

Cost Savings with the FresherTech System

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The FresherTech system reduces the total cost of ownership for high pressure processing compared to the competition. These savings can be as high as 60% in some cases. The three primary costs include capital costs, maintenance costs and depreciation.

Capital Costs

The largest cost driver is capital cost. FresherTech has a much lower cost of manufacture than its competitors. This is primarily because the competitors use more materials, use outdated manufacturing techniques and manufacture in high cost countries. The FresherTech is manufactured in China using advanced manufacturing techniques which it calls REETech™ (Resource Efficient Engineering Techniques). REETech is a result of the unique cooperation of the Chinese government in sharing the manufacturing techniques it uses to make military hardware. This allows FresherTech to make more advanced systems with less material at a lower cost.

The following example illustrates the cost differential for a common configuration:

	FresherTech Duo H200L/600F	Competitor's 215L
Capacity	2 x 200 Liters	215 Liters
Price	\$1,499,000*	\$1,769,000*
Price for 2 chambers	\$1,499,000*	\$3,538,000*
Price per liter	\$3,748*	\$8,228*
Savings	58.00%	

* Estimated

The following example illustrates the cost differential for another common configuration:

	FresherTech Duo H300L/600F	Competitor's 300L (x2)
Capacity	2 x 300 Liters	300 Liters
Price	\$2,100,000*	\$2,000,000*
Price for 2 chambers	\$2,100,000*	\$4,000,000*
Price per liter	\$3,500*	\$6667*
Savings	53.00%	

* Estimated

These costs do not even take into account the additional site improvement costs associated with the competitor's systems. Typically, flooring must be modified to add thicker footings to support the heavier Avure machine. The FresherTech system does not typically require any modifications. The Avure system also requires a separate room for intensifier placement. This may also require building improvements. The FresherTech system does not require separate intensifier placement. Finally, the

FresherTech system is modular and can fit into a number of different footprints to accommodate tight spaces.

Actual capital cost savings vary depending on the configurations being compared, but should typically be at least 40% compared to the competition.

Maintenance Costs

The FresherTech system uses best-of-breed components that are not as prone to wear or failure as the competition. The chamber and intensifier are expected to last 10 years or more without requiring major repairs. They also use numerous intensifiers which multiply the maintenance costs. Their intensifiers are also subject to rebuild/replacement after a few years. Their competitors' systems are widely reputed to require significant maintenance after the first couple of years.

Using industry standard maintenance cost estimates, a 2 chamber system with 300 liter chambers will cost around \$2.60 per cycle for a 2-shift operation. That compares to over \$6 per cycle for the major competitors.

The FresherTech System comes with a 12 month parts and labor warranty which eliminates these costs for the first year. An extended warranty goes another 12 months and includes parts.

Depreciation

The major components of the FresherTech system are expected to last 10 years and perhaps much longer. Their competitors' systems have a shorter lifespan for the major components and the systems depreciate more quickly. The wire-wound chambers used by the other two are also prone to failure.

Total Cost

The FresherTech system offers substantially lower total cost of ownership compared to its competitors. These savings can be as high as 40-60% depending on the configuration. This lower cost of ownership will open up HPP to companies that couldn't possibly justify purchasing a system from the competition. It will also improve the bottom line of companies that use HPP as a matter of necessity.

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