CASE STUDY





APPLICATION: High solids filtration/waste reclamation

How Spiral Water[®] Put the Squeeze On Cost and Waste for High Solids Juice Processing

CHALLENGE: High solids juice creates costly product loss

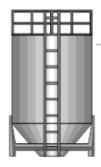
Trucking its raw pomegranate juice to an off-site centrifugal separation system, a grower/producer in Stockton, California was experiencing high operating expense and 13% product loss during processing. In addition, the severe centrifugal forces applied to the juice had an adverse effect on its flavor. With centrifugal separation, 400 gallons of product were lost in processing for every 3,000 gallon batch: a significant business expense for a product with high retail value.

SOLUTION: Spiral Water's 810 single filter skid

The grower/producer purchased a skid with a single, 15 micron Spiral Water Model 810 filter featuring our proprietary, automatic, self-cleaning filter technology. Specifically designed to address the issue of high and variable suspended solids removal, the revolutionary helical action of Model 810 filters up to 100 times dirtier water and provides continuous 10 to 100 micron filtration while using 90% less energy than traditional filtration systems.



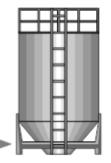
APPLICATION FLOW CHART



Prefiltered Juice 8% Solids



Spiral Water Filtration, 15µ



Filtered Juice 1% Solids

"Product quality and business efficiency are equally important to us. Spiral Water improved both."

Pomegranate Juice Producer Stockton, CA

CASE STUDY

MARKET: Beverage Processing

RESULTS: More product, better flavor, reusable solids

Using the innovative filtration technology in Spiral Water's 810 filter, the pomegranate juice was filtered from 8% solids to 1% solids, reducing the amount of product lost from 400 gallons per batch (a 13% loss) to just 85 gallons (a 1.7% loss). Spiral Water's one-pass filtration uses built-in sensors to purge concentrated solids. In the case of the pomegranate juice, these concentrated solids – a former "waste product" – contain nutrients and texture that are of value in other industries, including agriculture and cosmetics. The grower/ producer is extremely satisfied with the results, reporting that Spiral Water achieved all his objectives for product flavor and clarity.



Spiral Water's unique action filters pomegranate solids, protects flavor

BOTTOM LINE: Smart investment

Reducing process waste from 13% to 1.7%, protecting the flavor and quality of the pomegranate juice, and turning a former waste product into a sellable asset demonstrates how Spiral Water delivers a valuable return on investment.

Contact a Spiral Water application engineer:

1-844-2-SPIRAL engineering@spiralwater.com

ABOUT SPIRAL WATER

Founded in response to the growing need for more efficient and affordable clean water solutions, Spiral Water Technologies is working with companies across multiple industries to deliver breakthrough performance and innovative practices. Specializing in difficult-to-treat waters, Spiral Water has recently targeted wineries, breweries and specialty juice processors to demonstrate how its proprietary filtering system adds efficiency and value.



Spiral Water Technologies, Inc.

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Collected solids ready to convert from "waste" to resale