	Malvern, PA
Acq. / Opened	Opened in 2001 (2013 expansion)	Opened in 2014	Acquired in 2014	Opened in 2015
Services	HPP Service Provider, Cold Storage, Value-Add Services	HPP Service Provider, Temp. Controlled Storage, Value-Add Services	HPP Service Provider, Temp. Controlled Storage, Value-Add Services	HPP Service Provider, Temp. Controlled Storage, Value-Add Services
HPP Machines	Four 350L HPP Presses	Three 350L HPP Presses	Two 350L HPP presses	Two 525L HPP Presses
Size	North: 370,000 sq. feet South: 270,000 sq. feet	90,000 sq. feet	24,000 sq. feet	95,000 sq. feet Add'l. 75,000 sq. feet subleased
Other	88 Dock Doors 90 Rolling Stock OSSID weigh-price-labelers for code dating and pre-pricing Kitting/Assembly Line Overwrap Capabilities Dry Age Rooms (4), Water & Air Tempering	19 Dock Doors 4 Rolling Stock Ink Jet Capability Pack Off Line Scale System Labeling Air Tempering	6 Dock Doors 3 Rolling Stock Ink Jet Capability Pack Off Line Sale System Labeling	27 Dock Doors 5 Forklifts/Pallet Movers Ink Jet Capability Pack Off Capability Auto Labelers Front End Dumping & Scale System











#### **EXPERTISE**

Universal Pure can work with your current suppliers or bring our relationships to help you innovate and deliver the best products to your customers – we are your solutions provider



**PACKAGING** 



**REGULATIONS** 



PRODUCT DEVELOPMENT



**VALUE-ADDED SERVICES** 



**COLD STORAGE** 



**COST MANAGEMENT** 



PROCESS IMPROVEMENT



**EQUIPMENT** 



## **CAPABILITIES**



# Full Service Solution for Customers

- **HPP**
- Pre-HPP and Post-HPP Services
- Cold Storage
- Cost Management
- Kitting
- Packaging
- Product Development
- Regulations
- Testing

# Food Safety & Quality Commitment

- SQF Level III
- FDA Approved
- USDA Inspected
- Certified Organic
- ) Kosher











#### **SERVICE OFFERINGS**

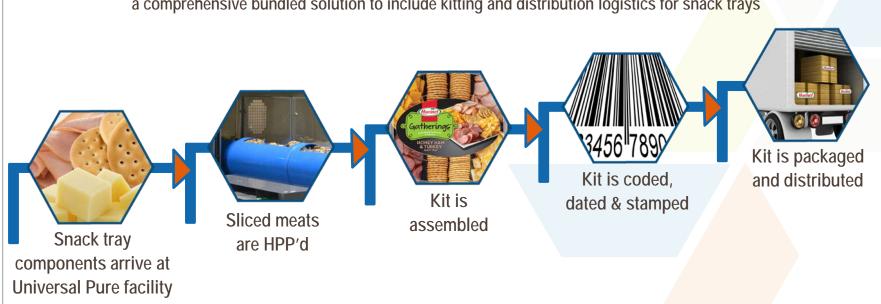
- Value-Add Capabilities & Services **HPP**
- Code / date stamping Cold storage Kitting R&D assistance ✓
- Dry aging
- **Tempering**

Logistics

- Co-packing relationships
- Regulatory assistance
- Validation assistance
- Regulatory assistance

#### **Full-Service Example**

Given Universal Pure's history of being a value added leader in HPP and cold storage, in 2017 the company developed a comprehensive bundled solution to include kitting and distribution logistics for snack trays



#### TECHNICAL EXPERTISE

# In-house Technical Expertise & Engineering Capabilities

#### Breadth

Universal Pure leverages its 18 in-house engineers / technicians

to be the most innovative, lowest cost HPP provider in the industry

#### Quality Assurance

- Robust quality assurance:
  - Validation study support for partners
  - Internal tools for control points
  - Knowledge of customer expectations
  - Risk assessment & crisis control plan
  - SQF Level III

#### **Experience**

- Vast knowledge of HPP applications
- Packaging / product customization and insights
- Multi-site footprint leverages
   best practices across network
  - Deep equipment expertise to improve uptime and drive down cost per cycle

#### Continuous Improvement

- Focus on evaluating processes and determining solutions for continuous improvement:
  - Operational equipment improvements – leveraging both Avure and Hiperbaric expertise
  - HPP processing efficiencies

# Robust IT & Operational Systems



- Cloud-based inventory control system
- Allows customers full traceability of their products and customization of their orders
- Enables high ROI through order accuracy, on-time shipping and labor efficiency



- Business analytics tool
- Drives operational insights and opportunities for improvement in operating costs



 Analyzes sales pricing information and margin analysis



 An ERP solution improving understanding of financials, inventory and operations



 Largest CRM platform, offering cloud-based applications for sales, services and marketing

#### **INDUSTRY LEADERSHIP**

#### **HPP Summit™**

Annual conference hosted by Universal Pure



#### **Cold Pressure Council**



Founding member

"To lead, facilitate and promote industry standardization, user education, and consumer awareness of High Pressure Processing "





High Pressure Certified Consumer Seal Debuted in 2017

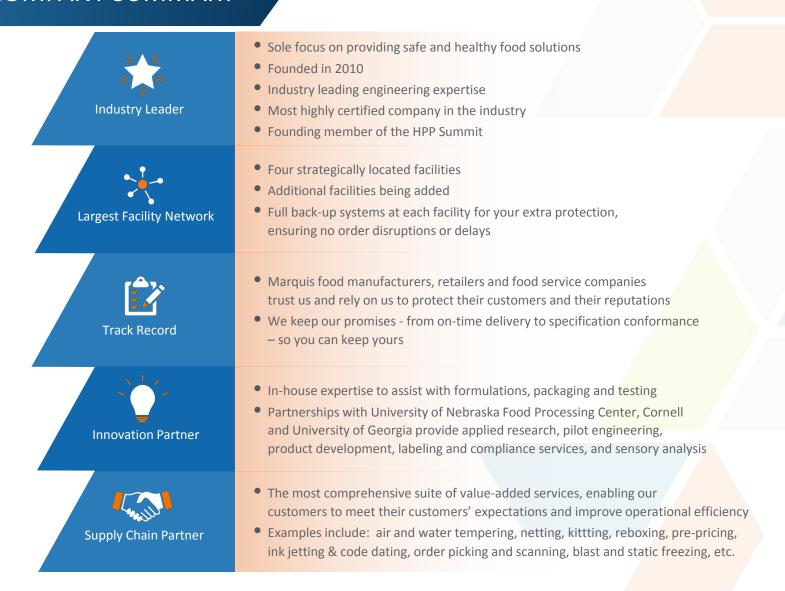
#### Research & Resources



Driving consumer & manufacturer awareness



#### **COMPANY SUMMARY**





WHAT IS HIGH PRESSURE PROCESSING (HPP)?

## WHAT IS HPP?

High pressure processing (HPP) is a unique food processing method that utilizes water and pressure to inactivate food-borne pathogens and spoilage organisms.

Unlike traditional thermal pasteurization methods that can compromise flavor and nutrients, HPP is a nonthermal process that:

- Enhances food safety
- Extends product shelf-life
- Protects brand equity and company reputation
- Enables the sale of **cleaner-label** products



#### WHAT IS HPP?

# High pressure processing (HPP) is a unique food processing method that utilizes water and pressure to inactivate food-borne pathogens and spoilage organisms

Potable water is pumped into the vessel creating isostatic pressure on the packages.

Product is held at a pressure up to 87,000 psi for 1 to 6 minutes depending on the HPP process recipe.



#### **CONVEYER**

Baskets are loaded with product in final packaging (hermetically sealed) and inserted into the HPP vessel. The basket enters the vessel and is sealed by plugs.

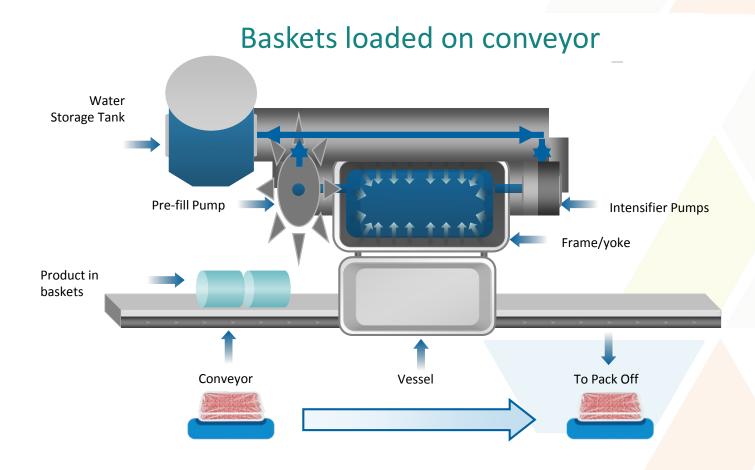
#### VESSEL

Pressure is transmitted uniformly & instantaneously throughout the products to disrupt microbial biochemistry of bacteria and spoilage microorganisms.

#### TO PACK OFF

Product is scanned, code/date stamped, and prepared to be shipped to the customers.

## WHAT IS HPP?



## **HPP PRODUCT APPLICATIONS**











#### **PROTEINS**







**Applications:** Sliced Cooked Meats: Chicken, Turkey, Ham and Beef; Uncured Ham and Sausage; Pulled Chicken and Pork, Ground Meats such as Turkey, Chicken and Beef







#### WET SALADS, DIPS, SALSA









Applications: Salsa, Chicken Salad, Hummus, Tuna Salad, Seafood Salad, Dressings







#### **BEVERAGES**







**Applications:** Orange Juice, Cold-Pressed Juice, Coconut Water, Smoothies, Kale Drinks, Iced Coffee







Other Product Categories	Applications	Benefits
Dairy	Yogurt & Yogurt Based Dressings, Cream, Sour Cream, Cream Cheese, Milk	
Seafood	Oysters, Lobster, Crab, Shrimp, Mussels	
Fruits & Vegetables	Smoothies, Fruit Cups, Spreads	<b>® (</b> )
Pet Food	Ground Meats such as Turkey, Chicken, Beef	<b>◎</b> Ø 🖭 🕸

#### **HPP Benefits Key:**



Pathogen

Reduction

**Extended** Shelf Life



Allows for

**Cleaner Label** 



Reduced **Sodium Products** 



Creamier Consistency



## **HPP RELEVANCY ON THE RISE**



- Cleaner-label demands from concerned and better educated consumers
- Explosive interest in fresh, more convenient, and less processed foods / beverages
- Consumer willingness to spend more money on wholesome foods
- Consumers have more of an interest in production methods than ever before

- Dramatic increase in customer audits to ensure compliance with new FSMA regulations
- Increased focus from government after a large volume of product recalls in recent years
- The need for formalized training of food safety and quality management

## **FOOD WASTE**

- The irrigated water used to grow WASTED food is more than the water used by any country
- · Vegetables, Fruit, Meat, Dairy, and Seafood account for >50% food lost
- Greater awareness to reduced food waste with HPP'd products. Less food waste = reduced climate impact
- Less food waste = reduced climate impact



NEWS | July 19, 2017

## Chipotle Customers Report Foodborne Illness Symptoms Online

By Staff



On Tuesday morning, a Chipotle Mexican Grill location in Sterling, VA was temporarily shut down after receiving multiple complaints from customers about foodborne illness. The closure was so that the location could sanitize the restaurant. This comes after a handful of *Escherichia coli*, norovirus and *Salmonella* outbreaks at multiple Chipotle locations in 2015 and 2016.



## FDA announces 'enforcement discretion' for specific FSMA regulations

Although FDA has temporarily relaxed some specific rules, processors are not necessarily off the hook, and may want to contact their food safety consultants.

# FOOD PROCESSING

Home / Industry News / 2017 / FDA Issues New Guidance to Food Industry Amid Recall Criticism

FDA Issues New Guidance to Food Industry Amid Recall Criticism

# Refrigerated & Frozen Foods

Study reveals growing interest for HPP food technology

FSM EDIGEST | October 3, 2017

## Embracing the Clean Label Movement

By Sean Riley



Many consumers look at the label when making decisions about their food choices, and most often they are looking for clean-label foods to complement their healthier lifestyle. According to the 2016 "Food and Health" survey from the International Food Information Council,[1] 47 percent of consumers look at the ingredients list when making a purchasing decision.

## Food Safety News

## CDC names top five foodborne illnesses in United States

BY NEWS DESK | JANUARY 11, 2018

The top five germs that cause illnesses from food eaten in the United States are norovirus, Salmonella, Clostridium perfringens, Campylobacter and Staphylococcus aureus, aka staph.



HPP: Achieve High Standards of Food Safety Without Compromising Food Quality

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#### **Shelf Life Extension**

Allows for broader distribution for HPP adopters

73.4% Of producers say the biggest reason they use HPP is for shelf-life extension

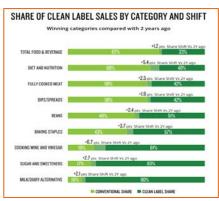
96.2% of retailers say they are more likely to purchase a product with a longer shelf life

of food producers say they could expand distribution range if their products had a longer shelf life

#### **Clean Label Trend**

HPP eliminates need for artificial preservatives





#### **Food Safety**

HPP reduces harmful bacteria like listeria, salmonella and e. coli



**Food Safety News** 

Salmonella outbreaks at multiple Chip

FDA Issues New Guidance to Food Industry Amid Recall Criticism

CDC names top five foodborne illnesses in United States
BY NEWS DESK, JANUARY 11, 2018

The top five germs that cause illnesses from food eaten in the United States are norovirus, Salmonella, Clostridium perfringens, Campylobacter and Staphylococcus aureus, aka staph.

#### Sustainability / Reducing Food Waste

HPP extends shelf life 2-10x, reducing waste

31%	Of food that is produced in America goes to waste (133 billion lbs. annually)
1.2B	Tons of food produced for global consumption is lost or wasted
\$160B	In annual lost retail sales in the U.S. is directly due to food waste

Consumers are moving away from center store aisles to purchasing fresh & refrigerated foods from the perimeter of the store





The percentage of respondents familiar with, and whose companies use HPP, grew from less than 60% in 2016 to the 80% range in 2017

**HPP Wins Out** 



HPP was favored by food service, manufacturers and retailers among other food processing methods on measures concerning food quality, food safety and food waste

Growing use of HPP





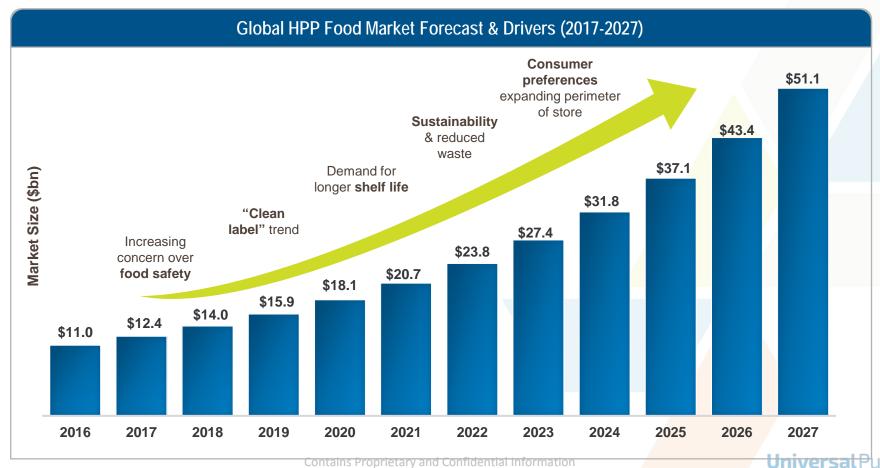
How did respondents characterize their use of HPP?

None: < 20% Some: 23.5%

**Substantial** 32.3% **Growing: 25.4%** 

### Global HPP & Cold Storage Market Analysis

The global HPP food market is projected to grow to \$51.1B by 2027 (15.2% CAGR), and the global cold storage market is anticipated to reach \$213B by 2025 (12.4% CAGR)



# HPP trends and results have lead to widespread adoption

Companies using HPP

Why / Impact









- Meet the growing consumer demands for:
  - Safer food & beverages
  - Cleaner labels
  - Corporate responsibility
- Shelf-life extension
- Brand equity protection
- Product innovation
- Food waste reduction

#### **HPP INDUSTRY TRENDS**



To lead, facilitate and promote industry standardization, user education, and consumer awareness of High Pressure Processing

"The formation of the Cold Pressure Council demonstrates the remarkable growth of HPP"

#### **Founding Members**





















**High Pressure Certified Consumer Seal to Debut** 



## **VALUE CREATION THROUGH HPP**

## **HPP VALUE CREATION**







**BRAND PROTECTION** 



**SAFER AND HEALTHIER FOOD AND BEVERAGES** 



COMPETITIVE **DIFFERENTIATION** 



**IMPROVED** SUSTAINABLITY/REDUCED **FOOD WASTE** 





**CHEMICAL FREE PRODUCTS** 

## **BENEFITS OF HPP**



#### BENEFITS OF HPP

#### **Supports Shrink Control**

- Reduce store brand product shrink by 50%
- Positively impact inventory management in retail locations
- Increased supply chain efficiencies and cost avoidance
- Supports corporate sustainability & food waste initiatives

#### **Extends Shelf Life**

HPP extends shelf-life 2X - 10X

Category	Non-HPP Shelf-Life	<b>HPP Shelf-Life</b>
RTE Meat	50 Days	100+ Days
Fresh Protei	n 18-21 Days	36-50 Days
Wet Salads	20-30 Days	50-60 Days
Fresh Juice	3-6 Days	30-60 Days
Dips	Varies	2X to 5X
Salsa	Varies	up to 10X

#### **Delivers Cleaner Labels**

- Eliminate preservatives from store brands
- Appeal to growing consumer demands/expectations
- 'Free From' = shorter ingredient deck
- Reduced sodium
- HPP is a natural process

#### **Ensures Food Safety & Quality**

- Protect brand equity
- Xeep customers safe
- Reduce media headline risk
- Regulatory compliance

- Inactivates Pathogenic Vegetative Bacteria:
  - Salmonella
  - E. coli 0157:H7
  - Listeria Monocytogenes (Lm)
  - Campylobacter
  - Vibrio & Viruses In Shellfish

- Kills Spoilage Organisms
  - Fungi: Yeasts & Mold
- Inactivates Harmful Bacteria & Food Spoilage Microorganisms:
  - Disrupting Their Microbial Biochemistry



THE BENEFITS OF OUTSOURCING HPP

## BENEFITS OF OUTSOURCING



#### NO CAPITAL INVESTMENT

Third-party HPP processing allows you the freedom to adjust product Capacity and frequency at any time without a huge capital investment.

## 2. QUICK STARTUP & ONGOING FLEXIBILITY

Get your HPP operation up and running as fast as possible – we are ready when you are.

#### 3. COST MANAGEMENT

Along with labor, insurance fees and other operating expenses, companies that outsource mitigate the risk of inconsistency in forecasted costs vs. actual costs.

## **4.** REDUNDANCY (GUARANTEED AVAILABILITY)

Downtime means lost revenue, which is why outsourcing to Universal can support your production scheduling efficiency targets.

#### **5.** VALUE ADDED SERVICES

Pre-HPP and Post-HPP services that can drive additional value for your company (Cold Storage, Tempering, Labeling, etc.).

#### 6. FOCUS ON CORE COMPETENCY

Focus on your core competencies while the experts at Universal reliably take care of your HPP operation

## **KEY FACTORS**

## **CORE BUSINESS FOCUS**

OPERATING EXPENSES

OPERATING EXPENSES

LINE EFFICTION INDACTENCY

SPEED & FLEXIBILITY
SPEED & FLEXIBILITY

**REQUIRED ENGINEERING EXPERTISE** 

# OUTSOURCE VS IN-HOUSE HPP?

# What's the best decision for your company?

Does in-house HPP give us more control and flexibility?

How can outsourcing
HPP help you avoid
business challenges and
complexities while
saving on CapEx?

Does in-house HPP help lower our costs?

Outsourcing

In-House

## CAPITAL EXPENDITURE & OPERATING EXPENSES

Capex	Industry Average	Comments
HPP Machine (525-L)	\$3MM - \$3.5MM	Recommended that each machine has a back-up, so customer commitments are not compromised
Front & Back End Ancillary Equipment	\$400K-\$500K	Inkjet, scales, hopper, drying system, conveyors, tape machines, carriers, etc.
Retrofit	\$250K-\$750K*	Concrete pad, water, drains, electricity
*If the infrastructure already exists.		

Can a HIGHER
RETURN on
capital be
ACHIEVED by
investing in your
CORE BUSINESS,
such as R&D /
Innovation, Sales
and/or
Marketing?

ОрЕх	Industry Average	Comments
Operating staff	7-9 line workers, 1 material handler, 1 QA technician, 1 supervisor	Per shift
Maintenance staff	1 maintenance engineer ~\$100K (fully burdened)	Per Shift
Parts	~\$6.50 per cycle	Not including spare parts inventory
Spare parts inventory	\$150K	Not including spare vessel (\$600,000)
Maintenance downtime	8-12%	Not including unscheduled downtime
Utilization	TBD	20-30 MM lbs. of product required to achieve full utilization
Other costs	Site specific	Utilities, CIP, ink jet, labeling, HPP audits / compliance, rent/space for equipment and product storage

## **CORE BUSINESS FOCUS**

Is in-house HPP a distraction today? Could outsourcing HPP free up space and labor for further production initiatives? Does saving on CapEx allow for further marketing and R&D exploration? INNOVATIVE THINKING **Universal**Pure **Contains Proprietary and Confidential Information** 

#### HOW UNIVERSAL PURE CAN SUPPORT YOU

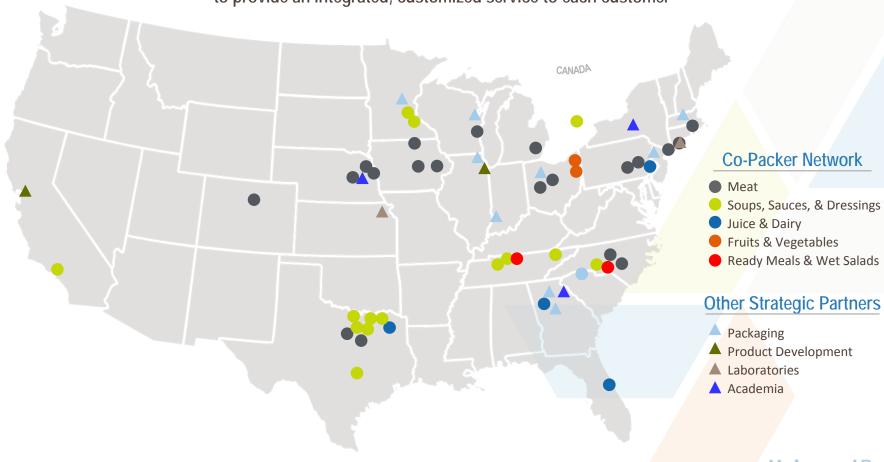
Universal Pure can work with your co-manufacturing partners or bring our relationships to help you innovate and deliver the best products to your customers



## UNIVERSAL PURE NETWORK OF SUPPLIER PARTNERS

#### Pre-HPP, HPP and Post-HPP Value-Added Services & Logistics

Universal Pure has deep relationships with co-packers and other strategic partners to provide an integrated, customized service to each customer



#### HOW UNIVERSAL PURE CAN SUPPORT YOU

## Partner with Universal to Deliver Your HPP Needs:



**Extends Product Shelf Life** 



Increases Sourcing Potential of Cleaner Label "Free From" SKU's



**Enhances Food Safety & Increases Brand Protection** 



Supports Achievement of Food Waste & Sustainability Goals



Leverage Your Existing Supplier & Manufacturer Network



Leverage Universal Pure's Network of Supplier Partners

## **CONTACT US**



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